



# Community update Piha cyclone recovery

We hope that the information in the updates will be relevant for most community members, so please also help us spread the word on this update to your neighbours and friends in Piha.

### In this issue:

- Drop-in clinic Auckland Council Recovery Office and GHD
- Nationwide test of Emergency Mobile Alert test
- Auckland Transport update
- Building assessments update
- Resource consent requirements
- Disputes between neighbours
- Central government Budget announcements
- Reporting new movement or landslides
- Rubbish collection for flood-damaged household goods
- Waitākere Regional Park
- Geotechnical update background and wide-scale landslide risk assessment

### Have we got your details?

If you've received this newsletter via email, then we're all good – we have your correct contact details.

If it has been passed on to you by someone else or you're reading it via a website or social media channel, please sign up via this online form.

## **Drop-in clinic - Auckland Council Recovery Office**

Simon Fraser, Community Liaison Lead for Piha and Karekare, will be available to discuss any recovery-related issues from Cyclone Gabrielle and Auckland Anniversary weekend floods:

Piha Community Library, 10:00am to 1pm, Wednesday 31 May.

Can't make this session? Feel free to email Simon at piha@aucklandcouncil.govt.nz.

### GHD on-site - landslide risk assessment study

GHD, Auckland Council's geotechnical supplier, will also be at the Piha Community Library on Wednesday 31 May from 10am-1pm, to gather information and observations from residents to include as part of GHD's landslide risk assessment. Information that is GHD seeking includes previous slope instability, surface seepage, springs and unstable, leaning trees.

If you can't make this time, you can also provide information via email to <a href="mailto:piha@aucklandcouncil.govt.nz">piha@aucklandcouncil.govt.nz</a> with your information, including exact location, plus any imagery you may have by 5 June. Please include 'GHD landslide risk assessment' in the subject line.

This information will be passed onto GHD, and will be recorded and considered as part of the GHD's landslide risk assessment.

## **Nationwide test of Emergency Mobile Alert test**

The National Emergency Management Agency (NEMA) will be conducting a nationwide test of the Emergency Mobile Alert system on Sunday 28 May, between 6pm and 7pm. An alert will be broadcast to all capable phones.

The test allows NEMA to evaluate the system, cell towers, and the ability for mobile phones to receive the alert. It also helps familiarise the public with what an Emergency Mobile Alert looks like and how their phone presents the message. Visit <u>NEMA</u> for more information, including how you can get ready for an emergency.

## **Auckland Transport update**

### Long-term remedial repairs

Investigation, planning and design work on long term remedial works for Piha, Rayner and Glenesk Roads continues. We will come back out to the community on these remedial works once planning and design work has been completed.

There will be many roadworks across the western suburbs over the coming months as we undertake repairs from this year's extreme weather. Work is underway with our roading contractors (primarily Downer, Fulton Hogan and Ventia) to co-ordinate remedial works and traffic management to help reduce disruption to road users where possible. We will look to communicate significant closures and alternative routes for remedial works in future community updates.

### Scenic Drive slip at Elevation

Auckland Transport is continuing to monitor the slip near Elevation Brasserie on Scenic Drive. This includes increased monitoring following continued heavy rainfall in the last few weeks. The most recent geotechnical assessment confirmed that this section of the road continues to be safe for vehicles weighing up to 3000kg. We have asked Police to monitor compliance with the weight restriction.

Work will get underway this week to repair and mitigate further damage to the road. This will include diverting stormwater and resealing. We will aim to carry out this work with minimal disruption to traffic, however, travel times through this section of road may increase.

### Ongoing road maintenance and drainage

Maintenance teams continue to monitor and assess drains for clearance across all western suburbs. This work has been hampered by continued rainfall and silt runoff into cleared drains – at times blocking drains again within 48 hours. Property owners can assist by helping to ensure loose dirt and debris isn't running off their property into nearby stormwater drains. If you have concerns about your local roads and drainage, you can contact us here.

## **Building assessments update**

Updated placard status numbers in Piha as of Monday 22 May:

- Red 1 10
- Red 2 9
- Yellow 1 15
- Yellow 2 7
- White 154

There are different reasons why these numbers may differ each week, including:

- If remedial action has been confirmed and approved by the council's compliance team, then the placard can be noted as closed and removed off the list.
- It is identified as a duplicate and removed.
- If was confirmed as one placard for a building with multiple postal addresses but sits in our system as one legal property.

Visit the <u>Auckland Council website</u> to learn more about what the placard colours mean.

## **Resource consent requirements**

Please note that work to repair your property will need to comply with the Resource Management Act. We recommend you check if a resource consent is required.

A resource consent may be required if:

- The works are not replacement like for like (existing use rights).
- The works are not permitted activities under the <u>Auckland Unitary Plan</u>, e.g. Significant Ecological Areas Overlay, coastal hazard areas and works in flood plains.

If you need help with this process, and you are a red or yellow placarded property owner, you can check in with your allocated case manager. Please email <a href="mailto:rbacomms@aucklandcouncil.govt.nz">rbacomms@aucklandcouncil.govt.nz</a> if you have not been contacted by your case manager. The team will help to connect you.

Alternatively, email <u>regionalplanninghelpdesk@aucklandcouncil.govt.nz</u> to contact our planning team who are supporting the Tāmaki Makaurau Recovery. Please note:

- To prioritise your application, we recommend including in the subject line the words \*flood or cyclone\*, the property address and the colour of the property placard.
- Include any photos and reports from consultants, as available.

Standard fees will apply for any resource consent application, with actual charges depending on the scale of the proposed remedial works and any impacts on ongoing hazards relating to the property.

### What's the difference between a resource consent and a building consent?

A resource consent is written approval from the council under the Resource Management Act, where works to carry out a project that has an impact on the environment, or could affect other people. A building consent is written approval from the council under the Building Act to carry out specific building work on a specific site, which must comply with current building regulations. It ensures that the proposed work is safe, durable and doesn't endanger the health and safety of anyone using the building. Visit the <u>Auckland Council website for more information</u>.

## **Disputes between neighbours**

Where a neighbouring property causes damage or disruption to you or your property – e.g. a slip, fallen tree, or broken fence – this is a matter to discuss with your neighbour. While we understand these situations can be stressful and frustrating, however Auckland Council has no role in situations of a purely civil issue between property owners.

Generally, damage caused by natural disasters is primarily the responsibility of the affected landowner. Where private property has been damaged, owners should contact their insurers in the first instance. Council is generally not responsible for damage to private property arising out of a natural event.

Where damage has been caused by a tree from a neighbouring property, insurance will usually cover the cost of the damage. If a person knows that a tree on their land poses a potential hazard but doesn't take steps to mitigate, they may be liable for any damage caused to a neighbouring property.

Landslides can be more complex to resolve. With naturally caused landslides, landowners are usually responsible for the damage on their own land. However, owners should also consider what could be reasonably done to warn neighbours or mitigate the effects of foreseeable landslide hazards coming from their land.

Fences are dealt with under the Fencing Act 1979, and generally neighbours are equally responsible for the cost of and repairs to a boundary fence.

We encourage you to discuss what can reasonably be done to reduce or remediate damage. We recommend speaking to a lawyer if you cannot resolve your concerns.

## **Central government Budget announcements**

We are working closely with central government to understand the detail around last week's Budget and what it means for funding flooding and cyclone work across the Auckland region. We hope to have clarity for our communities and will provide updates in future community updates.

## Reporting new movement or landslides

If you see new land movement, please <u>visit the Auckland Council website to find out who to</u> contact.

## Rubbish collection for flood-damaged household goods

If your property has been downgraded from a red placard and you now need to get damaged household goods removed, please call 09 301 0101 to arrange collection. Mention that you have a placarded property.

## Waitākere Regional Park

Multiple tracks at Waitākere Ranges Regional Park remain closed due to slips or dangerous trees. We ask the public to respect all closures and not remove any barriers or signage currently in place for their own safety, and to not add to environmental damage in the area, including the threat of spreading kauri dieback disease.

Our park rangers and staff are continuing to assess damage and accessibility, with a view to opening more areas as soon as practicable, taking into account the impact on residents.

A number of tracks suffered major slips and flooding that are unlikely to be resolved in the near future. However, we are still receiving geotechnical advice to work through what our options are, and no final decisions regarding long-term track closure have been made at this point.

We continue to encourage visitors to check our <u>map of open and closed tracks</u> on the Auckland Council website before heading out.

## Geotechnical update – background and wide-scale landslide risk assessment

### Geology

There is a dynamic geological history at Piha and Karekare, including volcanic formed rocks and old sand dunes. Coastal areas of Piha such as Marine Parade North, North Piha Road and parts of Garden Road are often overlain by recently deposited loose sands including sand dunes and loess (a wind-blown deposit of fine sands and silt) as part of natural coastal processes. These are usually poorly cemented and loose, meaning the particles do not stick together well.

Beneath these sand deposits, and more commonly in the steeper areas of Piha and Karekare, there are volcanic rocks, soils and deposits from millions of years ago. This creates multiple layers of various types of sedimentary rocks, ranging from pea-sized to larger than a car, held together by soil and other materials. The soil-like matrix which holds the rocks together can be vary variable in strength.

#### Landslides

As we have seen across western Auckland, landslides can sometimes move the earth, debris and vegetation downslope very rapidly. Landslides occur when the driving forces (such as gravity, steepness of slopes, and water pressure within the soil) are greater than the resisting forces (such as strength of the soil).

Debris flows are fast-moving landslides that are particularly dangerous to life and property because they move quickly, destroy objects in their paths, and often strike without warning.

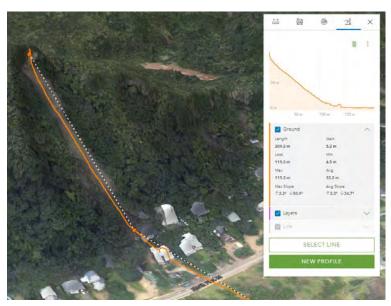


Figure 1: the profile of a landslip in North Piha from the Digital Elevation Model

### Impact of climate change

We do not yet know how much climate change can be implicated in the damage caused to Auckland this year as the science to determine that is very complex.

Auckland-specific climate projections suggest that overall rainfall in Auckland will be stable, but that it will likely fall in more intense bursts – especially in Autumn. It is expected that any increase in rainfall intensity would lead to significantly more landslides, especially if the rainfall was more intense than anything the slopes have encountered historically.

### Safety Recommendations for landslides

• Stay away from landslides – landslide debris tends to stabilise over time, but this process can be slow. Even if the landslide appears to be stable and there may be some loose earth and vegetation that can become dislodged and collapse. It is common to see landslides reactivate. Stay away from landslide material to avoid the potential danger.

- Do not remove landslide material without professional supervision and instruction to avoid creating a hazard for you or your neighbours, we recommend any debris material is removed with direct supervision and instruction by a suitably qualified geotechnical professional. Suitably qualified professionals include Chartered Geotechnical Engineers or Professional Engineering Geologists familiar with land instability in the West Auckland region.
- Take care when driving on roads affected by landslides – several large landslides have occurred above and below roads. Please follow the recommendations on the <u>Auckland Transport website</u> for road closures, and vehicle speed, weight and height restrictions.

### Geotechnical assessments

Auckland Council has been working with GHD to understand the risk-to-life of large-scale slope instability in Piha, Karekare and Muriwai. This will inform possible future dwelling hazard designations. The focus primarily is on areas with instability that affects large slopes, and on homes that currently have yellow and red placards. The areas being assessed in Piha and Karekare are shown in figures 2 and 3.



Figure 2: Overview of Piha assessment area

### GHD's landslide assessment includes:

• **Desktop interpretation** – collecting and studying information from property files, geomorphology, rainfall frequency interpretation and the LiDAR data which give background knowledge and information needed for the risk assessment.

- Field mapping providing detailed information about each of the landslides and assessing topographic features that will change the risk for properties. As part of the field mapping,
   Auckland Council and GHD will liaise with the community to document anecdotal accounts of slope instability and seepage.
   Please refer a section below for more information about collecting anecdotal evidence.
- Slope stability modelling and assessment – calculating the present stability of large, failed slope(s) in the Piha and Karekare



Figure 3: Overview of Karekare assessment area

- settings. The slope stability assessment will be analysed using two-dimensional computer software. The outcomes of the slope stability assessment will assist in selecting potential mitigation approaches
- Risk assessment undertaking quantitative risk assessment utilising the collected and computed data from the desktop interpretation, field mapping, modelling and slope stability assessment. The system formalises the elements of a risk model, and considers the individual likelihood of a landslide occurring, of it reaching a dwelling and of residents being impacted.

Deep ground investigation (e.g. machine borehole drilling) has not been scheduled for Piha and Karekare. Because of the types of landslides experienced in Piha and Karekare, undertaking deep ground investigation may not add significant value to the broad scale landslide risk assessment (but will slow down and extend the assessment timeline). The need for deep ground investigation may be considered if there is a change in the landslide risk assessment objective in the future.

Auckland Council and GHD understand the importance of this geotechnical work to the Waitakere community. Thus, this project will be intensely scrutinised, and sound and robust geotechnical advice that provides defensible guidance on managing the risk from landslides will be delivered.

### Timeline

Field mapping work will begin in Piha and Karekare in the coming weeks. GHD staff will be on site within the community to inspect and map landslides and land instability. Where it is safe, they'll be physically walking over the landslides in small teams (likely two people) and recording the features they identify on tablet computers.

The landslide risk assessment is estimated to take approximately 6 months to be completed. The initial stage of the assessment, establishing the GIS database and liaising with the community, commenced in April. We are currently on track to complete the geotechnical risk assessment work in this timeframe, with the final report expected by late September.

Please note, this timeline is a **guide only**; any change to the landslide risk assessment timeline will be announced in the community newsletter.

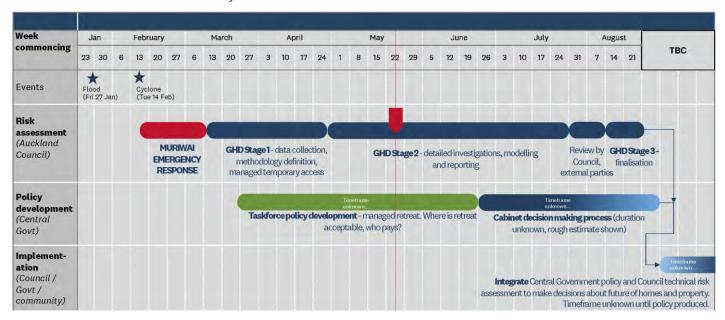


Figure 4: Timeline of the landslide risk assessment

### Frequently asked questions

### Who can I talk to for more information?

For property-specific information, please talk to your RBA case manager in the first instance. For general queries, you can contact Simon Fraser, Community Liaison Lead for Piha and Karekare at <a href="mailto:piha@aucklandcouncil.govt.nz">piha@aucklandcouncil.govt.nz</a>. While GHD will be on site for some time, staff won't have wider information about RBA placard processes or wider Recovery work.

### How often will I get an update on progress?

We expect to provide updates every few weeks via the Recovery Office community newsletters.

### What should I expect to see from the field mapping?

GHD will be sending a small team of experts to undertake the mapping. Where it is safe, they'll be physically walking over the landslides in small teams (likely two people) and recording the features they identify on tablet computers. Team members will be clearly identifiable. Mapping will be looking at land only, and no access will be needed inside homes.

If you object to this mapping occurring on your land, please send an email to your RBA case manager and Simon Fraser at <a href="mailto:piha@aucklandcouncil.govt.nz">piha@aucklandcouncil.govt.nz</a>.

### Will this work provide geotechnical information on my property?

This work will focus on the risk-to-life of large-scale slope instability in Piha, Karekare and Muriwai rather than focus on individual properties. All results from this investigation will be shared publicly and is likely to be useful to inform site-specific studies if they are needed.

However, in cases where GHD identifies information that the placard status of a property could be changed, a short report and placard change recommendation will be prepared for the property owner and Auckland Council. This is in lieu of the normal RBA assessment processes.

Houses that have experienced significant landslide damage and/or are in areas at a higher risk to landslides may be subject upcoming policy decisions on Climate Change Adaptation and property risk categorisation. Further announcements on this are expected from central government in early June.

### Should I get my own geotechnical advice?

A <u>rapid building assessment</u> (RBA) placard requires property owners to undertake a more thorough assessment to identify if your home or building is safe to remain in. This requires inspection and recommendations from suitably qualified professionals, including geotechnical advice where a placard has been issued due to land instability, to determine the repair works that need to be carried out.

All property owners are encouraged to engage the right engineering professionals to get their own advice, especially if you have any concerns about the work being undertaken by GHD or need site-specific design doing to make your property safe. Site-specific remediation advice is not within the scope of the GHD work. We recommend that you check with your preferred supplier what value the work will add in addition to the work that Auckland Council will undertake before you engage them.

### Will this work assess all landslides and land instability in my area?

No – with thousands of landslides across the Waitākere Ranges resulting from the extreme weather from the Auckland Anniversary weekend floods and Cyclone Gabrielle, it would be impractical to assess all landslides and areas of instability.

This study will focus on large scale landslides that are nominally on the hundred-metre scale, where multiple dwellings have been affected. Landslides that are smaller than this may be noted (i.e. location, approximate dimensions and type) where they are located on, or adjacent to, red or yellow placarded properties.

### How do we know the results of GHDs study will be reliable?

Because it's so important that we get this right, we have three levels of checking built into our work:

- GHD have robust internal review processes using experienced staff who worked on similar problems in the Christchurch Port Hills.
- Auckland Council has an internal peer reviewer who is reviewing the project as it progresses.
- We have engaged a separate external Geotechnical Advisory Panel comprising five of the most well-respected specialists in the country to review the methodology and end results.













