



Information for Category 1 homeowners



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* This Categorisation Approach was approved by the Chief Executive on 30 October 2023.

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Introduction

This guide provides information for Category 1 homeowners about how category decisions are made and what they mean for you.

The extreme weather events of early 2023 caused devastation across Tāmaki Makaurau and areas of the North Island.

In response, the Government introduced a way for councils to assess the future risk for storm-affected residential properties. Councils do this by assigning one of three categories, based on the level of potential risk to life from flooding or landslides in the future.

Auckland Council has adopted a Categorisation Approach, which describes how the council makes

these categorisation decisions and what each category means.

Under the council's Categorisation Approach a property can be assessed as Category 1, Category 2 or Category 3.

A copy of council's **Categorisation Approach** can be found in the appendix at the back of this document or by visiting our website **aucklandcouncil.govt.nz/recovery** and looking under 'storm recovery documents'.

Where to go for further information

Auckland Council has created a range of resources to support homeowners through the categorisation process and explain different aspects of the programme.

- Answers to frequently asked questions are available in the recovery section of OurAuckland (**ourauckland.govt.nz/recovery**), along with the on-demand recordings of information webinars and the latest recovery news articles.
- You can find guides and information sheets by visiting the **storm recovery documents library** on the council website (**aucklandcouncil.govt.nz/recovery**).
- If you have a question that is not answered in this guide or the supporting information, you can email us at **propertycategory@aucklandcouncil.govt.nz** for assistance.

How do I get a category for my property?

If you are not already in the categorisation process, you can register by completing an online Flood and Landslide Registration form (**property.flooded.co.nz**). This provides Auckland Council with information about your property and how it was impacted during the storms of early 2023.

We will then start a risk assessment process for your property.

A risk assessment has two parts:

1. An initial desktop assessment, based on existing information and any information you provide, which gives an indication of whether your property is likely to be low or high risk. The desktop assessment also tells us if an on-site

assessment is needed. It is possible for a category to be issued following the desktop assessment.

2. Following the initial desktop assessment, some properties will require an on-site assessment to look at your physical property so that more information can be gathered to inform a category.

The on-site assessment will look at the level of risk associated with your property, and whether there are changes that can be made at your property or in the surrounding area to reduce the future risk of serious flooding or landslides to the property.

Once the risk assessment process is complete, we'll contact you to inform you of your property's category and provide you with written confirmation of this.

What does Category 1 mean?

Our Categorisation Approach guides our categorisation decisions and defines what each category means in Auckland. Our Categorisation Approach is in line with the **government's risk categories** for assessing future flood and landslide risks to homes.

Category 1 is given to properties that don't meet the threshold of "intolerable risk to life". Because they don't meet that threshold, Category 1 properties are not eligible for a buy-out or other financial support within the categorisation programme.

If you have received a Category 1 for your property, it means that:

1. Auckland Council has assessed your property (whether through a desktop assessment, a site assessment or through an area-wide geotechnical study); and
2. Your property doesn't meet the threshold of intolerable risk to life under our Categorisation Approach.

Category 1 doesn't necessarily mean that a property was damaged in the storms or that there is any future risk associated with the property. It simply indicates the absence of intolerable risk to life. Category 1 will apply to a range of properties – from those that have sustained serious damage through to those that had no damage at all.

Our Categorisation Approach assesses risk at a property level rather than on an area-wide basis. Because risk is assessed based on the characteristics of an individual property, it is possible for your property to be given a Category 1 while your neighbour is given a Category 2 or 3. This could be for a variety of reasons including the features of your property (such as the shape or slope of the land), where your property is in relation to where water flows, the construction of your home or where it's situated on your land.

If my property is Category 1 does that mean there is no future risk to my property?

No, what it means is that the level of risk does not meet the threshold of 'intolerable risk to life' but it is not an assurance that your property will never be impacted by future severe weather events or that there is 'no risk'.

In mathematical terms, 'tolerable' in the context of land stability equates to the likelihood of a fatality is less than 1 in 10,000. This is comparable to the risk associated with driving a car. A higher likelihood of fatality is considered an 'intolerable risk to life'.

However, it is important to note that the level of risk you consider to be acceptable may be different to someone else's. For example, someone may choose never to drive because the risk is higher than what they are comfortable with.

What if my property still has a red or yellow placard?

Placards are very different to the property categorisation process which considers the future, long-term risk to life if another extreme weather event occurs.

If your home has a yellow or red placard, you will need to continue with repairs or remediation to make it safe, and then provide evidence to council that any storm damage has been fixed so your placard can be removed.

The type of evidence required will vary depending on your property's situation. For example, it could be an engineering report from a geotechnical engineer showing that there is no problem with slips; a structural engineering report showing that the building is now safe; or it could be proof that a builder has rectified the problem.

You can contact the council's Rapid Building

Assessment team by emailing

rbacomms@aucklandcouncil.govt.nz.

If you are unsure of what is required to remove the placard, they can explain this to you.

The RBA team will review the documentation you've supplied along with your placard status and determine whether or not a property visit is needed. A visit from council inspectors is not always required – it will vary from property to property.

Once the review is complete, and the property is deemed to be safe, you can remove the physical placard. You will receive an email notification (or a letter if we don't have an email address for you) with a change of placard status for your address. The placard will remain on your property file but will be updated from 'open' to 'closed'.

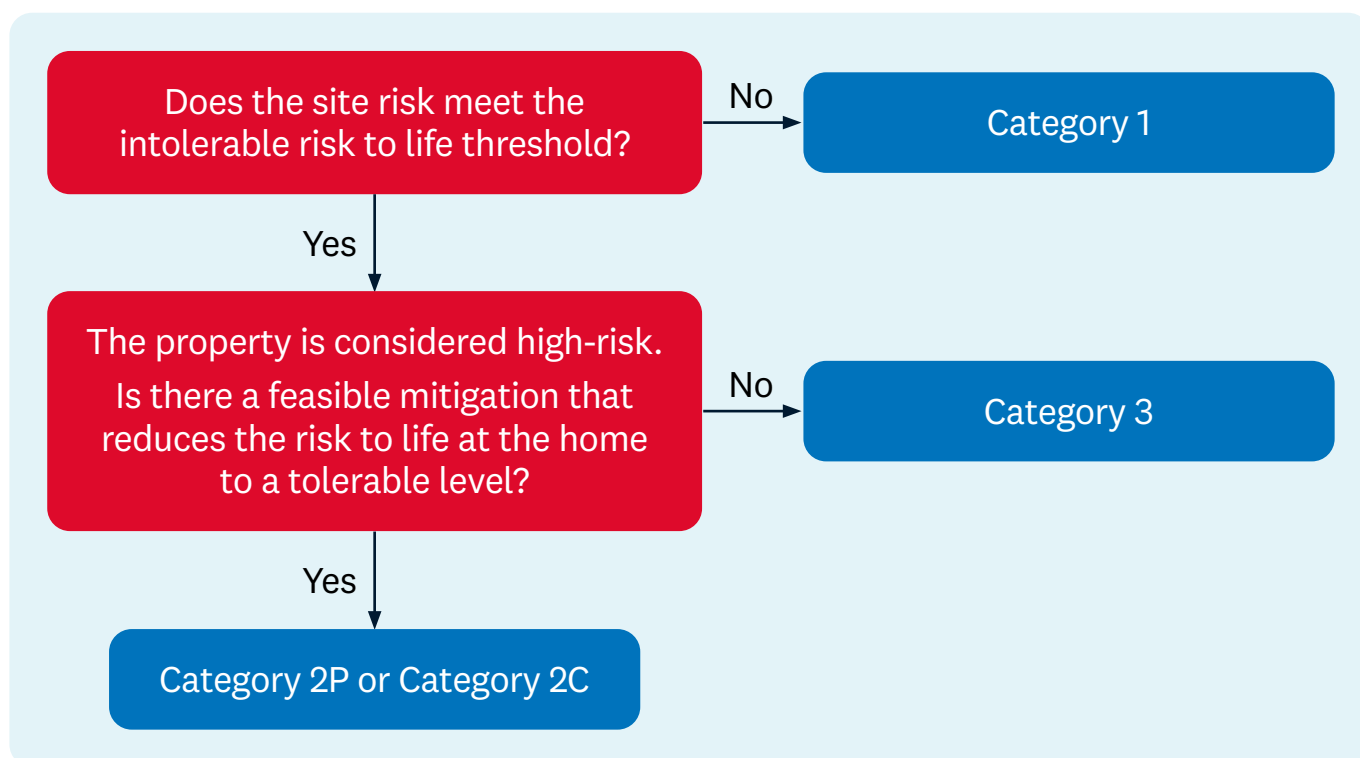
How we decide property risk categories

We have several steps that we go through before deciding a property's risk category.

Step 1: Assess whether there is 'intolerable risk to life' from flooding and/or landslides for people in homes on the property (risk assessment). Where there is no intolerable risk to life associated with these hazards, a property will be Category 1.

Step 2: If the risk to life is intolerable, we assess whether there are feasible changes to the property (mitigation) that will reduce the risk to life from an intolerable to a tolerable level (feasibility assessment)

Step 3: Consider the risk and feasibility assessments, and assign a property category (categorisation decision).



How Auckland Council measures 'intolerable risk to life' from landslide risk

For landslides, an intolerable risk to life is where the 'Annual Individual Fatality Risk' is 1 in 10,000 or greater for the most vulnerable person.

The risk is assessed in two stages. Firstly, there is a rapid desk-top triage to identify properties that are highly unlikely to have an intolerable risk to life. Detailed landslide risk assessments are complex and take a long time, so are only undertaken where there is a reasonable likelihood that the risk is intolerable. This desktop triage is undertaken by geotechnical experts based on the evidence provided in the online submission form, and from other records we have available about landslides that occurred in 2023.

Some properties will be given Category 1 based on a desk study which doesn't include a detailed risk assessment because this desktop exercise showed there was almost certainly no intolerable risk to life.

Where the desktop triage suggests there might be intolerable risk to life, geotechnical experts calculate the Annual Individual Fatality Risk based on information gathered through a detailed desktop assessment and on-site geotechnical assessments using industry guidelines **(AGS 2007)**. The assessments look for evidence of things including:

- land damage sustained from the extreme weather events
- land stability which may affect safe use of the property
- risk of loss of life for people in the property.

These assessments provide the council with enough information to inform a property category recommendation to the Deputy Group Recovery Manager, who then finalises the category decision.

How Auckland council measures 'intolerable risk to life' from flooding risk

For flooding, an intolerable risk to life is where there is a high risk to life for vulnerable people in a flood event that has a one per cent chance of happening or being exceeded in any one year (an existing 1% Annual Exceedance Probability (AEP) flood event).

To determine the risk to life from floods on a property, Auckland Council completes a 'flood danger risk assessment' and assigns a 'danger rating' that indicates the threat to people's lives from flooding inside or outside the home. We consider the flood danger both inside and outside the home, and whether people can safely escape the home.

Our flood danger risk assessment looks at things including:

- flood damage from the severe weather events
- the likelihood of flooding (the AEP)
- the level of risk to life by flooding for a vulnerable person
- building stability (how a building would hold up against fast or deep flowing water)
- the hazard inside the building as well as along the evacuation route from the building.

The ability for someone to navigate floodwaters depends on the size and strength of a person, and because each person is different, we set our threshold at what is considered safe for a 'vulnerable person'.

We define vulnerable as children, the elderly, and people with impaired mobility. A water depth of up to 0.5 metres is considered safe for vulnerable people, so this is the depth threshold we use in calculating risk to life.

A copy of the risk matrix that our assessment teams use to determine a category can be found in the **appendix section of this guide**. This shows how we reach the danger rating based on the hazard for people both outside and inside the home.

The flood danger risk assessments provide the council with enough information to inform a property category recommendation to the Deputy Group Recovery Manager, who then finalises the category decision.

How do you define consented or lawfully established ‘habitable’ space?

‘Habitable space’ is a technical term we use to describe the areas of your home that you live in – for example living room, bedroom or kitchen. It excludes any bathroom, laundry, water-closet, pantry, walk-in wardrobe, corridor, hallway, lobby, clothes-drying room, or other space of a specialised nature occupied neither frequently nor for extended periods.

What can I do if I think my property should be a different category?

If you have received a Category 1 for your property but you think the property should be a different category, you can ask for a review of the category decision. You have **three months** from the category being notified to you, to raise a dispute.

A property cannot become ‘uncategorised’, ‘decategorised’ or ‘Category 0’ via a dispute because the Categorisation Approach doesn’t provide for this.

Auckland Council has a dispute resolution framework for homeowners who wish to dispute certain decisions made by Auckland Council relating to their property.

The dispute framework provides dispute options for the following decisions:

- the categorisation of the property (categorisation decision)
- the reference valuation contained within the council’s offer to buy a Category 3 property (valuation decision)
- the outcome of an application made under the ‘special circumstances’ category (special circumstances decision)
- the outcome of decisions relating to insurance proceeds, including EQC proceeds or the outcome of a decision relating to the individual circumstances of an uninsured homeowner (insurance decision).

The disputes process cannot be used to challenge the design or content of the Categorisation Approach or Voluntary Buy-out scheme.

How to raise a dispute

To dispute your property category, you must send us the dispute application form (available for download from **aucklandcouncil.govt.nz/review** and email it, along with your additional supporting information about why you believe the category is incorrect to **recoveryreview@aucklandcouncil.govt.nz**.

If you want to get your own geotechnical report for your property, you will need to organise this at your own cost. To do this you need to use either:

- a Chartered Professional Engineer who specialises in geotechnical engineering, or
- a Professional Engineering Geologist.

The recovery section of Auckland Council’s website has **guidance** on organising your own geotechnical report, including a letter of engagement and a report template (search ‘get your own geotechnical report’ on the council website). If you decide to organise your own geotechnical report to support a category dispute, we strongly recommend that you use our guidelines so you can be sure your specialist’s report provides the information we require.

How we manage category disputes

When you raise a category dispute, the council will complete an internal technical review about the decision and provide a response as soon as possible. If you are still unhappy with the outcome, you can ask for a further external review by an independent expert. The independent expert’s decision is final.

Dispute Resolution Framework and application forms

You can find the full Dispute Resolution Framework and application forms on the Auckland Council website (**aucklandcouncil.govt.nz/review**), under ‘storm recovery documents’.

There is no set time for completing a dispute because every dispute is different. We will respond to your application as soon as possible.

Is there support available for Category 1 property owners?

There is no financial assistance for Category 1 homeowners in the co-funding agreement between the government and Auckland Council. This agreement only provides financial assistance where there is intolerable risk to life (Category 2 and 3).

Working with insurers

Any damage to your home that was caused by the storms should be managed through your private insurance company. Auckland Council has no influence on insurance companies and their claims processes, so if you have questions about insurance cover, it is best to contact your insurer directly.

Insurers manage EQCover claims on behalf of EQC Toka Tū Ake. You can **find information** about natural hazards insurance provided by EQC Toka Tū Ake on their website (eqc.govt.nz), including the **Householders' Guide to EQCover**.

The Insurance Council of New Zealand has helpful information about working with insurers following emergency events, including consumer guides. You can find these on their dedicated storm recovery webpage (icnz.org.nz/industry/disaster-recovery).

If you are finding it hard to get your insurance claim settled, you can get free and independent support from the **NZ Claims Resolution Service** by calling **0508 624 327**. Information about the services they can provide can be found on their website (nzcrs.govt.nz).

Working with your bank

If you are concerned about your financial situation, talk to your bank early. Although it's a difficult conversation to have, speaking to your bank early will mean there may be more assistance options available to you. Most banks have dedicated hardship teams to support customers with financial challenges, so ask to speak to a member of that team to get specialised advice.

If you're not satisfied with how your bank is responding to your request for support, you should first write to them and ask them to resolve the issue. If you're still not satisfied, you can make a complaint to the Banking Ombudsman by emailing help@bankomb.org.nz or visit its website (bankomb.org.nz). The Banking Ombudsman is independent and can provide free advice around banking complaints.

Storm Recovery Navigator service

The Storm Recovery Navigator service is available to anyone who was impacted by the 2023 storm events. Whether you have questions about decisions being made about your home, your insurance situation, accessing financial assistance, or need support to deal with the emotional and mental toll, our Navigators are here to connect you to the resources and information you need to navigate your way through the coming months and beyond.

You can contact the service by filling in an **online referral form**, calling **09 884 2070** or sending an email to navigators@aucklandcouncil.govt.nz.

Flood preparedness

For property owners in flood-affected areas, there is advice available about how you can prepare your home to deal with flooding. The **'Preparing your property for flooding' brochure**, which can be found in the appendix of this handbook and on the Auckland Council website (under 'storm recovery documents'), contains information about the things you can do at your property to reduce the impact of flooding on your home.

The 'Get Prepared' section of Auckland Council's Flood Viewer (aucklandcouncil.govt.nz/floodviewer) has guides on understanding your flood risk and how to be prepared.

Auckland Emergency Management's website (aucklandemergencymanagement.org.nz) also has resources to help you prepare a plan for extreme weather events.

Storm-related resource and building consents processing

If you need resource and/or building consents for storm-related repairs to your property, your applications can be processed by a dedicated team set up to speed up these processes. Please include the word 'flood' or 'cyclone' in the subject line to ensure your application will be allocated to this team.

If you're not sure if you need a resource and/or building consent, there is a **'Do I need a consent' tool** on the Auckland Council website which can help you, or you can speak to your allocated case manager (if your home had a placard). The council website (aucklandcouncil.govt.nz/consents) also explains the process you need to undertake to get a consent for your works.

You can also email regionalplanninghelpdesk@aucklandcouncil.govt.nz to discuss your application with our planning team.

It's important to note that all repairs and mitigations will be subject to relevant building code and resource management requirements, and the standard consent fees will apply.

The appendix at the back of this guide has information about **Section 74 notices**, which is something which may be applied during the building consent process to properties in New Zealand affected by natural hazards.

What goes on property records about categories?

A property file is a record of documents, information and correspondence relating to a specific property, and this file is publicly available. People sometimes purchase a property file if they are researching a property that's for sale.

The property file will include a copy of the letter you have been sent from Auckland Council which confirms that your home has been given a Category 1. This letter explains that the property was assessed for intolerable risk to life from flood and landslide hazards, and no further action on the part of the council was required.

The property file will also contain a copy of your original Flood & Landslide Registration form (if you completed one) and any engineering reports you have provided, along with any final flooding or geotech assessment reports that have been created by Auckland Council as part of the risk assessment process.

A decision that a property is Category 1 is **not** recorded on the Land Information Memorandum (LIM). Where a property is given a final Category 2 or Category 3, this will be noted on the LIM.

Appendix 1 – Categorisation Approach

Auckland Council has agreed with the Government to implement the Government’s categorisation framework (the **Framework**) for Auckland homes severely affected by the events over the Auckland Anniversary Weekend and Cyclone Gabrielle 2023 (**severe weather events**).

This document describes Auckland Council’s nominated categorisation approach (**Categorisation Approach**) for application of the Framework.

Scope

1. Auckland Council’s Categorisation Approach is part of a one-off, limited response to the exceptional circumstances of the severe weather events in 2023, and is not a permanent programme for future disaster relief.
2. The Categorisation Approach will be applied to residential properties¹ that have a legally established residential dwelling on them, and were affected by the severe weather events (**Properties in Scope**).
3. Auckland Council will make a Categorisation Decision about Properties in Scope on the basis of the Categorisation Approach set out below.

Overview of categorisation approach

4. In applying the Categorisation Approach to Properties in Scope, the council will:
 - a. Assess whether there is “intolerable risk to life”² from flooding and/or landslides (risk assessment) for occupants of residential buildings on the property (not the land).

- b. Assess whether there is a feasible mitigation available to reduce the risk to life associated with the property to a tolerable level (feasibility assessment).
 - c. Taking into account the risk assessment and feasibility assessment, assign a “Category” to the property (the Categorisation Decision).
5. A Categorisation Decision will enable the identification of:
 - a. Category 3 properties eligible for a buy-out under the Scheme Terms.
 - b. Category 2 properties, for which there is a feasible mitigation at either a community or property level.
 - c. Category 1 properties, for which the risk does not meet the threshold of “intolerable risk to life”.
6. Council’s application of the Framework through the Categorisation Approach (and the resulting Categorisation Decision) is a feature of the jointly funded, one-off, limited response to the exceptional circumstances of the severe weather events in 2023. Accordingly, a Categorisation Decision:
 - a. Is understood by the council as an “administrative tool” and a prerequisite to allow the council to respond to the severe weather events.

¹ “Residential properties” does not include any properties owned, managed or administered by the Crown or any of its entities or agencies.

² For flooding, there is “intolerable risk to life” where there is a high risk to life to vulnerable people in an existing 1 per cent AEP flood event. For landslides, there is “intolerable risk to life” where the Annual Individual Fatality Risk is 1 in 10,000 or greater for the most vulnerable user.

- b. Is not considered by Auckland Council to be an enduring state attaching to a property. A Categorisation Decision reflects the risk assessment and feasibility assessment at a particular point in time.
- c. Does not have a legislative or regulatory basis.

Government framework

7. The Government released initial risk categories for assessing the future of flood and landslide affected residential properties on 1 May 2023. The three categories announced by the Government were:
 - a. Low Risk – Repair to previous state is all that is required to manage future severe weather event risk. This means that once any flood protection near the property is repaired, the home can be rebuilt at the same site.
 - b. Managed Risk – Community or property-level interventions will manage future severe weather event risk. This could include the raising of nearby stop banks, improving drainage or raising the property.
 - c. High Risk – Areas in the high-risk category are not safe to live in because of the unacceptable risk of future flooding and loss of life. Homes in these areas should not be rebuilt on their current sites.
8. The descriptions of the Government’s initial categories (which inform the Framework) are as follows:

9. The Government Framework refers to floods but also applies to landslides (and so the council reads “flood” as referring to “flood or landslide” throughout).
10. The Government’s Framework is clear that the Voluntary Buy-out Support Scheme for Category 3 properties will be a voluntary process and is limited to residential properties only. These parameters inform the scope of Auckland Council’s Categorisation Approach.

Context for development of the Categorisation Approach

11. The nature of the damage sustained in Auckland in the severe weather events has informed the development of the Categorisation Approach:
 - a. **Flood damage sustained in severe weather events:** Auckland’s topography is a primary driver of flooding characteristics. Auckland’s catchments are generally small, steep and drain to the coast. The region has ~94,000 km of overland flow paths (the routes taken by stormwater when flowing over land, including over 16,000km of permanent streams).

Category	Definitions	Examples
1	Repair to previous state is all that is required to manage future severe weather event risk.	Minor flood damage to repair but no need for significant redesign/retrofitting.
2C	Community level interventions are effective in managing future severe weather event risk.	Local government repairs and enhances flood protection schemes to adequately manage the risk of future flooding events in the face of climate change effects.
2P	Property level interventions are needed to manage future severe weather event risk, including in tandem with community level interventions.	Property specific measures are necessary e.g., improved drainage, raising houses is necessary. Benefits accrue to property owners but some may face affordability issues.
2A	Potential to fall within 2C/2P but significant further assessment required.	Interventions may be required / possible but insufficient information to provide initial categorisation (these may subsequently move between “2” categories or to categories 1 / 3).
3	Future severe weather event risk cannot be sufficiently mitigated. In some cases some current land uses may remain acceptable, while for others there is an intolerable risk of injury or death.	In the face of enhanced climate risks the property may face unacceptable risk of future flooding. Other property could be subject to unstable land that poses an ongoing risk.

This means we have more flooding from heavy rain events (pluvial flooding), often with little warning (flash flooding). There are no major rivers in the region meaning there is less flooding from rivers breaching their banks (fluvial flooding) than other regions in NZ.

- b. **Land instability resulting from the severe weather events:** In Auckland, land instability is often prevalent in the weak soils and rock that are common across the region. Landslides can be triggered by heavy rainfall, earthquakes and human activity such as removal of trees and vegetation, steep cuttings, poorly placed fill, leaking water pipes or a combination of these.
12. In Auckland, advice from technical experts is that individual property assessments are required to support Categorisation Decisions. For landslides, this aligns with the recommendations of the GNS Science guideline **“Landslide Planning Guidance – Reducing Landslide Risk through Land-Use Planning”** (in consultation). For flooding this aligns with the standard flood assessment method for on-site assessments of public and private buildings (Auckland Council – Flood Modelling Specifications 2013).
13. The Categorisation Approach will be applied to residential properties and has been designed to assess risk at the property level rather than on an area-wide basis.

Process: Application of the Categorisation Approach

14. The Categorisation Approach will be applied as follows:
 - a. Auckland homeowners with Properties in Scope are invited to ‘opt in’ by providing information that the council can consider in undertaking an initial desktop assessment.
 - b. To date, Properties in Scope have been identified where a homeowner:
 - i. Owns a property in an area that council is aware was highly impacted or suffered significant damage; and/or
 - ii. Has received a letter from Auckland Council (sent to all placarded properties) or become aware of the categorisation process through the media; and/or
 - iii. Has provided information to council to inform a desktop assessment.
 - c. Work remains ongoing to identify additional Properties in Scope³.
 - d. **A desktop triage** is undertaken to determine whether a property has the potential to have “intolerable risk to life”. This desktop assessment is based on expert judgement using the information provided by the homeowner, along with other relevant information including available datasets, flood model results, hazard maps, and records from the severe weather events.
 - e. For any Property in Scope where the desktop assessment indicates the potential for “intolerable risk to life” (and for any flooded properties that property owners have indicated they consider may be “a Category 2 or 3”), the council (or experts engaged by the council) will undertake a **site assessment**.
 - f. The results of the site assessment inform the risk assessment and are reported alongside potential mitigation options, with costings at a concept design level, to inform an assessment of feasibility.
 - g. The results of the risk and options assessments (and the desktop assessment) provide the council with sufficient information to inform the Categorisation Decision (i.e. whether there is an “intolerable risk to life” associated with the property, and whether the long-term risk can be feasibly mitigated to a “tolerable” level).
 - h. The Categorisation Decision will be made by the Group Recovery Manager or Natural and Built Environment Lead, following consideration of the recommendation from technical experts.
 - i. The Categorisation Decision and the next steps in the process will be communicated to the property owner by the council’s Recovery Office.

³ For example, the Group Recovery Manager issued a statutory notice under the Civil Defence Emergency Management Act 2002 to insurance companies and Toka Tū Ake EQC, requiring them to provide property addresses for significant claims received in relation to the severe weather events. The notice stated that this information was required to assist council in identifying properties under the categorisation framework.

Categorisation approach: landslide risk assessment

15. For landslides, the risk assessment framework anticipates that a building will be “Category 3” where the Annual Individual Fatality Risk is 1 in 10,000 or greater for the most vulnerable user and there is no feasible mitigation (at a property or community level) to reduce the risk to a tolerable or acceptable level.
16. The Annual Individual Fatality Risk is calculated as follows:

$$R_{(LoL)} = P_{(H)} \times P_{(S:H)} \times P_{(T:S)} \times V_{(D:T)}$$

Where

$R_{(LoL)}$ is the risk (annual probability of loss of life) (death) of an individual).

$P_{(H)}$ is the annual probability of the landslide.

$P_{(S:H)}$ is the probability of spatial impact of the landslide impacting a building (location) taking into account the 1 travel direction given the event.

$P_{(T:S)}$ is the temporal spatial probability (e.g. of the building or location being occupied by the individual) given the spatial impact and allowing for the possibility of evacuation given there is warning of the landslide occurrence.

$V_{(D:T)}$ is the vulnerability of the individual (probability of loss of life on the individual given the impact).

17. For properties where there may potentially be “intolerable risk to life” according to a desktop triage in areas not covered by the GHD report, Auckland Council has contracted geotechnical engineers to undertake on-site geotechnical assessments. Auckland Council has created a template scope of works to guide the quantitative assessment by geotechnical experts of risk to life from landslides. If property owners prefer to organise their own geotechnical report they can do so, with advice available on the council’s website (including a downloadable copy of the template for completion by the privately engaged geotechnical engineer, and guidelines on the use of AGS2007 for landslide risk assessment in Auckland).
18. A landslide risk assessment undertaken in accordance with council’s template will provide the council with evidence of (amongst other things):
 - a. **Damage assessment:** An assessment of land damage sustained from the Auckland weather events (which will also include any work carried out to repair the land damage, consideration of pre-existing conditions or damage, apportionment of damage if multiple events, and assessment of any sources of off-site risk).
 - b. **Quantitative assessment of the stability of the land** which may affect safe use of the property.
 - c. **Quantitative assessment of risk of loss of life** for users of the property.
An “intolerable risk to life” (in accordance with the AGS2007 guidelines), is an Annual Individual Fatality Risk of 1 in 10,000 or greater for the most vulnerable user.
 - d. **Expert opinion on whether the long-term risk to life can be reduced to a tolerable level** (and advice on the Categorisation Approach required to achieve this, and scope of works to be completed as part of the construction programme, including a cost estimate).
 - e. **An assessment of the unmitigated and mitigated risk** of loss of life.

19. A landslide risk assessment undertaken in accordance with Auckland Council's template provides the council with sufficient information (in addition to the information already held) to inform a recommendation by the technical experts to the Group Recovery Manager.

Categorisation approach: flooding risk assessment

20. Auckland Council's risk assessment framework for flooding assesses "intolerable risk to life" associated with residential properties, based on a Danger Rating assigned through the application of "Flood Danger Risk Assessment".
21. Flood Danger represents the relative threat posed by flooding to building occupants taking into account the flood hazard inside and outside the building, and evacuation routes.
22. For flooding, the risk assessment framework anticipates that a building will be "Category 3" where there is a high risk to life to vulnerable people in an existing 1 per cent AEP flood event, and there is no feasible mitigation (at a property or community level) to reduce the risk to a tolerable or acceptable level.
23. Risk assessment for flooding will include:
- a. **Damage assessment:** an assessment of flood damage sustained from the Auckland weather events.
 - b. **Assessment of Flood Danger** as a combination of:
 - i. **Event likelihood** (in terms of the probability of an event of a given magnitude being equalled or exceeded within a year – the Annual Exceedance Probability, or AEP),
 - ii. **Hazard** (the level of risk to life by flooding),
 - iii. **Exposure** (what is exposed to flood hazard in a given place) and
 - iv. **Vulnerability** (propensity to suffer adverse effects of flooding, based on individual characteristics and external factors).
24. Auckland Council will assess whether there is "intolerable risk to life" by assigning a Flood Danger Rating to a property in accordance with council's Flood Danger Rating Schema. The Flood Danger Rating represents the threat to life to people inside or outside dwellings on residential property that are exposed to flood hazard.
25. In addition to Flood Danger, the risk assessment framework takes into account the likelihood of an event occurring. Event Likelihood is described by the annual exceedance probability (AEP) of the flood event, which is the probability of the event being equalled or exceeded within a year. As rainfall is the primary driver of flooding in the Auckland region, flood event likelihood can be considered synonymous with rainfall event likelihood.
26. **Expert opinion on options to reduce risk to life to a tolerable level** (and the Categorisation Approach required to achieve this, and scope of works to be completed as part of the construction programme, including a cost estimate).
27. **An assessment of the unmitigated and mitigated risk:** A flooding risk assessment undertaken in accordance with Auckland Council's template, and if necessary an options assessment provides the council with sufficient information (in addition to the information already held) to inform a recommendation by the technical experts to the Group Recovery Manager.

Categorisation approach: feasibility assessment

28. The site assessments undertaken by Auckland Council (or experts engaged by the council) will consider whether there is a property or community level solution available to mitigate the risk to life associated with a property, and the approximate cost of that solution.
29. Whether a **property level mitigation** is feasible will be determined by the council taking into account
 - a. The cost of the mitigation (whether the cost of the mitigation is likely to cost less than 25 per cent of the CV of the property).
 - b. Whether the mitigation can reasonably be expected to be delivered within two years of the Categorisation Decision.
30. Whether a **community level mitigation** is feasible will be determined by the council (and is subject to business case approval and funding under the National Resilience Plan).

Categorisation approach: quality assurance

31. The Government engaged Tonkin & Taylor Ltd to provide a high-level assurance review of the process followed by Auckland Council in establishing the Categorisation Approach (in accordance with the Framework).
32. In terms of the application for the Framework, for the landslide risk assessments Auckland Council has engaged a panel of five experts (the **Geotechnical Advisory Panel**) to review the approaches taken, project scopes and key deliverables. These individuals were chosen to represent the range of skills and experience needed to achieve the required outcomes. The Geotechnical Advisory Panel comprises two Engineering Geologists, a Hydrologist and two Geotechnical Engineers from five independent organisations.

33. In addition to the Geotechnical Advisory Panel, Auckland Council has a dual approach to quality assurance for the landslide risk assessments being undertaken across Auckland. Auckland Council is in the process of engaging two well respected local experts to act as mentors to the suppliers undertaking the field assessment work to help ensure they are providing consistent, well informed reports. Once delivered, each report is then subjected to a robust peer-review process. Council has engaged WSP Australia to undertake the technical peer-review, while our in-house Regulatory Services team will check proposed mitigations for potential consenting requirements.
34. For the Flood risk assessments Auckland Council is in the process of engaging a panel of four experts to review and assure the approach taken. These individuals were chosen to represent a range of skills and experience needed to achieve the required outcomes. The group contains expertise from across New Zealand, including the engineering sector, local government, and a Crown Research Institute.

Dispute resolution

35. Auckland Council has established a **dispute resolution process** for Categorisation Decisions. The dispute resolution process will relate to a Categorisation Decision made in respect of a Property in Scope, and is not an opportunity to contest the Framework or the Categorisation Approach itself.

Special circumstances

36. On the application of a homeowner, the council may in its discretion consider whether to make a Categorisation Decision that departs from the position set out in this Categorisation Approach (**a special circumstances decision**).
37. A special circumstances decision will be made in accordance with the council's Guidance on the application of Special Circumstances, and will have regard to:
 - a. The nature of the "special circumstances" and the extent of (and any implications of) departure from the Categorisation Approach.
 - b. The level of any increased cost to the council resulting from the departure from the Categorisation Approach.
 - c. Whether departure in an individual case is consistent with the council's overarching policy objective for its Categorisation Approach, which is to permanently remove or reduce the intolerable risk to life posed by some residential properties due to the severe weather events.
 - d. Whether departure in an individual case is consistent with the further objectives guiding the council's policy approach (i.e. whether departure is effective, affordable, fair and consistent with policy intent, and equitable).

Appendix 2

– Auckland Council Property-level flood risk assessment framework

Non-technical Overview

4 March 2024

Introduction

In response to the severe weather events of January and February 2023, Auckland Council determined that flood-affected properties would be eligible for consideration for buy-out or subsidised risk mitigation where there is a high risk to life to vulnerable people in a flood event that has a 1% probability of occurring or being exceeded in a year. The Auckland Council Healthy Waters department

developed the Framework for Assessing Flood Risk at the Property-level to enable the categorisation of properties affected by flooding during the severe weather events of January and February 2023. The Framework provides a systematic approach for assessing flood risk on individual residential properties in the Auckland region. This document provides a non-technical overview of that framework.

Flood Danger Rating

The Framework employs a Flood Danger Rating system, which classifies the flood hazard at a property during peak flood conditions based on water depth, flow velocity, and the combined effect of these factors on the stability of people and buildings.






The Flood Danger Rating describes the perceived hazardousness of flooding on a property:

- **Low Danger:** generally not dangerous for all, including vulnerable people.

- **Moderate Danger:** Whether the situation is dangerous depends primarily on people's decision making. Their choices will determine the level of hazard to which they are exposed.
- **High or Extreme Danger:** Dangerous for vulnerable people, and may be dangerous for all, irrespective of what people decide to do.

The figure on the following page describes several illustrative flooding scenarios.

Illustrative flooding scenarios and danger ratings

LOW DANGER		<ul style="list-style-type: none"> • Building stability is not at risk. • Flooding may or may not be up to the dwelling footprint. The habitable floor of the dwelling remains dry. • An evacuation route is available which does not require wading or requires low-hazard wading only. • Low danger, including for the mobility impaired.
MODERATE DANGER		<ul style="list-style-type: none"> • Building stability is not at risk. • The dwelling is surrounded by floodwaters that pose high hazard for children and the elderly and may also be high hazard for adults. The floodwaters could be right up to the dwelling footprint, but the habitable floor remains dry. • There is no safe or low-hazard evacuation route available. • While the safer option would be to shelter in place, some people may choose to evacuate due to uncertainty about the evolving flood situation. This would be dangerous for children and the elderly and may also be dangerous for adults.
		<ul style="list-style-type: none"> • Building stability is not at risk. • Properties in this zone have a habitable floor subject to minor flooding <0.5m in depth. • A safe or low hazard evacuation route is available but must be accessed from the upper levels of the dwelling. • For able-bodied people who are likely to evacuate or take refuge upstairs, this scenario represents low danger. • For mobility impaired people who may be downstairs, the danger is moderate.
HIGH DANGER		<ul style="list-style-type: none"> • Building stability is not at risk. • The dwelling is surrounded by floodwaters that are high hazard for children and the elderly and may also be high hazard for adults. • There is no safe or low-hazard evacuation route available. • The floodwaters extend right up to the dwelling footprint and there is flooding over habitable floor, which could be deep. • A significant proportion of people may try to evacuate. • This scenario is dangerous for all.
		<ul style="list-style-type: none"> • Building stability is not at risk. • Properties in this zone have a lower habitable floor subject to flooding >0.5m in depth that poses high danger for mobility impaired people. At higher levels of flooding (>1.2m) this scenario is dangerous for all, including others in the house who may try to assist those trapped downstairs.

Illustrative flooding scenarios and danger ratings

EXTREME DANGER



- The floodwaters extend right up to the dwelling. There may be flooding over habitable floor, which could be deep.
- There are deep and/or fast flowing floodwaters immediately adjacent to the building footprint.
- The building stability may be threatened by erosion of the building foundations or uplift forces causing failure of the walls and foundation slab.
- Even if a safe or low-hazard evacuation route is available, occupants may not be able to access it in the event of building failure.
- This scenario would be dangerous for all.

Flood Hazard Assessment

The Flood Danger Rating is determined by assessing the observed or predicted flood hazard conditions on the property.

The framework uses flood hazard thresholds grounded in empirical evidence of the stability of people and buildings in flood flows and which align with Australian national guidance. The most dangerous situations are where people or buildings are likely to become unstable in the water.

Auckland's landscape is defined by many small, steep valleys. This topography tends to produce localised flash flooding which can be highly variable at the property-level. It is not uncommon for flooding to affect one property but not neighbouring properties, and it is possible to have dangerous flooding on one side of a house but no flooding on the other side.

For this reason, the assessment considers flood hazard at three locations on the property. At each location, the Flood Danger Ratings reflect the threat to those who are vulnerable:

- **The hazard to people inside:** this represents the threat to people from flooding inside the building and is assessed as the maximum flood depth over the lowest affected habitable floor. Inside the dwelling the most vulnerable people are the mobility impaired who could not evacuate unassisted even if they wanted to. Around 14 per cent of the adult population in New Zealand and 46 per cent of those aged over 65 are mobility impaired.

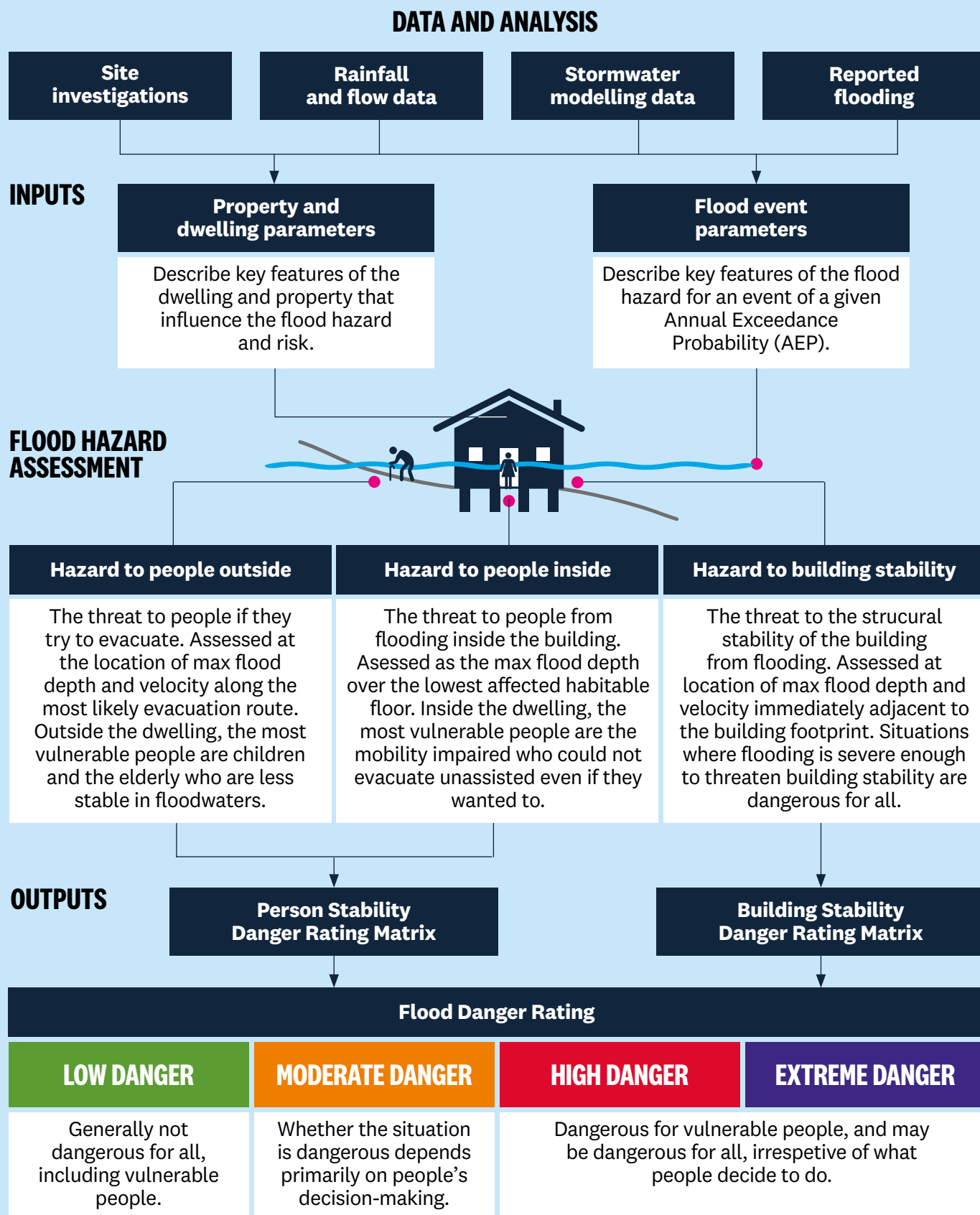
- **The hazard to people outside:** This represents the threat to people if they try to evacuate and is assessed at the location/s of maximum flood depth and velocity along the most likely evacuation route. Outside the dwelling, the stability of people in floodwaters is a function of their height, weight, and physical ability relative to the depth and velocity of flow. The most vulnerable are children and the elderly who are less stable in floodwaters.
- **The hazard to building stability:** this represents the threat to the structural stability of the building from flooding and is assessed at the location/s of maximum flood depth and velocity immediately adjacent to the building. Very deep and/or fast flowing waters can damage the structural integrity of the building and pose a risk that the building might collapse. Everyone is vulnerable in this situation as people inside the building may not have time to evacuate to safety if the building were to collapse. This scenario would be dangerous for all and therefore has the highest danger rating of extreme.

The inputs to the flood hazard assessment are generated from detailed desktop and site investigations.

These include flood event parameters, which describe key features of the flood hazard, and dwelling parameters, which describe key features of the dwelling and property that influence the flood hazard and risk.

The figure on the following page shows the inputs and components of the flood hazard assessment and how these are combined to generate the Flood Danger Rating.

How the Flood Danger Rating is determined



The Person Stability Danger Rating Matrix is below. This matrix shows how the assessed flood hazards to people inside and outside the dwelling are combined to generate the Flood Danger Rating.

Person Stability Danger Rating Matrix

HAZARD Show the danger rating based on the assessed hazard inside and hazard outside.					HAZARD TO PEOPLE OUTSIDE											
					Assess flood hazard along the most likely evacuation route using DxV Chart 2 (Flood hazard thresholds for person stability). Select the most appropriate hazard outside rating between very low to high.											
Danger rating key <div><div></div> LOW DANGER</div> <div><div></div> MODERATE DANGER</div> <div><div></div> HIGH DANGER</div>		Conditions			Hazard rating		An evacuation route is available and does not require wading.			An evacuation route may be available but requires wading. Hazard is a function of depth and velocity of flooding along the evacuation route. Refer DxV Chart 2.						
					D&V thresholds		n/a		Refer DV Chart 2		Refer DV Chart 2.		Refer DV Chart 2.		Refer DV Chart 2.	
HAZARD TO PEOPLE INSIDE	Step 3. Assess flood hazard inside the dwelling based on depth over habitable floor (assuming V = 0 inside the building).	Habitable floor remains dry.	Very low	Floodwaters are NOT touching the building footprint. Nil depth over habitable floor.												
				Floodwaters are touching the building footprint. Nil depth over habitable floor.												
	For assessing hazard Inside, vulnerable people includes children, the elderly, and the mobility-impaired.	Habitable floor is wet.	Low hazard for all except infants and very young children.	Depth (D) over habitable floor: 0 ≤ D < 0.5m.												
			Low hazard for able-bodied adults / high for vulnerable people.	Depth (D) over habitable floor: 0.5 ≤ D < 0.85m.												
			Moderate hazard for able-bodied adults.	Depth (D) over habitable floor: 0.85 ≤ D < 1.2m.												
			High hazard for all.	Depth (D) over habitable floor: D ≥ 1.2m.												

Intolerable Risk Threshold @ 1% AEP

Flood risk

The Flood Danger Rating represents the threat to life to vulnerable people in a given flood event.

For the purposes of property categorisation, Danger Ratings of Extreme or High are considered to be intolerable if the flood event has a probability of 1% or more of occurring or being exceeded in a year. This is referred to as the Annual Exceedance Probability or AEP.

A flood with an AEP of 1% would be expected to occur, on average over the long-term, once every 100 years, but may occur more frequently than that. There is a 55% chance of a 1% AEP flood occurring at

least once in any 80-year period, and a 19% chance of it occurring at least twice in that period.

The selection of the 1% AEP as the threshold for intolerable risk is consistent with the standards for urban planning and development in Auckland. Situations classified as High or Extreme Danger are dangerous, particularly for vulnerable people. Properties where these situations are expected to occur with an annual probability of 1% or greater should be considered unsafe for long-term residential occupation.

Existing risk

This is the flood risk which currently exists, based on recorded rainfall, the existing level of development in the catchment, and the current state of the property and dwelling at the time of the assessment.

Properties which are assessed to have High or Extreme Danger Ratings in the existing 1% AEP

flood become candidates for property buyout or subsidised risk mitigation works. Properties which are assessed to have Low or Moderate Danger Ratings in the existing 1% AEP flood receive a Category 1 classification.

Future risk

This is the flood risk that is anticipated to exist in the future assuming heavier rainfall due to climate change, the maximum development of the catchment (which increases runoff), and the future state of stormwater infrastructure and the property and dwelling assuming any proposed community or private risk mitigation works have been completed.

The final property categorisation (as in Category 3, Category 2P or 2C) depends on an assessment of the potential private and community solutions to mitigate the flood risk at the property. Since flood risk in the future will be greater than the existing risk due to climate change and the effects of development, future risk must be considered in this evaluation to determine whether the proposed property-level or community-level interventions will be effective at mitigating the future risk.

Appendix 3

– Information about Section 74 notices

What is a Section 74 notice?

A Section 74 notice is something that might be applied during the building consent process to properties in New Zealand affected by natural hazards.

As set out under **Section 72 of the Building Act 2004** (or its predecessors, s 641A of the Local Government Act 1974, and s36 of the Building Act 1991), territory authorities like Auckland Council must grant building consents on land which is subject or is likely to be subject to one or more natural hazards, so long as the building work that is proposed is protected from the effects of the natural hazard concerned. The land intimately connected with that building work must also be unlikely to be compromised by the natural hazard that in turn could compromise the building work.

The building work must also be unlikely to create a new hazard on any land, and must not make the existing natural hazard worse.

To be able to grant a building consent, the council may also have to consider applications for waivers or modifications of the building code the building work may not comply with.

In these circumstances, the consent can be granted but with the requirement that a Section 74 notice is registered on the Record of Title (what used to be called a Certificate of Title). This process only applies when a building consent application is made for a new building or a major alteration to an existing building.

If the building or building work are exempt under Schedule 1 of the Building Act 2004, the Section 74 notice will not apply.

What is the purpose of a Section 74 notice?

A Section 74 notice allows property owners to build on land subject to natural hazards while also providing a level of protection to both the consenting authority and future prospective buyers. The two key purposes of the notice are to:

- alert subsequent buyers to the presence of a natural hazard on the property
- protect councils from legal action related to the exercise of the owner's right to build on the land when it is affected by natural hazards.

How are Section 74 notices applied? Could I get one on my property?

Section 74 notices can only be applied as part of a building consent process. Before a building consent is granted that requires the registration of a Section 74 notice, the council requires an owner to sign an Acknowledgement of Risk to confirm they have consulted with legal and technical experts and understand the nature of the condition and legal implications.

Once a Section 74 notice has been registered, it stays permanently on the property's Record of Title. The presence of a Section 74 Notice is something a lawyer or conveyancer should flag with any prospective buyer as part of the property purchasing process.

Records of Title for any property can also be downloaded for a small fee from the LINZ website (linz.govt.nz).

What is considered a natural hazard?

The Building Act defines a natural hazard as land subjected to:

- erosion (including coastal erosion, bank erosion, and sheet erosion)
- falling debris (including soil, rock, snow, and ice)
- subsidence
- inundation (including flooding, overland flow, storm surge, tidal effects and ponding)
- slippage.

Not every possible natural hazard that might exist or have the potential to occur on your land, will be severe enough to be classified as a natural hazard under the Building Act, e.g. not all flooding is deep enough, fast enough, or long-lasting enough to meet that criteria.

Independent evidence that accompanies the building consent may support that position, and if the council agrees it can process and grant the building consent with none of the provisions for natural hazards applying, i.e. no notice need to be applied to your title.

Hazards such as tsunamis or earthquakes are not regarded as natural hazards under the Building Act.

Can I get a Section 74 notice removed from my property?

It is possible to have a Section 74 notice removed only if the council is satisfied that the hazard has been eliminated or mitigated through property works or local infrastructure changes. By law, the notice cannot be removed for insurance purposes or any other similar reason.

Can I still get insurance or finance if I have a Section 74 notice on my property?

How a Section 74 notice might affect your insurance policy or ability to secure finance is something you should discuss with your lawyer, finance provider and insurer.

There may also be consequences for your building policy related to any other conditions the council must apply to the building consent that relate to waivers or modifications of the building code.

The Earthquake Commission (ECQ) also provides **information on their website** about Section 74 notices and how these may impact EQC insurance claims.

Does a property's category (from the risk categorisation process following the 2023 severe weather events) determine whether a Section 74 notice is issued?

No, a property's category will not determine where a Section 74 notice is necessary.

A Section 74 notice is only issued when undertaking building work and is determined by the location and nature of the natural hazard and the impact of the proposed building work on that natural hazard.

The categorisation process does not affect the council's decision making under the Building Act (the Act under which Section 74 notices are issued).

Will the council flag if a property is likely to have a Section 74 notice issued so a homeowner knows in advance of considering undertaking consented works?

No, but your designer and/or your engineer should be able to give you early advice on the likely impact of your property's natural hazards on the proposed building work.

Indicative information on certain natural hazards is visible on the Auckland Council GIS tool. You may also apply for a Project Information Memorandum (PIM) from the council.

The PIM would also identify potential natural hazards as well as other key considerations that the Council is aware of that might affect your project.

Any information that there might be a natural hazard on your property should be investigated by your own independent specialists and advisors before you apply for a building consent.

A Section 74 notice is determined by the location and nature of the natural hazard and the impact of the natural hazard on the proposed building work and on the land intimately connected with that, and vice versa, the possible effects of the building work on that natural hazard.

Find more information on building on land subject to natural hazards on the **council website** (searching 'Building on land at risk of a natural hazard'). MBIE has published helpful guidance for homeowners following the 2023 severe weather events.

Appendix 4

– Preparing your property for flooding



What is stormwater?

Stormwater is the water that runs off surfaces when it rains.

During wet weather, stormwater naturally flows overland to the lowest point. In regular, small rain events, this usually has minimal impact on people or property. However, when there is heavy rain and the stormwater network reaches capacity or there is a blockage, greater volumes of water flow overland and may cause flooding.

Climate change is increasing the number and intensity of extreme rain events, so we all need to be prepared and become more resilient to flooding.

About stormwater

Stormwater flows across public and private land through open drains, culverts, pipes, along roads and via parks, wetlands and streams on its way to the sea.

Everyone has a role to play in maintaining the stormwater network to reduce the impact of flooding. By allowing water to flow freely and safely through our neighbourhoods, we will help keep our whānau, property and the community safe during storms.

Who is responsible for maintaining the stormwater network?

The public stormwater network serves whole communities and is managed by Auckland Council (or Auckland Transport in rural areas). In some cases, the public stormwater network may run across or under private properties.

Private stormwater systems are the pipes and drains on private property that connect to the public network. Streams that run through or next to a privately owned property are part of the private stormwater system. It is the property owner's responsibility to maintain the private stormwater system, (including streams and overland flow paths), up to and including connections to the public network.

To report stormwater flooding risks like blocked drains, culverts, catchpits or grates, or to request an investigation following a flood or stormwater event, call Auckland Council on 09 301 0101.

For drain or pipe blockages on private property, please call a plumber or drainlayer.



What is an overland flow path?

An overland flow path is the natural course water takes across the land.

During heavy rain an overland flow path can become a temporary, fast-flowing stream.

What is a flood plain?

Flood plains are areas predicted to be covered by flood water during heavy rain. They occur in low-lying areas and next to streams and rivers, including where streams were historically piped.



What is a flood-prone area?

Flood prone areas are low-lying areas where water can become trapped and collect during heavy rain, especially if the stormwater outlet reaches capacity. They can occur naturally or be created by changes to the land.

Know your flood risk

Your property might be at risk of flooding for several reasons including:

- it is at the bottom of a steep hill/road or driveway
- it is next to (or near) a stream or river
- there is a flood plain or flood prone risk on or near the property
- it has an overland flow path within (or near) the property
- it is in an urban area with a lot of hard surfaces (e.g. concrete, asphalt) that can't absorb water
- if changes have been made to the land or buildings that obstruct the flow of stormwater
- it is in a low-lying coastal area.

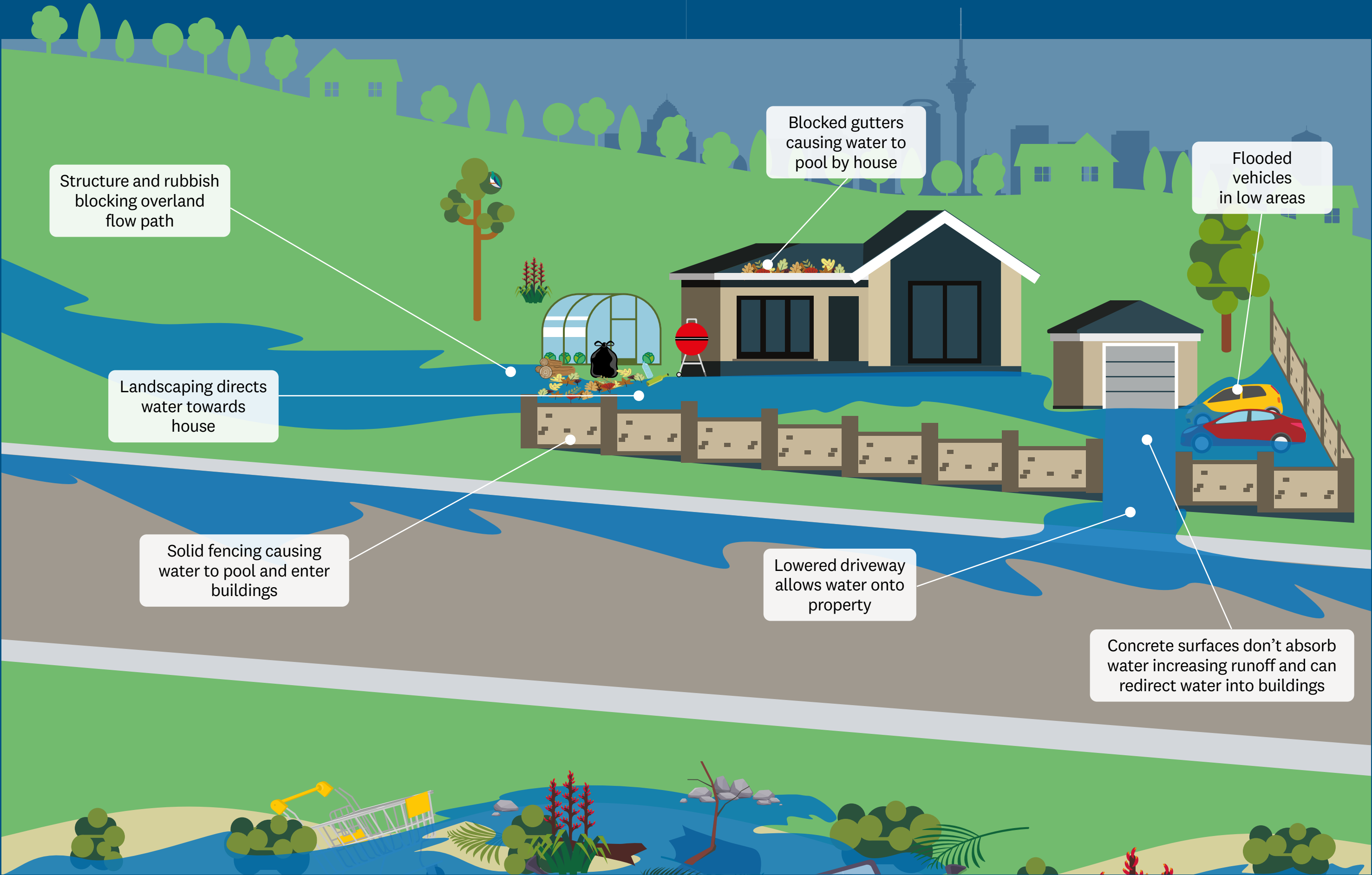
Find out if your property is at risk from flooding
on Auckland Council's flood viewer:
aucklandcouncil.govt.nz/floodviewer
(read the back of this leaflet for more info on the flood viewer).

Simple ways to reduce flood damage when a storm is expected

While we can't control the weather, and it's not always possible to prevent flooding, there are things you can do to prepare your whānau for storms and minimise flood damage to your property. Consider doing the following:

- move vehicles, valuable items and livestock away from low areas that could flood
- check gutters and drains are clear of debris so water can drain away easily
- clear rubbish and debris that could be picked up by flood water and create a blockage
- in the house, store valuables and important documents in high places
- ensure that places that might flood including garages and basements are not used for sleeping
- have a grab bag and emergency plan that includes your pets ready, in case you need to evacuate. Visit **getready.govt.nz** for more information
- report any visible blockages in the public network (roadside drains) to council on **09 301 0101**.

Property related stormwater issues



Long-term improvements to reduce the impact of future floods

If your property is in a flood risk/hazard area or changes are made to the natural flow of water e.g. the overland flow path is blocked by debris or a structure is built over it, more water can find its way onto your property and into your home. If there is an overland flow path through your property, water must be able to enter and exit freely at its natural point, however there are some improvements you can make to minimise the impacts of flooding.

- When your driveway is lower than the road and is not in an overland flow path, ensure it is high enough or has a hump so water stays on the road instead of running down your drive.
- When landscaping, ensure the ground is shaped to direct water away from your home.

- Ideally your house's floor height should be higher than the surrounding land, and you should have to step up (or ramp) to enter your home.
- Fix or replace broken gutters and downpipes to prevent water pooling by your house.
- Place fences and buildings away from overland flow paths and ensure fences have a gap at the bottom to allow water to travel underneath.
- Where practical, replace hard surfaces like concrete with permeable materials like grass or spaced pavers to absorb water and reduce run off.

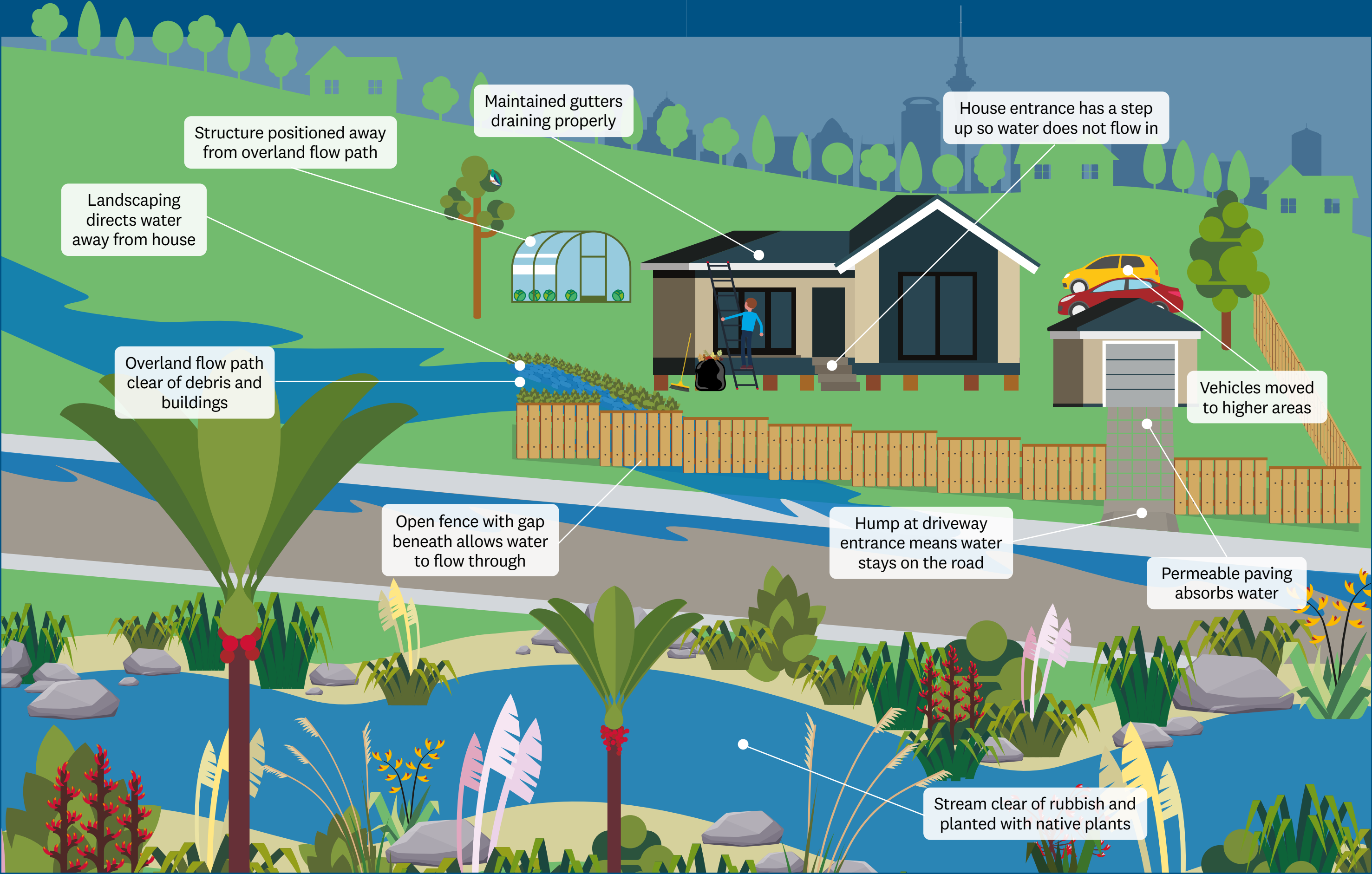
Do you rent your home?

While the property owner or landlord is typically responsible for building works and larger property maintenance (check your lease or rental agreement for specifics), you should be careful where you place your belongings and look after the property to reduce the risk of flooding and damage.

Does your home insurance cover flood damage?

Consider increasing the amount of flood related cover you have in your policy if you're able to.

Property related stormwater improvements



I have a stream on or near my property

Most streams running through or next to privately owned property are private streams. Maintenance of the channel and stream banks to ensure water can flow freely is the responsibility of the property owner.

During heavy rain, high water volumes can cause streams to overtop. To reduce potential damage to your home, streamside residents should:

- keep the stream clear of debris, fallen trees, rubbish and invasive pest plants so water can flow freely

- plant stream banks with native plants with narrow trunks and leaves that will lie flat in a flood, to prevent stream bank erosion and create habitat for wildlife.

Streams often flow through multiple properties so it's a great idea to work with your neighbours on maintaining the stream so everyone is better protected from flooding. Talk to your neighbours or your local community / environmental group about working with other local residents to make improvements to your stream.

Do I need a consent to carry out works on my property?

Any building activity, such as raising the ground level, increasing the impervious area or changing an overland flow path may require a resource consent from the council.

Common works that require a building or resource consent:

- constructing buildings and structures (including fences) on a flood plain
- diverting, changing, or blocking overland flow path
- earthworks in (or next to) a stream

- vegetation removal within 10m of a stream, where the plant species are native or non-natives not listed in the Regional Pest Management Plan
- new or replacement structures (including fences), in (or next to) a stream.

Information about consents, including when you need them and how to apply, can be found at **aucklandcouncil.govt.nz**. Always check with council or a building professional first, for specific advice about consent requirements for your property.

Consider your neighbours

When making changes to your property, consider your neighbours and avoid increasing the flood risk elsewhere.

It is illegal to intentionally re-direct stormwater that naturally flows through your property, onto a neighbouring property. Water must be allowed to flow down its natural path, and any impacts must be managed by each property owner.

Find out if your property is at risk from flooding



Use the interactive map on the **Auckland Flood Viewer** to see if there are flood hazards present on your property.

Anyone can use this free, easy app on a smartphone, tablet or computer. The Flood Viewer shows flood plains, overland flow paths, flood prone areas and areas at risk of coastal inundation, as well as information, advice and videos to keep you, your whānau and property safe.

The information shown on the Flood Viewer is publicly held data and is also available upon request on a LIM report. Flood modelling is updated periodically so we recommend checking back regularly to see if the information about your property has changed.



Visit **aucklandcouncil.govt.nz/floodviewer**



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