



**24 March
2023**



Community Newsletter

Muriwai Beach cyclone recovery

27 March 2023: This newsletter has been updated and differs from the newsletter emailed out on Friday 24 March. We've asked Ross to help clarify the information for property owners with yellow placarded houses near the Muriwai cliffs in the exclusion zones.

This is a special edition newsletter to provide an update on our progress with geotechnical assessments. Early next week, we will be sending a regular update which will be in our usual style and address many of the questions on your mind, including cordons, as we move into recovery.

Planning for the future

Update from Ross Roberts, Auckland Council Head of Engineering Resilience

We've received many questions by email, phone and in person. Through this newsletter we will try to address these so the whole community can see the responses.

While we don't have all the answers you need at this time, we can share our current thinking based on the information we do have. We know this will evolve as we collect more data and we will keep you informed as we learn more.

Last week we re-placarded a large number of homes. We don't expect that there will be any more significant changes in the coming weeks – for the vast majority your current placard is unlikely to change until we've undertaken more detailed studies over the next three to six months.

Risk level	Rapid assessment outcome	Placard
Low risk ie light or no damage or life risk is expected	CAN BE USED No immediate further evaluation required	CAN BE USED (WHITE)
Moderate risk to life safety ie minor or localised damage to property or surrounding area	Y1 RESTRICTED ACCESS TO PART(S) OF THE PROPERTY ONLY No entry to parts of the property with significant damage	RESTRICTED ACCESS (YELLOW)
	Y2 RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision	
High risk to life safety ie severe damage to property or surrounding area likely	R1 ENTRY PROHIBITED At risk from ground failure	ENTRY PROHIBITED (RED)
	R2 ENTRY PROHIBITED Significant damage	

Figure 1: Figure – Placard summary from Ministry for Business, Innovation & Employment Field Guide: Rapid Post Disaster Building Usability Assessment – Geotechnical

Part 1 – Red houses in exclusion zone

This applies to red placarded houses near the Muriwai cliffs (exclusion zones)

On 11 March we re-assessed our earlier analysis presented in the newsletter on 8 March and during the following week reviewed the placards for all the properties in the exclusion zone. If your placard changed as a result of this, you should have received a letter (by email) towards the end of last week confirming this re-assessment. If you haven't received the letter (email) this means your placard hasn't changed.

If your house still has a red placard and is in the exclusion zone, it will be because it is located close enough to the cliffs that if a landslide occurred it could impact your house.

The evidence in Muriwai shows that landslides can re-occur in places where they have happened previously. We also know that new landslides occurred where there have not been landslides recorded in the past. The whole cliff line appears to have been formed by a series of old landslides. We therefore believe that all areas along the cliff are susceptible to future landslides. This risk is the reason why houses have been given red placards even when they have not been directly impacted by a landslide in the most recent event.

During the re-assessment process we refined our map of the F-angles presented in the newsletter on 8 March using on-site measurements to ensure they were sufficiently accurate. These are now superseded by the work currently underway, but there has been interest in the community for these to be shared, so they're shown in the figure below.



Figure 2 – Updated F-line assessment after on-site calibration. The red line shows the shortest likely landslide travel, and the yellow line shows the longest likely landslide travel. The orange areas are the landslide source areas.

A significant risk remains to the red placarded properties within the influence zone of the cliffs, notably on Motutara Road and Domain Crescent.

Can the risk be managed?

There are a few approaches available to manage the risk from landslides, including:

1. Improve understanding of the risk (to justify removing red placards on some houses)
2. Reduce exposure to the hazard (e.g. don't put people in higher risk locations)
3. Reduce the hazard (e.g. stabilise an unstable slope)
4. Isolate people from the hazard (e.g. put a barrier between the slope and the people, or build a landslide resistant house)
5. Accept the risk

Option 1: Improve understanding of the risk to justify removing red placards on some houses

Auckland Council is working on this now. By undertaking detailed geotechnical investigations and modelling potential future landslides, we can refine our understanding of the risk. We anticipate that this will allow us to change some currently red placarded houses to white without needing to resort to one of the less desirable options described below. This is our preferred option – we want to get people back into their homes if we can do this safely.

It is likely that some of the red placarded homes will, with further investigation, prove to be safe enough to be reoccupied. We won't know which properties these will be until the assessment work is done. We will be doing our best to re-evaluate the evidence we collect as soon as we can to get as many people back into their homes quickly.

Option 2: Reduce exposure to the hazard

Reducing the exposure to the hazard, potentially by avoiding re-building on some areas of land, needs to be considered. This is called managed retreat. Because this is a very significant consequence for the owners it's not a decision that should be made without the best information, which will take some time to collect. We still expect this process to take three to six months of geotechnical data collection before we can start the decision-making process.

This is unlikely to be the case for all the red placarded properties, as we believe that Option 1 (removing of red placards) will apply to some of them.

Managed retreat may be appropriate for some properties. While the assessment of levels of risk is technical, the decision to retreat decision is made at a political level and so we cannot give more details on the likely roadmap for these decisions until we hear more from central government.

Option 3: Reduce the hazard

This involves stabilising the slopes to prevent future landslides. In some cases this can be done by building large retaining walls, installing complex underground drainage systems, or installing reinforcing elements into the slope.

To identify which, if any, of these are possible in Muriwai we need much more detailed geotechnical information. Based on the currently available information none of these approaches are likely to be easy. Engineering a solution to such large slopes with such widely distributed landslides might not be possible or might be more expensive than the houses they are protecting. They might also be a blight on the environment that the impact wouldn't be

acceptable to the community. Imagine replacing the native bush with a solid concrete wall – even if it could be made to work it would make Muriwai a quite different place.

As part of our geotechnical investigations we will be assessing which hazard reduction options are viable and practical and will be considering ways in which this can be done in a cost-effective and sensitive manner. This assessment won't look at who would be responsible for implementing any hazard reduction measures, as this will vary from location to location.

Option 4: Isolate people from the hazard

Isolating people from the hazard can be achieved by creating more robust houses that can survive a landslide or, where there is room, building a structure such as an earth bund to catch the landslide. Both may be possible in some locations (but probably not all) and would need the next stages of our investigation to confirm. However, it could be very expensive, which might not be acceptable for homeowners or their insurers. In addition, this may have negative visual impacts, and won't offer protection for people when they are outside the property.

Option 5: Accept the risk

For some of the red placarded houses it may be the case that the risk is too high for the current use but that other uses might be acceptable. This option needs more work to decide if it could be appropriate. Any such change would require agreement of the regulator (Auckland Council) and the landowner. If they agree that the risk is acceptable, then it becomes a private issue between you and your insurance company as to whether you accept the risk and want to rebuild in a different, more resilient way.

One possibility is that Auckland Council agrees that rebuild is possible but imposes strict controls on the location or type of building. This could mean you (or your insurer) might not want to rebuild in the way required because of cost, appearance or restrictions on use.

Next steps

As you can see, there's a lot more than purely geotechnical issues to consider. Engineering solutions can often be found for most problems, but sometimes it's not appropriate to do that for reasons which are social, environmental, economic or political.

As we go through this process we will work alongside and comply with the direction from central government, finding the right balance of protecting people, property rights, and the environment. Most importantly, we need to ensure that people in these situations are treated fairly and supported.

Our initial work using the F-angle assessment has allowed us to enable quite a few households to return to their homes. The next stage of our work is to assess these slopes in detail, taking into account the local topography (shape of the ground surface) at each site to consider if any landslides that occur uphill will be funnelled towards or away from each property. This will look at areas where landslides have already occurred, and similar slopes that haven't had a landslide yet but could fail in future. It will help us further refine our understanding of the level of risk which will help us with future decisions about each house.

This will be supplemented with boreholes to assess the ground conditions in more detail and allow us to quantify the level of risk for each area.

We will be able to share a more detailed programme for these works in our next newsletter.

What should you do?

For most people in this situation it will take some time before we have enough information to change their placard, and there is the potential that some locations may not be considered appropriate for rebuilding.

The information collection will take three to six months, and decisions will then be needed beyond that. You should be prepared to be out of your home for at least that amount of time. We will complete this work as quickly as we can, and keep you informed of progress as we go.

There may be a few homes currently with red placards that can be downgraded based on early interim findings of the next studies, but these are expected to be in the minority and until the work is done we can't know which properties they will be. We don't anticipate even these few changing for at least a month.

**** This section has been updated and differs from the newsletter emailed out on Friday 24 March ****

Part 2 – yellow houses in the exclusion zone

This applies to yellow placarded houses near the Muriwai cliffs in the exclusion zones

Houses with yellow placards have an unacceptable risk which means there needs to be some restrictions on their use. As the risk is lower than some of the red placarded properties, the house can be used for short periods, or part of the house can be used.

The work being undertaken by Auckland Council to assess the risk will apply to your house. The information collection will take three to six months, and decisions will then be needed beyond that. You should be prepared to be out of your home for at least that amount of time. We will complete this work as quickly as we can, and keep you informed of progress as we go.

There may be a few homes currently with yellow placards that can be downgraded based on early interim findings of the next studies. However, these are expected to be in the minority and until the work is done, we can't know which properties they will be. We don't anticipate even these few changing for at least a month.

Part 3 – houses outside exclusion zone

This applies to red and yellow placarded houses outside the exclusion zones

To get your placard removed you will need to get a Detailed Damage Assessment undertaken. This will inform you and your insurer of the steps needed to make your home safe.

Your insurer will be able to provide information regarding what professionals and inspections will need to be organised (e.g. geotechnical or structural engineers, licensed building practitioners). You can find out more about this process [here](#).

We are preparing guidance on the level of detail we expect to see in these assessments to help scope the work.

What should you do?

Talk to your insurer about getting a Detailed Damage Assessment undertaken.

Frequently asked questions

I have a house in the exclusion zone with a red or yellow placard. Our temporary accommodation requires us to commit to a 12 month lease this week. What should I do?

It is highly unlikely that your placard status will change in the next month, and for most people the future of your property won't be known until the geotechnical work is completed (three to six months). Some homes will have their placards downgraded at this point, but for others it won't be possible. For these more challenging properties where the placard can't be removed there is likely to be several months of negotiations around potential managed retreat (if this is an option) or remedial works, who pays for this and the time taken to do any work, which could take many more months. You should consider these timeframes when making your decision.

I've heard that some houses on Motutara Road/Domain Crescent will have their placards changed next week, is that correct?

There are no changes planned for next week. Last week we made all the changes we are able to with the available evidence. We need more detailed evidence to be able to make any changes to the remaining placards. In most cases this will be in line with the three to six month timeframe described earlier.

There may be a small number of properties where site-specific factors reduce the risk and may be able to have their placards changed more quickly. These are being reviewed by our team as a priority but will need more assessment. At best this will take several weeks.

My house has been completely destroyed, is it likely that I'll ever be able to rebuild?

It's too early to say for each specific property whether the risk can be managed. Houses that have been destroyed are known to be in a high risk zone, and are more likely to be considered for managed retreat if this option is made available by central government. Even if a rebuild is possible it's likely to be quite a long time before it's possible as other mitigations (such as slope stabilisation, if possible) would probably have to be built first.

Should I get my own geotechnical advice?

The normal process where a house has been given a red or yellow placard is for the owner (or their insurer, where they are insured) to engage the right engineering professionals to advise what steps are needed to remove a placard. However, for those properties in the exclusion zone Auckland Council is paying for a detailed area-wide assessment of the risk. We're doing this because the risk is wide, and so a big-picture approach is the only rational way to fully assess the risk. It is more efficient and effective for Auckland Council to engage this work. All results will be shared with you and your insurers. You are still welcome to get your own advice, but it is unlikely to add much value in addition to the work that Auckland Council will undertake on your behalf.

I have a lot of furniture in my red-placarded house. Can I retrieve it so I don't have to buy new furniture for my temporary accommodation?

For those in the exclusion zone - we are investigating options to get longer managed access slots (possibly for half a day per property). It won't be available for all properties because for

some the risk is too high. More work is needed to confirm if this is feasible, and we'll inform you as soon as we have done this.

For those outside the exclusion zone – you can apply for longer access by engaging a geotechnical professional to prepare a health and safety plan and escort you on site. Please submit your health and safety plan to RBacomms@aucklandcouncil.govt.nz before attempting re-entry. It won't be available for all properties because for some the risk is too high.

Will council be looking at stormwater and wastewater disposal?

This will be considered in our review of the geotechnical stability, and we will share any recommendations for improvements that come out of that assessment.

High-level plan (roadmap) for properties in the current exclusion zone

- Apply initial F-angle analysis of slip hazard to properties in the exclusion zone
Status: *complete*
- Perform geo-technical review of each property in the exclusion zones and identify any other risk factors
Status: *complete*
- Reassess placard status based on analysis of slip hazard and site observation
Status: *complete*
- Determine if the site is still considered dangerous
Status: *complete*
- Contact property owners (in the exclusion zone only) on updated placard status
Status: *complete*
- Apply updated placard status to building and update council records
Status: *complete*
- Communicate managed temporary access to affected property owners
Status: *complete*
- Review closure of Muriwai Regional Park and cordons*
Status: *prior to 1 April*
- Additional geotechnical investigation, analysis and modelling of the slopes at Muriwai
Status: *over the next three to six months, due to complexity of the land stability*
- Review status of remaining red-placarded homes
Status: *once additional geotechnical work to assess risk has been completed, unless new geotechnical information becomes available in the meantime.*

* On 17 February, Auckland Emergency Management closed a number of regional parks including Muriwai Regional Park. As part of this, a review date of 1 April was set which does not necessarily mean the park will reopen. This will need to be considered before then, along with cordons, factoring in security issues and economic recovery.

As we work through a cordon management plan, we will engage with the community and welcome your feedback.

Community support hub

The Muriwai community support hub will no longer be operating out of the Muriwai Surf Club as we transition from response to recovery. For those needing support, please visit Auckland Emergency Management [website](#), you can also contact:

- Temporary Accommodation Service: 0508 754 163 [Cyclone Gabrielle and Auckland flooding 2023 » Temporary Accommodation \(mbie.govt.nz\)](#)
- MSD Civil Defence payments: 0800 400 100 [Civil Defence Payment - Work and Income](#)
- NZ Claims Resolution Service: 0508 624 327 [New Zealand Claims Resolution Service \(nzcrs.govt.nz\)](#)
- If you're feeling stressed or overwhelmed, please consider talking with a 1737 counsellor for support, advice and ideas that can help. Call or text 1737 anytime.

Support your local

A number of commercial operators in Muriwai have been significantly impacted by the severe weather and the subsequent closures. As they recover, please consider supporting your local business, as many of you already do. Whether it's just a coffee, a meal or even gift vouchers to support, if you are in a position to do so, we know it is greatly appreciated and needed, at this time.

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, we'd like you to share your contact details with us. Please email us at muriwai@aucklandcouncil.govt.nz.

There are lots of reasons we might not have your details – you might be a tenant (and we've been dealing directly with the property owner); you might not have provided an email address (just a phone number) to our inspections team; or sometimes, despite our best efforts, handwritten forms lead to mistakes.

Need help?



Visit: aucklandemergencymanagement.org.nz/muriwai

Enquire: muriwai@aucklandcouncil.govt.nz or rbacomms@aucklandcouncil.govt.nz



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