



Merri-bek
City Council

Stormwater Mapping

2021 Engagement Summary Report



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• ACKNOWLEDGEMENT OF COUNTRY

Merri-bek City Council acknowledges the Wurundjeri Woi Wurrung people as the Traditional Custodians of the lands and waterways in the area now known as Merri-bek. We pay respect to their Elders past, present, and emerging, as well as to all First Nations communities who significantly contribute to the life of the area.

1. Purpose

This report gives the findings from 2021 landowner engagement for stormwater overland flow path maps (stormwater maps), which were then declared under the [Building Regulations 2018](#). This report:

- Outlines the methods and outcomes from the engagement.
- Keeps people in the loop by reporting back the engagement outcomes and how Council will use this feedback.
- Identifies learnings for Council, to inform future engagement for updated maps.

2. Introduction

2.1 Project Background

As our climate continues to change it is expected Merri-bek, as with all metropolitan Melbourne, will experience less regular but more intense rainfall and storm events. This will result in an increased risk of stormwater impacts.

Stormwater overland flows from infrequent but severe 1% Annual Exceedance Probability (AEP) storm events pose a risk to community safety and property. This is a storm that has a 1% chance of happen in any given year and is sometimes referred to as the one in 100-year storm event.

To help minimise this risk, in 2017 Merri-bek City Council (Council) engaged experts to do a technical engineering study and identify land more likely to experience stormwater overland flows from infrequent but severe 1% AEP storm events across Merri-bek's local drainage network.

As the local drainage authority, Council is responsible for local stormwater inlet pits, pipes, and roads which provide for the passage of stormwater.

Melbourne Water, as the regional drainage authority, is responsible for the larger inlet pits, pipes, floodway channels, retarding basins, and stormwater outlets to regional waterways. Melbourne Water also manages the care and maintenance of Merri-bek's waterways, which discharge stormwater towards the Yarra River (Birrarung) and Port Phillip Bay (Nerm). Melbourne Water is also the floodplain management authority for metropolitan Melbourne.

On 4 May 2021, [Regulation 153 of the Building Regulations 2018](#) was activated, because Council's local stormwater maps were declared. This declaration was an important step forward for managing our City's growth and change, because these maps help us enable better land development in the face of extreme storm events.

The declaration means affected landowners, who want to develop their land, need to firstly achieve 'report and consent' for their building permit applications. This gives landowners the opportunity to mitigate the potential impacts of stormwater flows on their land development. This building permit process is centred on the role of registered building surveyors, who issue building permits.

Whilst the declaration of stormwater maps for building permits is an important step, the Victorian Government has established a planning system which prompts councils to put final maps into planning schemes.

2.2 Engagement Overview

. The 2021 engagement was done to:

- Inform affected landowners about the initial stormwater maps.
- Seek feedback on the stormwater maps.
- Help landowners who may want to develop their land, to understand permit obligations.
- Assist developers and registered building surveyors in the building permit process.
- Respond to any questions about the technical engineering study and the stormwater maps.

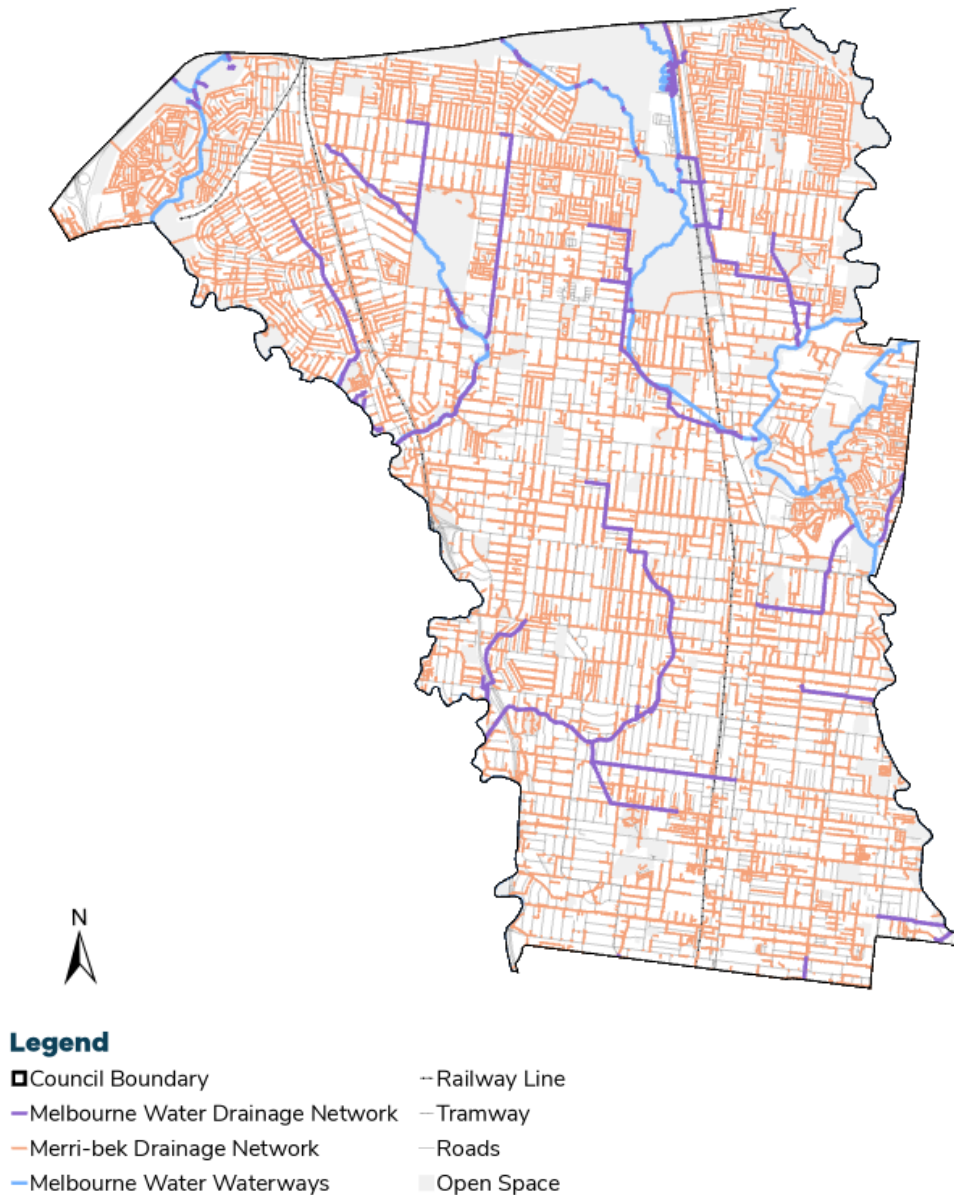


Figure 1: Melbourne Water and Council drainage network

This report provides a summary of the findings from the 2021 landowner engagement. It details the methods of engagement, the issues raised by landowners, and describes how this feedback will inform Council's ongoing engagement work. Learnings from this engagement process are particularly relevant as Council prepares a new round of consultation to include final stormwater maps in the [Merri-bek Planning Scheme](#).

3. Overview of the engagement process

Between 10 February and 10 March 2021, Council notified and engaged with relevant landowners about the new stormwater maps for the City's local catchments.

This was enabled by Council:

- Posting 10,857 letters
- Having a Conversations Merri-bek webpage with more information
- Having public notices in The Age and Herald Sun newspapers
- Hosting drop-in sessions at Council offices.

Due to COVID-19 impacting on face-to-face engagement, Council held virtual meetings whilst any 'in person' meetings followed COVID-safe practices.

Council received feedback in different ways. Some people produced videos and photographs while others sent us emails, posted information on a website, or participated in one-on-one conversations.

Council listened to landowner feedback and gave responses via the Conversations Merri-bek website, in email, speaking to people over the phone and in person. Council also involved drainage engineering experts, Engeny Water Management, to help answer technical questions when needed.

4. How we received your feedback

Council used its engagement website Conversations Merri-bek to invite landowners to give written feedback. The Conversations Merri-bek webpage had **428 page visits** and received **51 contributions**.

Council held two face-to-face drop-in sessions. **27 people attended**. These were held on 23 and 25 February 2021 at the Council offices at 90 Bell Street, Coburg. Attendees shared their thoughts, asked questions, and learnt more about the stormwater maps and how they would be used.

A further **24 meetings** were held with people online. Council also did **2 site visits**.



51
website
contributions
received



27
drop-in session
attendees



24
individual
meetings



54
email/phone
queries



2
site visits

5. What you told us

Several key themes emerged from your feedback. These included:

1. Accuracy of the stormwater maps
2. Insurance and property values
3. Maintenance and upgrading drainage systems
4. History of stormwater overland flow paths

6. Discussion

The following discussion gives the key issues which came from the 2021 engagement and a summary of responses. These issues often mirrored those raised by people in other municipalities, where engagement has already been done for other stormwater maps.

6.1 Accuracy of the stormwater maps

Some people had concerns about the accuracy and validity of the data used to create the stormwater maps. Some had questions regarding the technical expertise of the independent mapping consultants.

Comments

Council engaged Engeny Water Management P/L (Engeny) to complete a technical study and do a stormwater overland flow path mapping exercise. Engeny has successfully assisted other councils and Melbourne Water by preparing similar maps and appearing as experts at hearings and tribunals for their specialist drainage engineering knowledge.

Engeny collated Council's drainage data, land contour information, and rainfall data before using digital modelling technology to simulate the impact of the 1 in 100-year storm event. This technical was informed by national guidelines called [Australian Rainfall and Runoff, 2019](#). This process provided Council with best-practice maps, showing land susceptible to stormwater overland flows from 1 in 100-year storm event.

These stormwater maps are not intended to definitively show where stormwater impacts will affect land. Instead, the maps show the locations where the risk of stormwater flows should be considered when land is being developed. In this way the maps are a trigger for initiating an assessment process for land development proposals.

As a result of the issues raised in the 2021 engagement, Council appreciated there was a need to further refine the maps. This prompted Council to share its stormwater modelling and mapping with Melbourne Water, to instigate a wider modelling review process so updated maps could be prepared. Once this technical review is done, Council intends to share the updated maps with affected landowners.

The Victorian Government's direction is to include final stormwater maps in planning schemes. The purpose of the maps is to show land where mapped 1 in 100-year stormwater risk exists. In this way, the maps are a trigger for when landowners need to consider these stormwater risks.

6.2 Property values

Some people were concerned the maps may adversely impact land values.

Comments

Property values are determined by many factors including trends in the market cycle, lot sizes, types of surrounding properties, the amenity and services in the surrounding area, and planning requirements. As such, it is difficult to determine what influence, if any, stormwater maps might have on the value of a property.

To better understand the potential for impact, after the 2021 landowner engagement, Council reached out to other municipalities where stormwater maps exist to see what additional information there is for this valuation concern.

Council learned in 2016 Manningham City Council engaged specialist property advisors to provide independent advice on any potential impacts the maps would have on the values of affected properties. Council also learned Stonnington City Council did similar in 2004.

The expert advisors were unable to establish a correlation between stormwater maps and value impacts, over the short or long term.

6.3 Insurance premiums

Some people were concerned the declaration of maps under the [Building Regulations 2018](#) would lead to an increase in their insurance premiums.

Comments

Council recommended that residents contact their insurance provider directly for any insurance concerns. Any general insurance queries may also be directed to the Insurance Council of Australia (ICA).

The ICA website states that although most insurers regard rainwater runoff as part of a storm cover, some insurers won't cover rainwater runoff or storm surge when the customer chooses not to take flood cover. These options are explained in the product disclosure statement for your policy.

This advice shows the benefit of talking to your insurance provider. The ICA website also discusses insurance implications for the ongoing impacts of climate change.

6.4 Maintaining the drainage system

Many people raised concerns about maintenance of Council's drainage infrastructure. This included requests to do maintenance at specific locations. Among these were queries about gutter cleaning, stormwater drain cleaning, and infrastructure repairs.

Comments

Council's Customer Service team manages service requests and ensures they are directed to the appropriate work team. Respondents were directed to liaise with Customer Service to help resolve any maintenance concerns for their local area.

The queries showed there is an opportunity to give more upfront information about Council's approach to drainage system maintenance. For future engagement, this learning will inform the preparation of a fact sheet with more information about drainage maintenance.

6.5 Upgrading the existing drainage system

Some people suggested the solution is to upgrade the existing drainage system to meet the capacity requirements of a 1% AEP storm event.

Comments

Piped drainage systems that are managed by Council are typically designed to cater for more frequent one-in-five and one-in-ten-year storm events. It is not practically feasible nor economically justifiable to adapt an extremely rare one-in-100-year storm into the design of the local drainage network.

Upgrading the drainage network to accommodate for a one-in-100-year storm event would mean acquiring a significant number of properties to setup water catchment areas to store stormwater when an extreme storm event took place. This would not be possible given the highly urbanised nature of Merri-bek.

Council takes a range of measures to reduce the risks and impacts of stormwater overland flows from Council-owned assets including the following:

- Drainage improvement works
- Cleaning and repairing stormwater drains
- Reviewing the capacity of drains
- Building stormwater collection and reuse projects
- Providing stormwater overland flow advice to landowners
- Supporting the work of the SES in cleaning up after severe storms
- Collaborating with our municipal and state government partners on delivering better strategic responses to severe storm events and stormwater management.

The queries received showed there is an opportunity to give more upfront information about Council's approach to upgrading the drainage system. For future engagement, this learning will inform the preparation of a fact sheet with more information about Council's drainage works upgrade program.

6.6 History of stormwater overland flows

Some people noted they had never experienced significant stormwater run-off from a storm event on their property and that the maps should not apply to their land.

Comments

If your property has been designated as subject to stormwater runoff during a 1% AEP rainfall event, there is a 1% chance of your property experiencing stormwater flows of that degree in any given year. The maps don't make you more likely to experience stormwater runoff; the data documents existing risks considering changing weather patterns.

These intense storms are rare, but stormwater overland flows happen regularly across Melbourne and we want to mitigate this risk as best we can so that you are even less likely to be impacted by a severe rainfall event in the future.

The stormwater mapping and modelling was completed by Engeny Water Management, consultants who specialise in hydrologic and hydraulic modelling. The modelling has been reviewed internally by Engeny, who operate an ISO 9001 certified quality assurance system, and also by Melbourne Water.

Merri-bek's *Municipal Emergency Management Plan 2021* (MEMP) gives arrangements for the prevention and mitigation of, response to, and recovery from, emergencies that could occur in the City of Merri-bek, this includes risks from storm events. A key objective of the MEMP is to identify existing and possible emergency hazards and risks and implement measures to prevent and reduce the causes or effects of such emergencies.

As our City grows and property is developed, Council has an opportunity to reduce the impacts of stormwater on new buildings and landscaped developments. Stormwater maps form part of the toolkit through which Council can help affected landowners prepare for and manage the impacts of extreme storms.

7. Conclusions

Council's 2021 engagement with affected landowners about the stormwater maps provided important learnings for future engagement about updated stormwater maps. Council is committed to continuous improvement, and will complete the following key items stemming from this 2021 engagement:

1. Release this report, summarising the engagement process and closing the loop with respondents, landowners, and our community.
2. Plan for further landowner and community engagement prior to any future planning scheme amendment process to introduce the stormwater maps into the [Merri-bek Planning Scheme](#)
3. Collaborate with Melbourne Water, in partnership with Engeny, to produce refined. stormwater maps. Taking a 'whole-of-catchment' will enable a more accurate depiction of stormwater overland flow paths, by integrating regional and local scale drainage networks into the stormwater modelling approach.
4. For future engagement, review the online approach by giving more upfront information, and another opportunity for affected landowners to ask questions about the mapping.
5. Have technical reports prepared by subject matter experts with landowners as the primary audience for readability.

7.1 Next steps

Council has been working through the above items in preparation for future landowner engagement. This will happen after the updated stormwater maps are prepared.

This future landowner engagement would happen before any process begins to include final stormwater maps in the [Merri-bek Planning Scheme](#). This Planning Scheme Amendment process would also include further notice to affected landowners.

Key actions which pick-up the learnings gained, include:

1. Review engagement materials, including letters to landowners and the form and function of the Conversations Merri-bek website.
2. Provide more information, including an FAQs page for the website, fact sheets for questions previously asked and brochure giving more information.
3. Ensure the purpose of the stormwater mapping project, which is to reduce risks for landowners when they develop their land, is clear throughout our engagement materials, website, and face-to-face conversations.
4. Enable further face-to-face opportunities for affected landowners to have conversations with council officers about the updated stormwater maps.

Now that Melbourne Water is well progressed in its review of the stormwater modelling, it is anticipated updated stormwater maps will be ready in mid-2023. This will enable landowner engagement to begin soon after.

Following this engagement, Council would redeclare its updated stormwater maps under the [Building Regulations 2018](#). Then, look to begin a Planning Scheme Amendment process to introduce the

stormwater maps into the [Merri-bek Planning Scheme](#). Affected landowners will be informed of this process when it begins.

A preliminary timeline for making progress is in Attachment 1.

Council thanks the Merri-bek community for their engagement so far and looks forward to continuing to inform on this critical, resilience-building project.

Appendices

Appendix A: Glossary

A **1% Annual Exceedance Probability (1% AEP)** event is a severe storm that has a 1% statistical chance of being exceeded in any one year. During such a storm, heavy rainfall leads to stormwater flowing overland. The 1% AEP event is sometimes referred to as the 1 in 100-year storm or the 100-year storm. This does not mean a location that experiences a 1% AEP storm will not see another storm for 100 years. Such severe storms can happen more regularly.

The [Building Regulations 2018](#) is a legislation that contains, amongst other things, requirements relating to building permits, building inspections, occupancy permits, enforcement and the maintenance of buildings.

A **registered building surveyor** is a professional trained in understanding the building process. They ensure that building work complies with legal requirements, and they issue the building permits that allow work to commence.

A **Report and Consent** is the process in which you seek approval from Council to proceed with building or construction works that do not meet the minimum standards outlined in the Building Regulations, or may affect community assets, infrastructure, or amenities.

Stormwater overland flow paths are natural paths that water likes to flow along and into stormwater drains or local creeks after running off neighbouring properties and driveways or rising from the ground.

The [Merri-bek Planning Scheme](#) is a rule book, with various components, that sets out how land can be used and developed. The [Merri-bek Planning Scheme](#) is online. More information about planning schemes is in Using Victorian's Planning System.

The [Planning and Environment Act 1987](#) is a framework for planning the use, development and protection of land in Victoria. The Act sets out procedures for preparing and amending the planning scheme, as well as the process for obtaining permits, settling disputes, enforcing compliance and other administrative procedures.

Appendix B: Engagement limitations

The following outlines assumptions and limitations identified as part of this stage of engagement.

- Some participants may have participated in multiple engagement activities such as the Conversations Merri-bek website, drop-in sessions, phone, and email, therefore it is possible that some views may have been captured more than once.
- Some participants chose not to provide demographic information. Therefore, the demographic information is only representative of the information provided.
- This stage of engagement was partially impacted by Covid-19 safety measures including ongoing stay-at-home orders which concluded on 17 February 2021. This may have impacted upon participation at drop-in sessions with changes in attitudes towards public gatherings.
- Participation through the Conversations Merri-bek project website required all users to be registered and to sign in to assist in collecting data about participants and helps to prevent repeated survey responses from the same user. However, it is noted that these additional steps can present a barrier to engagement.
- Some feedback received falls outside the scope of this engagement. This feedback will be collected and provided to Council for consideration.

Appendix C: Snapshot of collateral

Figure 1: Mailout sent to affected property owners

Moreland Civic Centre
90 Bell Street
Coburg
Victoria 3058

Postal Address
Locked Bag 10
Moreland
Victoria 3058

Telephone: 9240 1111



Moreland
City Council

Doc. No: D21/39268

IMPORTANT INFORMATION FOR THE COMMUNITY: NEW FLOOD MAPPING IN YOUR AREA

We want to let you know about our flood mapping study of all drainage catchments across Moreland. This study will help us better understand local flood risks and what this means for building on your property.

Ελληνικά: Ο Δήμος εργάζεται για να μειώσει τον κίνδυνο πλημμύρας στην περιοχή σας. Εισάγονται νέοι κανόνες για τις κατασκευές ώστε να διασφαλιστεί ότι γίνεται σωστή αποστράγγιση των νερών της βροχής. Μάθετε περισσότερα στη γλώσσα σας, καλέστε το 9280 1912

Il comune sta lavorando per ridurre il rischio di inondazioni nella vostra zona. Sono state introdotte nuove regole per assicurare che l'acqua piovana possa drenare correttamente. Per saperne di più nella vostra lingua, chiamare il 9280 1911.

يحمل المجلس على تقليل مخاطر الفيضانات في منطقتك. ويتم إدخال قواعد جديدة للبناء لضمان إمكانية تصريف مياه الأمطار بشكل صحيح. اعرف المزيد بلغتك، اتصل على الرقم 9280 1913

市议会正致力降低您所在地区的淹水风险。我们实施新的建筑规则，以确保雨水妥善排放。如需您的母语了解详情，请致电 9280 0750

Belediye bölgenizde sel riskini azaltmak için çalışıyor. Yağmur suyunun gerektiği şekilde akıp gitmesi için yeni bina yapım kuralları devreye sokuluyor. Kendi dilinizde daha çok bilgi almak için 9280 1914 numaralı telefonu arayın

What we are doing

We want to reduce the risks and impacts of flooding in Moreland, through new planning and building controls. These new controls will apply rules to new buildings to help adapt to weather extremes and our changing environment.

To develop these new controls we have prepared flood maps for Moreland. In March 2021 we intend to make a declaration under the Building Regulations (2018), which means further Council approvals will be needed for new building work.

We've identified more than 7,500 properties in Moreland that are in areas prone to flooding during high intensity rainfall.

Why we are doing this

During average rainfall events, Council drains can capture the water and direct it into Melbourne Water drains downstream. This stops water from overflowing into streets, onto footpaths and into buildings.

A 1% Annual Exceedance Probability (AEP) event is a high-intensity storm that has only a 1% statistical chance of occurring in any one year. During a storm of this intensity, heavy rainfall can lead to stormwater flowing overland - damaging properties and infrastructure, which creates costs for residents, businesses and Council.

The flood mapping study provides us with data that will help us to advise property owners and developers planning or proposing buildings and works. We want to ensure buildings and works are constructed above the flood level and don't block the flow of stormwater.

To keep up to date with flood planning and provide feedback on our flood mapping study, visit conversations.moreland.vic.gov.au/flooding

What this means for your property

Your property has been identified as having a 1% chance of flooding in any given year. These intense storms are rare, but flooding happens regularly across Melbourne. The flood mapping study documents the flood risks that already exist in our city and helps us to prepare for high intensity rainfall events more effectively.

If you own more than one property in Moreland, please visit www.moreland.vic.gov.au/floodmapping to search your address and check which property/properties this applies to.

We use the data to provide advice to property owners and developers planning or proposing buildings and works. This will ensure developments are constructed above the flood level and don't obstruct the flow of stormwater.

Once the flood declaration is made, report and consent from Council must be approved before a building permit can be issued for new buildings, or renovations and additions. Anyone selling or buying property will be notified of the flood risk at the time of purchase when they seek a Section 51(2) Property Information Certificate from Council.

Once these new controls are implemented, we'll work with you via a two-step approvals process when planning any building works:

Step 1: Lodge a Flood Level Application for preliminary advice.

Step 2: Once the design is finalised, lodge a Report and Consent application

Visit www.moreland.vic.gov.au/floodmapping for more information.

Talking with our community about flood mapping

If you are worried about flooding on your property have questions, or just want to provide us with more information on how your property has flooded in the past, you can:

- Book a 15 minute meeting with us on **Tuesday 23 February** and **Thursday 25 February 2021**. Please call 9355 4270 or email DAthanas@moreland.vic.gov.au to book.
- Speak with our Urban Planner, Dimitrios Athanas, on the phone. Please call 9355 4270.
- Provide feedback directly at conversations.moreland.vic.gov.au/flooding by **Friday 5 March 2021**.

Next steps

After we have talked to our community about flooding and flood mapping, we will start a planning scheme amendment process to include the flood mapping information in the Moreland Planning Scheme. Including the mapping of flood prone areas in the planning scheme is our long-term plan for helping to manage flooding impacts across Moreland.

We'll be inviting community feedback throughout this process and will contact you to let you know when this is happening.

Because planning scheme amendments can take a long time, we will introduce temporary controls under the Building Regulations (2018). This will mean that we can use the flood mapping data to improve the advice we give about building and works immediately.

Please note, Melbourne Water is currently undertaking its own flood mapping study. This is likely to be completed by May/June 2021. This means we are likely to update our flood maps in line with Melbourne Water data before the planning scheme amendment process.

Get in touch

If you are worried about flooding on your property, have questions, or just want to provide us with more information on how your property has flooded in the past, please contact Dimitrios Athanas (Urban Planner) on 9355 4270 or via DAthanas@moreland.vic.gov.au. For more information, visit conversations.moreland.vic.gov.au/flooding.

Moreland Language Link

廣東話	9280 1910	عربي	9280 1913	हिंदी	9280 1918	All other languages 9280 1919
Italiano	9280 1911	Türkçe	9280 1914	普通话	9280 0750	
Ελληνικά	9280 1912	Tiếng Việt	9280 1915	ਪੰਜਾਬੀ	9280 0751	

Figure 2: Website Home Page for 2021 Engagement

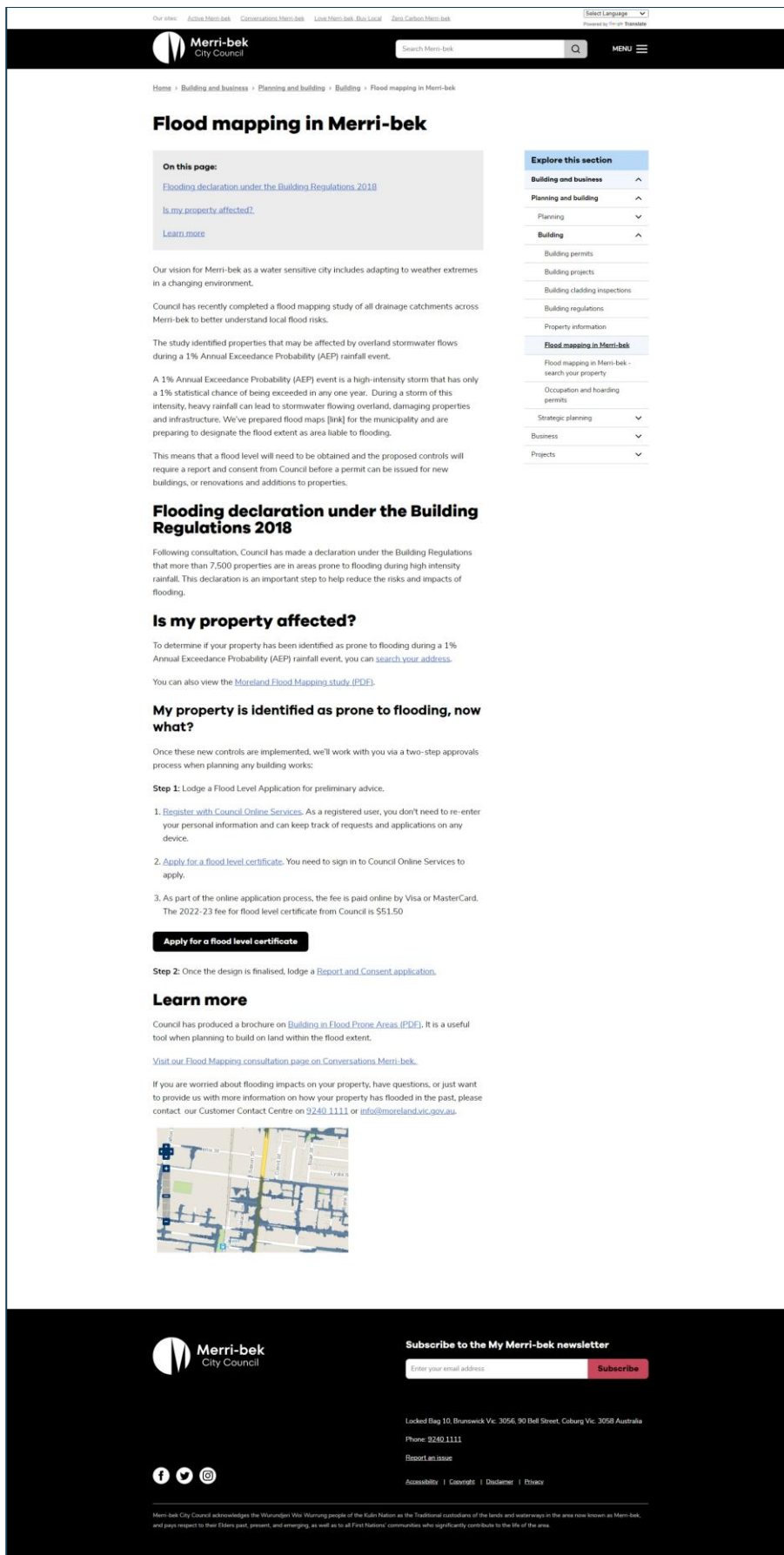


Figure 3: Maps Used for Engagement

Our sites:

[Active Merri-bek](#)
[Conversations Merri-bek](#)
[Love Merri-bek, Buy Local](#)
[Zero Carbon Merri-bek](#)

Select Language

Powered by Google Translate

Merri-bek

City Council

Search Merri-bek

Q

MENU

Home

>

Building and business

>

Planning and building

>

Building

>

Flood mapping in Merri-bek - search your property

Flood mapping in Merri-bek - search your property

Enter your address

Enter your address...

Q SEARCH

We've completed a flood mapping study of all drainage catchments across Merri-bek. This study will help us better understand local flood risks and what this means for building on your property.

The flood mapping study provides us with data that will help us to advise property owners and developers planning or proposing buildings and works. We want to ensure buildings and works are constructed above the flood level and don't block the flow of stormwater.

Please note: these maps do not show flood extents that are already including in flooding overlays in the Merri-bek Planning Scheme.
[Find out if your property already has a flooding overlay](#)

My property is identified as prone to flooding, now what?

Once these new controls are implemented, we'll work with you via a two-step approvals process when planning any building works:

Step 1: Lodge a Flood Level Application for preliminary advice.
Step 2: Once the design is finalised, lodge a Report and Consent application

Anyone selling or buying property will be notified of the flood risk at the time of purchase when they seek a Section 51(2) Property Information Certificate from Council.

If you are worried about flooding impacts on your property, have questions, or just want to provide us with more information on how your property has flooded in the past, please contact Council's Customer Contact Centre on [9240 1111](tel:92401111) or info@moreland.vic.gov.au
Visit www.moreland.vic.gov.au/floodmapping to find out more about how the Merri-bek flood mapping study affects your property.

* A 1% Annual Exceedance Probability (AEP) event is a high-intensity storm that has only a 1% statistical chance of occurring in any one year. During a storm of this intensity, heavy rainfall can lead to stormwater flowing overland - damaging properties and infrastructure, which creates costs for residents, businesses and Council.

Legend

Areas prone to flooding during a 1% AEP rainfall event. Read below for further information.

Merri-bek

City Council

Subscribe to the My Merri-bek newsletter

Enter your email address

Subscribe

Locked Bag 10, Brunswick Vic. 3056, 90 Bell Street, Coburg Vic. 3058 Australia

Phone: [9240 1111](tel:92401111)

[Report an issue](#)

f

t

@

Accessibility

|

Copyright

|

Disclaimer

|

Privacy

Merri-bek City Council acknowledges the Wurundjeri Woi Wurrung people of the Kulin Nation as the Traditional custodians of the lands and waterways in the area now known as Merri-bek, and pays respect to their Elders past, present, and emerging, as well as to all First Nations' communities who significantly contribute to the life of the area.

16

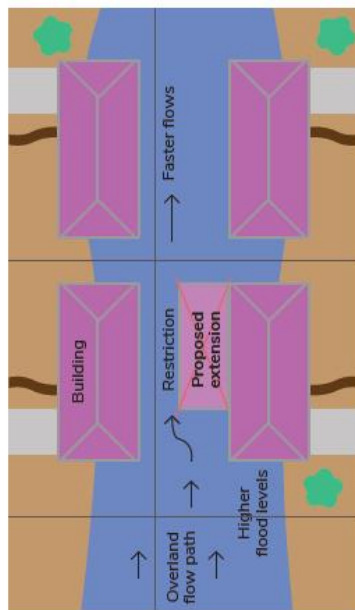
17

17

Figure 5: Building in Flood Prone Areas brochure

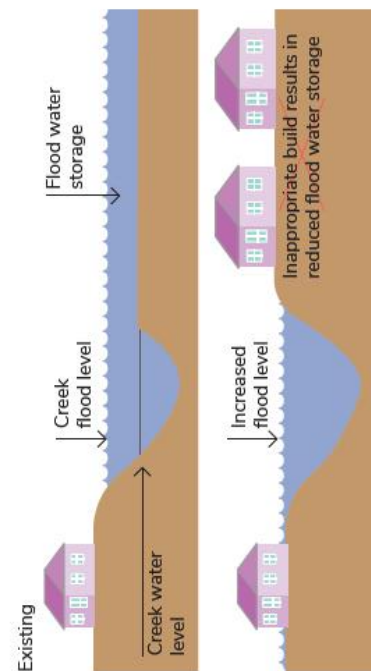
Flood flow

Your new building, extension or development must allow for and not restrict the free passage of floodwaters through the site, so that it does not cause higher flood levels or faster flows.



Flood Storage

Flood storage is the area available to temporarily store water during a flood. If the area for existing flood storage is filled and inappropriately developed with buildings or structures, it can result in higher flood levels thus affecting adjoining properties.



Your property and flooding

What is the 1% Annual AEP Flood Event?

A 1% Annual Exceedance Probability (AEP) event is a high-intensity storm that has only a 1% statistical chance of being exceeded in any one year. During a storm of this intensity, heavy rainfall can lead to stormwater flowing overland, damaging properties and infrastructure and creating costs for residents, businesses and Council.

How do I find out the extent to which my property is affected by flooding?

Flood level information can be obtained from Council by accessing the Flood Mapping in Moreland webpage at moreland.vic.gov.au/floodmapping and submitting a Flood Level Application form.

Can I still build if my property is affected by flooding?

If your property is affected by flooding, Moreland City Council requires that any new development, or extension to an existing property must be designed so that it is protected in the 1% AEP flood event. The development also must not increase flood risk or cause hazards to people and property.

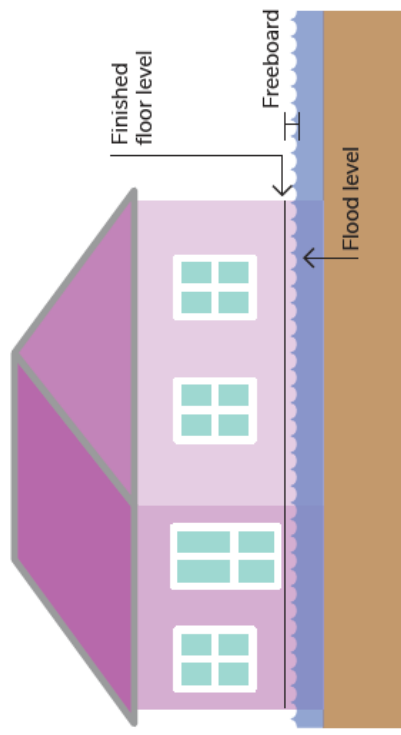
Council will work with you to make sure your works are constructed above the flood level and don't obstruct the flow of stormwater.

How will Council assess your building proposal?

Requirements for any development will differ depending on your site conditions. Council will consider the following criteria when assessing your proposal to undertake building development works in areas affected by the 1% AEP flood event.

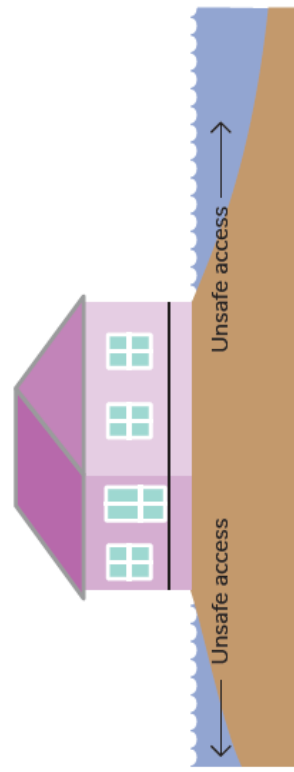
Freeboard

Freeboard is the height difference between the 1% AEP flood event and the floor level of the building. Allowing adequate freeboard helps to protect people and property from flood damage.



Access and site safety

Safe access to and from the site of your proposed development is important. Council prohibits development on properties where the depth and flow of floodwaters could be hazardous. This ensures that people are safe from deep and fast flowing waters during a flood.



Appendix D: Preliminary Timeline for Ongoing Progress

Timeline

-  **Prelim A - Interim Council stormwater maps prepared**
Feb 2021
-  **Prelim B - Interim Council stormwater maps shared with landowners**
March - April 2021
-  **Prelim C - Interim Council stormwater maps declared for building permits**
August 2021
-  **Prelim D - Interim local drainage stormwater maps given to Melbourne Water**
August 2021
-  **Prelim E - Melbourne Water completed city-wide stormwater models**
Early 2023
-  **Stage 1 - Updated Council stormwater maps validated**
March - June 2023
-  **Stage 2 - Updated Council stormwater maps shared with affected landowners**
July- August 2023 (tentative)
-  **Stage 4 - Updated Council maps declared for building permits**
Late 2023 (tentative)
-  **Stage 3 - Council meeting to consider the stormwater maps**
Late 2023 (tentative)