



Merri-bek
City Council

Stormwater Mapping

2023 Engagement Summary Report



Contents

1. Purpose	3
2. Introduction	3
2.1 Project Background.....	3
2.2 Engagement Overview	4
3. Overview of the engagement process	5
4. How we received your feedback.....	5
5. What you told us	6
6. Discussion.....	6
6.1 Map extent over property	6
6.2 Map quality, legibility and access	7
6.3 Property value and insurance impacts	8
6.4 Future property development.....	8
6.5 Stormwater impacts and adaptation	9
6.6 Council drainage maintenance and upgrades	10
7. Conclusion	11
Appendices	12
Appendix A: Glossary	12
Appendix B: Engagement limitations	13
Appendix C: Mail-out collateral.....	14
Appendix C: Conversations Merri-bek website	18
Appendix E: Summary of submissions.....	32

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 Merri-bek City Council's (Council) property owner engagement for an updated stormwater overland flow path map (stormwater map) for the council's local drainage areas in the city. The engagement was done over seven weeks in September and October 2023. Following the engagement, the stormwater map was designated under the [Building Regulations 2018](#).

This report:

- Outlines the methods and outcomes from the engagement.
- Keeps our community informed by reporting back the engagement outcomes.
- Describes what we learned and how we will use this feedback.

2. Introduction

2.1 Project Background

As our climate changes, it is expected Merri-bek and metropolitan Melbourne will experience less regular but more intense rainfall and storm events. This results 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 one percent chance of happening in any given year and is sometimes referred to as the 1 in 100-year storm event, or the 100-year event. During these rare but intense rainfall events, stormwater moves across land as it makes its way to drains and creeks. The storm's intensity influences how much runoff flows across the land, as well as how much runoff can get into our drains.

To help minimise this risk, in 2021 we designated an initial stormwater map under [Regulation 153 of the Building Regulations 2018](#). We did property owner engagement in 2021, prior to designating the map. You can [read a report](#) summarising the outcomes of the 2021 engagement on our website.

Designating a stormwater map means affected property owners need to receive a 'report and consent' through the building permit application process prior to developing their property. This enables property owners to manage 100-year stormwater impacts for their development. This building permit process is centred on the role of registered building surveyors, who issue building permits.

Since designating the 2021 map, new information has been released. This enabled us to update the modelling and mapping for the 100-year stormwater flow paths in Council's local drainage areas. These areas are associated with the Merri-Bek Drainage Network shown in Figure 1. The new information includes [updated national guidelines](#), geographical data, infrastructure data, and upgraded modelling technologies.

It is necessary for our stormwater map to be informed by the best available information. To ensure this, we involved engineering experts who did all the technical work for the 2023 updated map. We received this map in August 2023 and shared it with affected property owners in September 2023.

This report provides a summary of the findings from the 2023 property owner engagement. It gives the methods of engagement, the issues raised, and describes how we responded.

2.2 Engagement Overview

. The 2023 engagement was done to:

- Inform affected landowners about the updated stormwater map.
- Seek feedback on the stormwater map.
- 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 map.

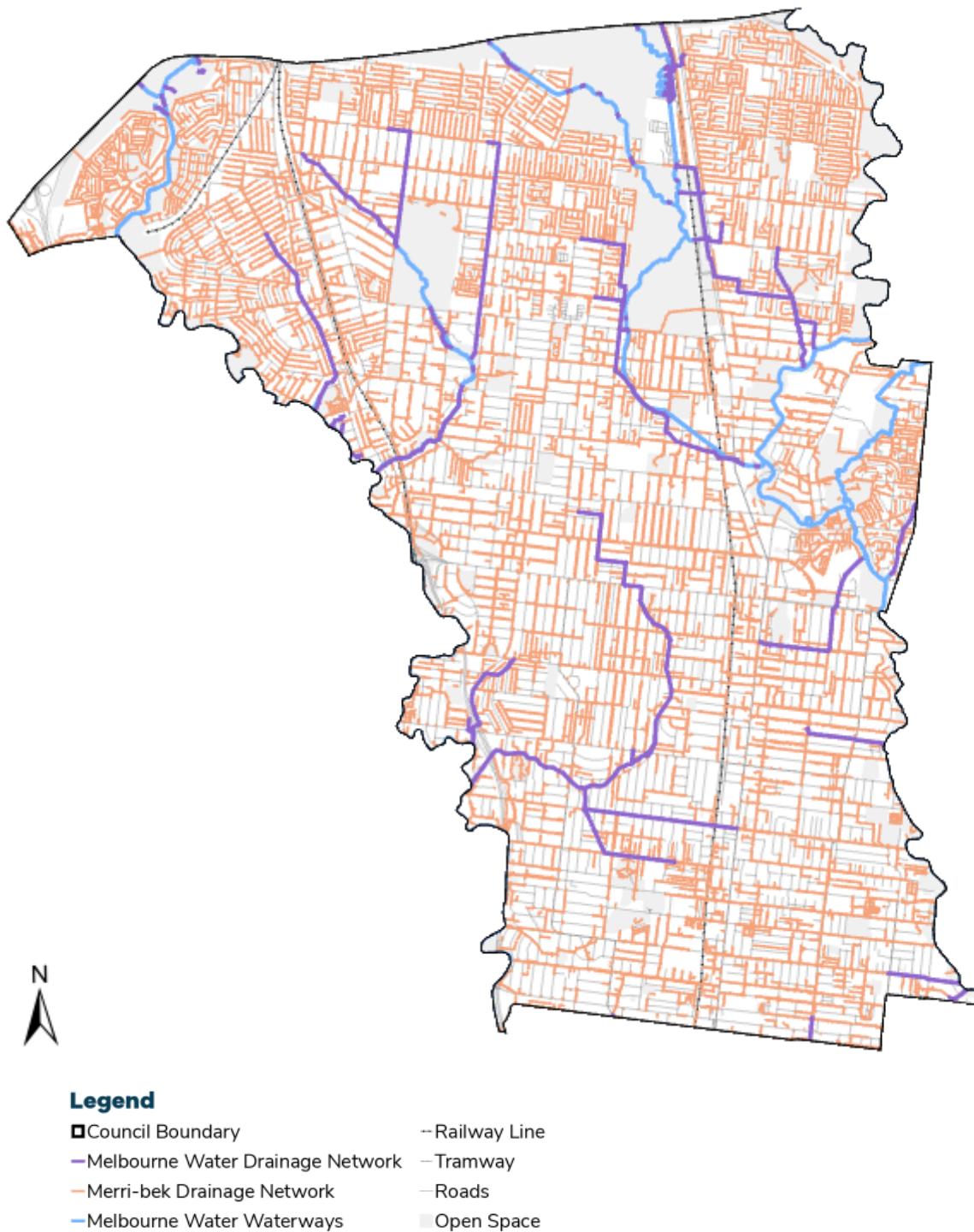


Figure 1: Melbourne Water and Council drainage network

3. Overview of the engagement process

Between 1 September and 20 October 2023, Council notified and engaged with relevant property owners about the updated stormwater map for the City’s local catchments.

This was enabled by:

- Posting 9,801 letters.
- Having Conversations Merri-bek webpages, with further information.
- Answering all email and telephone enquiries.
- Hosting several information sessions at Council facilities across the municipality.

We received feedback in different ways. Some people sent us emails while others posted questions on the Conversations Merri-bek website. Some people telephoned us, and others came to our information sessions for one-on-one conversations.

We listened to all feedback and gave responses via the Conversations Merri-bek website, in emails, speaking to people over the phone and in person. We involved drainage engineering experts, Engeny Pty. Ltd., (Engeny) to help answer technical questions when needed. We also answered questions in the weeks after the end of the engagement period.

4. How we received your feedback

We used our engagement website Conversations Merri-bek to invite people to ask their questions. The Conversations Merri-bek webpage had **1,688 page visits** from **1,001 unique visitors**.

We received **42 online enquiries**, comprising 28 emails to our Strategic Planning inbox and 14 contributions to the Ask A Question form on our Conversations Merri-bek webpage. Many of these enquiries involved several follow-up emails and/or phone calls.

We received **12 phone calls**. We were able to answer all questions during the call, through follow up emails, or by inviting people to book an appointment at one of our face-to-face information sessions.

We held **4 information sessions** so people could ask us questions face-to-face. **6 people attended**. These were held across the municipality in Fawkner and Coburg on the 26 September, Brunswick on 3 October and Glenroy on 7 October. Attendees shared their thoughts, asked questions, and learned more about the stormwater map and how it would be used. We ensured all these people had the information and were given answers, either on the day or later through follow-up phone calls and emails.

How you contacted us:



Figure 2: 2023 Engagement metrics.

5. What you told us

To understand the issues raised by people, we have catalogued our feedback into six themes:

1. Map extent over property
2. Map quality, legibility, and access
3. Property value and insurance impacts
4. Future property development
5. Stormwater impacts and adaptation
6. Council drainage maintenance and upgrades.

For this report, we have assigned a theme to each piece of feedback by reviewing what questions were asked. Some people asked extra questions additional to their main questions, so we assigned secondary themes to capture all of the feedback. The themes and questions were peer-reviewed so we could accurately report back on the questions about the updated map.

The results are:

Theme		Primary questions	Secondary questions
1	Accuracy of stormwater maps on individual property	19	1
2	Map quality, legibility and access	8	3
3	Property value and insurance impacts	5	6
4	Future property development	8	1
5	Stormwater impacts and adaptation	9	2
6	Council drainage maintenance and upgrades	5	11

Figure 3: 2023 Engagement themes.

6. Discussion

The following discussion describes the key issues that emerged during the 2023 engagement and gives a summary of responses.

6.1 Map extent over property

Some people had questions about the accuracy of the mapped extent of the stormwater overland flow path for their property.

Commonly asked questions were: Why does this impact my property? Why is my street impacted? I have new information about my property to share with Council.

Comments

We engaged Engeny to complete a technical study and a stormwater overland flow path mapping exercise. Engeny prepared the 2021 initial stormwater map and has prepared similar maps for other councils and Melbourne Water. Engeny also completed a comprehensive technical report and has experience as an expert at hearings and tribunals for preparing stormwater maps.

Since the designation of the initial 2021 stormwater map under [Regulation 153 of the Building Regulations 2018](#), there has been new information about climate and rainfall, refined land contour information, new drainage works, and [new national guidelines](#) released for the measurement and mapping of stormwater overland flows. Engeny collated this data before using digital modelling technology to simulate the impact of rainfall during 1 in 100-year storm event. This process provided

us with updated, best-practice maps which shows land affected by 100-year stormwater overland flows.

The purpose of the stormwater map is to trigger an assessment process for land development proposals.

Most issues raised during the 2023 engagement related to whether people's individual properties ought to be included in the updated stormwater map. Council officers shared context-specific information about the map, anticipated stormwater depths at particular locations, and further documentation (including Engeny's [Technical Report](#) and our [Drainage Infrastructure Fact Sheet](#)). All questions from property owners were answered in full with no unresolved enquiries at the end of the engagement period.

Some property owners also gave new information about their property's land levels, which helped Council trigger a mapping review exercise. The information was given to Engeny, who completed technical analysis and site visits. The results of this review process are in [Appendix H of the Engeny Technical Report](#).

6.2 Map quality, legibility and access

Some people asked questions about the map or modelling quality, its legibility, or questions about accessing or reading the map.

Commonly asked questions were: Explain the quality of the map? How do I find my property on the map? Help me understand the supporting documents? How do I navigate the website?

Comments

Stormwater maps are prepared from a technical engineering process. Because of this, it can be difficult for some people to understand a technical report that describes the map-creation process. To resolve this we:

- Talked and emailed people, to explain the technical engineering process.
- Shared further information on the peer-reviewed methodology and data used by Engeny to create the map.
- Advised Engeny's methodology meets the ISO9001 international quality management and assurance standard.

All people with these questions were satisfied with the response.

Some people said they had challenges navigating the website. When designing the website, accessibility was a key consideration for creating the maps, designing the website and the supporting collateral. Council's Accessible Communication Advisor was involved in the website's design, and drafting the notice letter, brochure for accessibility for

- those living with low vision.
- our Cultural and Linguistically Diverse (CALD) community.
- for others whose first language may not be English.

As a result, the online maps had high-contrasting colours. We also produced an A4 brochure with key messages in Merri-bek's seven most spoken languages other than English. We also did a 'plain English' review of our written collateral to ensure those who use an online web translation tool could access our information clearly and accurately.

The A4 brochure for Merri-bek's seven most spoken languages other than English, is in Appendix C to this report.

6.3 Property value and insurance impacts

Some people had property value and insurance questions about designating the map under the [Building Regulations 2018](#).

Commonly asked questions were: Will this impact my property value? Will this increase my insurance premiums?

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, a stormwater map might have on the value of a property.

To better understand the potential for impact we reached out to other councils where their stormwater map is in place, to see what additional information there is for this valuation concern.

We learned in 2016 Manningham City Council engaged specialist property advisors to provide independent advice on any potential impacts the map would have on the value of affected properties. We also learned that Stonnington City Council did similar in 2004. The expert advisors were unable to establish any correlation between a map and value impacts, over the short or long term.

On insurance, we recommend property owners contact their insurance provider directly for any insurance queries. Any general insurance queries may be directed to the Insurance Council of Australia (ICA).

The [ICA website](#) states that although most insurers regard stormwater runoff as part of storm cover, some insurers won't cover stormwater runoff or storm surge when the customer chooses not to take flood cover. We advised people to look at their product disclosure statement in their property insurance policy.

When giving answers, we encouraged people to talk to their insurance provider. The ICA website also discusses insurance implications for the ongoing impacts of climate change.

6.4 Future property development

Some people had questions about how future development might need to respond to the map's designation under the [Building Regulations 2018](#).

Commonly asked questions were: How will this impact future development on my property? What permit processes will be required for future development? How might I design my development to respond to the requirements of the *Building Regulations 2018*?

Comments

Stormwater maps are only triggered when a new development is proposed for a property. This means that being affected by a stormwater map only affects property owners when land development requires a building or planning permit.

Having a designated stormwater map means Council, as the drainage and planning authority, can ensure new development is appropriately designed and assessed to ensure effective consideration of severe stormwater impacts.

Considering stormwater impacts when a property is being developed is a shared responsibility. Property developers and their design consultants are responsible for addressing stormwater impacts

when preparing their proposals. Registered Building Surveyors are responsible for issuing building permits that consider the impacts. Council is responsible for assessing applications and issuing planning permits.

Property developers can appropriately consider the stormwater map by following this process:

1. First, make a flood level application to Council.
2. Consider asking a licensed land surveyor to prepare a land-level survey for the property. This plan should show the affected area and give land levels in the Australian Height Datum.
3. The designer of the development should consider how to best manage the 1 in 100-year risks and prepare preliminary plans.
4. Contact Council's [Urban Planning team](#) prior to submitting a permit application.

We encourage everyone who intends to lodge a building or planning permit to speak first to [our Urban Planning team](#). They may recommend holding a pre-application meeting where these issues (as well as other building and planning-related items) can be discussed. The benefit of discussing future development with Council, at the pre-application stage, is it can save developers time and money by addressing issues before the statutory application process begins.

6.5 Stormwater impacts and adaptation

Some people had questions about the impacts of stormwater on the safety of their existing property, and some had questions about what kinds of adaptation and mitigation measures they could do to reduce the impact of stormwater flows from a 100-year event.

Commonly asked questions were: How will stormwater flow impact my property? How will neighbouring property development impact my stormwater-affected property? What can I do to help protect my property against stormwater impacts?

Comments

As our city grows and property is developed, there is an opportunity to reduce the impacts of stormwater. Since stormwater maps are considered when a building or planning permit is sought, some people without plans to develop their properties asked how stormwater would affect their existing property and what they could do to manage these impacts.

The avenue for understanding a property's stormwater hazard is for the property owner to facilitate the preparation of a land level survey by a licensed land surveyor, with levels reduced to the Australian Height Datum. Whilst Council has access to a comprehensive Technical Report, with hazard maps included, the report's purpose was to inform the preparation of the stormwater map. Upon request, high-resolution versions of the report were provided.

We had several questions from property owners asking what they could do to help reduce the impacts of stormwater from severe storm events. We responded with some suggestions. These included:

- Being proactive with cleaning gutters and raking up fallen leaves. These can block drains and make it more difficult for the stormwater to flow into the drainage network;
- Monitoring the amount of leaf matter in kerbs and gutters on the street. If there is a lot of debris in the gutters, residents can log a 'customer inquiry' with Council, so one of our maintenance crews can go and have a look. This can be done [online](#) or by calling 9240 1111.

6.6 Council drainage maintenance and upgrades

Some property owners had questions about maintenance of Council's drainage infrastructure. Some others also asked about Council's [Drainage Improvement Plan](#) and associated capital works projects for drain infrastructure upgrades.

Commonly asked questions were: What works is Council planning to complete to improve stormwater drainage? Will Council update Merri-bek's drains to the 1 in 100-year standard? What is Council doing to mitigate stormwater impacts on its drainage network? Can I lodge a maintenance request?

Comments

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 State Emergency Service 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.

Merri-bek's [Municipal Emergency Management Plan 2022-2025 \(MEMP\)](#) 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.

Piped drainage networks managed by Council are typically designed to cater for more frequent 1 in 5-year storm events. It is not practically feasible or economically viable to adapt the 1 in 100-year storm event into the design of the city's local drainage network. The Victorian Government's response to management of 1 in 100-year storm impacts in established suburbs, is to identify the importance of stormwater maps, and enable the statutory use of these maps for enabling land development.

We made several documents relating to our drainage infrastructure and improvement plans available on our Conversations Merri-bek website. We encouraged those who had questions about our drainage network to read these documents and ask us follow-up questions. The [Drainage Infrastructure Fact Sheet](#), which was developed in response to questions from our 2021 engagement, and our [Drainage Improvement Plan](#) were downloaded 119 times throughout the 2023 engagement period.

The 2021 stormwater map engagement feedback had several property owners notifying us of drainage maintenance concerns. To ensure any maintenance request that arose from the 2023 engagement was efficiently handled, we initiated a customer request so the appropriate maintenance team could visit the location and do any necessary maintenance actions.

7. Conclusion

Council's 2023 engagement for its updated stormwater map included a suite of engagement actions. These actions ensured an effective opportunity for people to get involved and ask questions.

The stormwater map is an important tool for enabling the city's future development and resilience.

Some key observations from this engagement include:

- Mail-out notice letters and brochures were effective at answering questions and directing people to the Conversations Merri-bek website.
- With 1,668 page visits from 1,001 unique visitors, over 10% of all affected property owner households visited our website. This usage demonstrated many people accessed the available information.
- Of the 9,801 letters sent to affected property owners, we received 54 enquiries. All of these queries were answered, and all subsequent queries were also answered. There are no outstanding questions.

Considering the high visitation rate of the Conversations Merri-bek website and the number of letters sent to affected owners, it is reasonable to conclude the mail-out and website collateral, answered most queries. Then, those who contacted Council had their queries answered.

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.

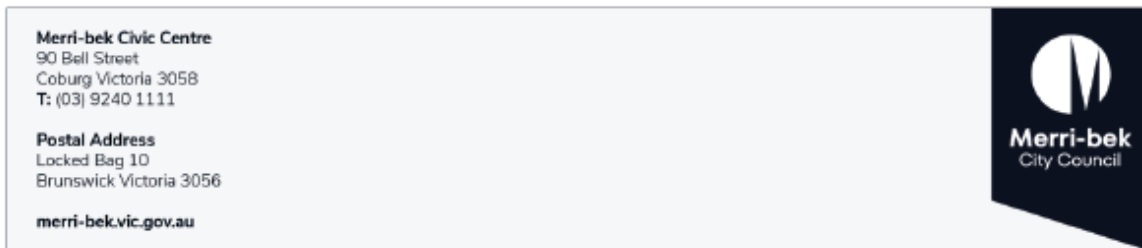
The [Planning and Environment Act 1987](#) is a framework for planning the use, development and protection of land in Victoria. The Act sets out procedures for preparing and amending the planning scheme, as well as the process for obtaining permits, settling disputes, enforcing compliance and other administrative 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. While every effort has been taken to capture each individual enquiry, 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.
- Some people asked questions after the conclusion of the engagement period. While all feedback has been captured and all questions answered, this report concerns the community feedback received during the engagement period of 1 September to 20 October 2023.
- Some feedback received falls outside the scope of this engagement. This feedback will be collected and provided to Council for consideration.

Appendix C: Mail-out collateral



Dear Property Owner

STORMWATER MAP FOR LAND DEVELOPMENT

Changes to our climate means that we need to consider the ways that storms affect land.

We have created a map which shows where stormwater is likely to flow during large storms. Stormwater maps help with decisions about how new buildings should be designed. Stormwater maps also help Council to identify where future drainage improvements can happen.

Council worked with stormwater experts to produce the map. There is more information about the map in the attached brochure. We invite you to review the brochure attached to this letter.

You can see how this map affects you and find out more on Council's website:
conversations.merri-bek.vic.gov.au/stormwatermaps.

If you have any questions, email us at **strategicplanning@merri-bek.vic.gov.au** before Friday, 20 October 2023. All feedback will be considered and made available on our website.

Following the question period, we will start the process to have the map designated for use by building surveyors. We will then consider starting a process for putting the map in the planning scheme. We will contact you again when this happens.

Yours sincerely

Narelle Jennings
Manager City Strategy and Economy

Merri-bek Language Link

Italiano	Italian	9280 1911	Türkçe	Turkish	9280 1914	普通话	Chinese (Simplified)	9280 0750
Ελληνικά	Greek	9280 1912	Tiếng Việt	Vietnamese	9280 1915	National Relay Service: 13 36 77 or relayservice.com.au		
عربي	Arabic	9280 1913	नेपाली	Nepali	9280 0751			

Figure 1: Letter to affected property owners included in mail-out.



Stormwater Map for Land Development

Why has Council prepared a stormwater map?

Climate change and more frequent, large storms led us to consider where stormwater flows across the land. During these storms, the water flows along streets and land until it reaches a creek.

We want to help landowners, so their new buildings and structures are away from where stormwater flows over land. To do this we've prepared a stormwater map.

What is the stormwater map?

The map shows land that is expected to experience stormwater runoff from a 1 in 100 year storm. The map considers past storms, land conditions, buildings, roads, drainage pipes, and other infrastructure.

The map also helps us to identify places where stormwater drainage improvements can happen.

How was the map prepared?

Expert drainage engineers have prepared the map. They used drainage information, images, rainfall data, and the latest technology to replicate the 1 in 100 year storm. National engineering guidelines and technical specifications informed how this was done.

A 1 in 100 year storm has a one percent chance of happening in any year. Such a storm can happen more often than one time in 100 years.

Find out more

Our website gives more information. This includes the stormwater map and a questions and answers page.

Type the following address into your web browser. We recommend using a laptop or desktop computer.



conversations.merri-bek.vic.gov.au/stormwater

You can ask us a question on the website. Alternatively, email us at:



strategicplanning@merri-bek.vic.gov.au

If you want to report a blocked or broken drain, contact Customer Service on 9240 1111.

Go to our Conversations Merri-bek webpage to find out more.

conversations.merri-bek.vic.gov.au/stormwatermaps

Merri-bek Language Link

Italiano	Italian	9280 1911	Türkçe	Turkish	9280 1914	普通话	Chinese (Simplified)	9280 0750
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عربي	Arabic	9280 1913	नेपाली	Nepali	9280 0751			

When will the map be used?

The map is used when landowners want to develop their land.

The Victorian Government has a planning tool called the Special Building Overlay for councils and Melbourne Water to include stormwater maps in planning schemes.

Having a Special Building Overlay means the landowner can plan their development proposal with stormwater information.

We have also used the maps to identify where future drainage improvements can happen.

Why are you contacting me about this?

The map affects your land. We invite you to look at the map and ask us questions.

In the future, we intend to include the stormwater map in the Merri-bek Planning Scheme with a Special Building Overlay.

Have similar maps been done elsewhere?

Yes, we have maps that show Melbourne Water stormwater areas. Other councils across Victoria also have stormwater maps and have put them in their planning schemes.

What happens next?

We would like to invite you to ask questions about the updated map. We will consider all questions and summarise what people have said to us in a report which will be made available to the community in the future.

After the question period, we will start the process to have the map declared for use by building surveyors.

We will then consider asking the Victorian Government to begin a process for putting the map into the planning scheme. We will contact you again when this happens.

Want to talk in-person?

Have questions you would like to discuss with a council officer? Book a time to talk to us at one of our three information sessions.

Type the following address into your web browser:



conversations.merri-bek.vic.gov.au/stormwater/in-person

You can also email or call us to arrange an appointment:



strategicplanning@merri-bek.vic.gov.au



9240 1111

Want more information?

Visit our website, conversations.merri-bek.vic.gov.au/stormwater, where we have prepared answers to many common questions, have factsheets, reports, and more. You can also view the stormwater maps. We recommend using a desktop or a laptop computer to view the website. You can access the web at one of our libraries if you do not have one.

If you want to talk face-to-face, visit our website, email, or phone to book a time to talk to us.

If the answer to your question is not on our website, contact the Strategic Planning Unit. Our email is strategicplanning@merri-bek.vic.gov.au. Do this before Friday, 20 October 2023.

If you want to report a blocked or broken drain, contact Customer Service on 9240 1111.

Merri-bek Language Link

Italiano	Italian	9280 1911	Türkçe	Turkish	9280 1914	普通话	Chinese (Simplified)	9280 0750
Ελληνικά	Greek	9280 1912	Tiếng Việt	Vietnamese	9280 1915	National Relay Service: 13 36 77 or relayservice.com.au		
عربي	Arabic	9280 1913	नेपाली	Nepali	9280 0751			

Figure 2: Project brochure included in mail-out



Italiano

Il consiglio comunale di Merri-bek ha preparato una mappa delle acque piovane per i proprietari terrieri che desiderano apportare delle modifiche ai loro terreni. Ciò si è reso necessario a causa dell'effetto dei temporali sempre più frequenti e intensi.

La mappa riguarda la sua proprietà. La invitiamo a prendere visione della mappa e a porci tutte le domande che le vengono in mente.

Prenderemo in considerazione tutte le domande e le riassumeremo in un rapporto che verrà messo a disposizione della comunità.

Per maggiori informazioni chiami il numero 9280 1911 o scriva un'email in italiano all'indirizzo strategicplanning@merri-bek.vic.gov.au prima del 20 ottobre 2023.

conversations.merri-bek.vic.gov.au/stormwater

नेपाली

IMerri-bek सिटी काउन्सिलले ले जग्गाधनीहरूले आफ्नो जग्गामा विकास गर्न चाहनेमा प्रयोग गर्न सक्ने आँधीबेहरी पानीको निकासको नक्सा तयार गरेको छ। यो धेरै बारम्बार हुने ठूलो आँधीबेहरीको प्रभावको कारण हो।

नक्साले तपाईंको भूमिलाई असर गर्छ। हामी तपाईंलाई नक्सा समीक्षा गर्न आग्रह गर्दछौं र तपाईंसँग कुनै प्रश्नहरू छ भने सोच्न सक्नु हुन्छ।

हामी सबै प्रश्नहरूबारे विचार गर्नेछौं र समुदायलाई उपलब्ध गराउने रिपोर्टमा जनसमुदायको धारणा संक्षेपमा प्रस्तुत गर्नेछौं।

थप जानकारीको लागि 9280 0751 मा फोन गर्नुहोस् वा 20 अक्टोबर 2023 भन्दा अघि strategicplanning@merri-bek.vic.gov.au मा आफ्नो भाषामा इमेल लेख्नुहोस्।

conversations.merri-bek.vic.gov.au/stormwater

Ελληνικά

Ο Δήμος Merri-bek έχει ετοιμάσει έναν χάρτη όμβριων υδάτων για να τον χρησιμοποιήσουν οι ιδιοκτήτες γης εάν θέλουν να αναπτύξουν τη γη τους. Αυτό οφείλεται στον αντίκτυπο των πιο συχνών μεγάλων καταιγίδων.

Ο χάρτης επηρεάζει τη γη σας. Θα θέλαμε να ελέγξετε τον χάρτη και να υποβάλετε όποιες ερωτήσεις έχετε.

Θα εξετάσουμε όλες τις ερωτήσεις και θα συνοψίσουμε όσα μας είπαν οι άνθρωποι σε μια έκθεση που θα διατεθεί στην κοινότητα.

Για περισσότερες πληροφορίες, καλέστε το 9280 1912 ή γράψτε ένα email στη γλώσσα σας στη διεύθυνση strategicplanning@merri-bek.vic.gov.au πριν από τις 20 Οκτωβρίου 2023.

conversations.merri-bek.vic.gov.au/stormwater

中国人

Merri-bek 市议会制作了一份雨水分布图，供土地所有者在开发土地时使用。这是由于更频繁的大风暴影响。

此分布图会影响您的土地。我们希望您能查看此图，并提出您的任何问题。

我们会考虑所有的问题，并在报告中总结所收集的意见，然后向社区公布。

如需了解更多信息，请致电 9280 0750 或在 2023 年 10 月 20 日之前发电邮至：

strategicplanning@merri-bek.vic.gov.au 查询，电邮内容可用您的母语书写。

conversations.merri-bek.vic.gov.au/stormwater

عربي

أعد مجلس مدينة Merri-bek خريطة لمياه الأمطار لملاك الأراضي لاستخدامها إذا كانوا يريدون تطوير أراضيهم. ويرجع ذلك إلى تأثير العواصف الكبيرة المتكررة.

تؤثر الخريطة على أرضك. لذلك نود منك مراجعة الخريطة وطرح أي أسئلة لديك. سننظر في جميع الأسئلة ونلخص ما قاله لنا الناس في تقرير سيتم إتاحته للمجتمع.

لمزيد من المعلومات، يرجى الاتصال على الرقم 92801913 أو كتابة بريدًا إلكترونيًا بلغتك على strategicplanning@merri-bek.vic.gov.au قبل 20 تشرين الأول / أكتوبر 2023.

conversations.merri-bek.vic.gov.au/stormwater

Türkçe

Merri-bek Belediyesi arazi sahiplerinin arazilerini bina yapımına açmak istediklerinde kullanmaları için bir yağmur suyu akış haritası hazırladı. Bu, daha sık görülen büyük fırtınaların etkisinden kaynaklanmaktadır.

Bu harita arazinizi etkiler. Haritayı incelemenizi ve sorularınızı sormanızı istiyoruz.

Tüm soruları dikkate alacağız ve insanların bize söylediklerini topluma sunulacak bir raporda özetleyeceğiz.

Daha fazla bilgi için 9280 1914 numaralı telefonu arayın veya 20 Ekim 2023 tarihinden önce strategicplanning@merri-bek.vic.gov.au adresine kendi dilinizde bir e-posta gönderin.

conversations.merri-bek.vic.gov.au/stormwater

اردو

Merri-bek سٹی کونسل نے زمین کے مالکان کے لیے طوفانی پانی کا نقشہ تیار کیا ہے جسے وہ اپنی زمین کو ڈویلپ کرنے کے لیے استعمال کرسکتے ہیں۔ اسے بار بار آنے والے بڑے طوفانوں کے اثرات کی وجہ سے تیار کیا گیا ہے۔

یہ نقشہ آپ کی زمین کو متاثر کرتا ہے۔ ہم چاہیں گے کہ آپ نقشے کا جائزہ لیں اور ہم سے آپ کوئی سوالات پوچھیں۔

ہم تمام سوالات پر غور کریں گے اور لوگوں نے ہمیں جو کچھ کہا ہے اس کا خلاصہ ایک رپورٹ میں تیار کریں گے جو کمیونٹی کو دستیاب کی جائے گی۔

مزید معلومات کے لیے، 20 اکتوبر 2023 سے پہلے 92401111 پر کال کریں اور ترجمان کے لیے پوچھیں یا اپنی زبان میں strategicplanning@merri-bek.vic.gov.au پر ای میل کریں۔

conversations.merri-bek.vic.gov.au/stormwater

Figure 3: Key message translations included in mail-out

Appendix C: Conversations Merri-bek website



Stormwater map for land development

Find out more about the stormwater map and what this means for building on affected land

[+ Follow](#)

Home > Stormwater map for land development

Council is updating its stormwater map

We wrote to people with land affected by stormwater flows from infrequent but significant storms. We did this because the Victorian Government has a planning process to prepare, share and use stormwater maps.

Council manages the smaller local drainage areas, Melbourne Water manages the bigger, main drainage areas. The updated map is only for Council's local drainage areas.

What does the map show?

The map shows land affected by stormwater flow paths in a 1 in 100-year storm across Council's drainage catchment area. A 1 in 100 year storm has a one percent chance of happening in any year. The 1 in 100 year storm measure is the engineering and planning standard for preparing stormwater maps.

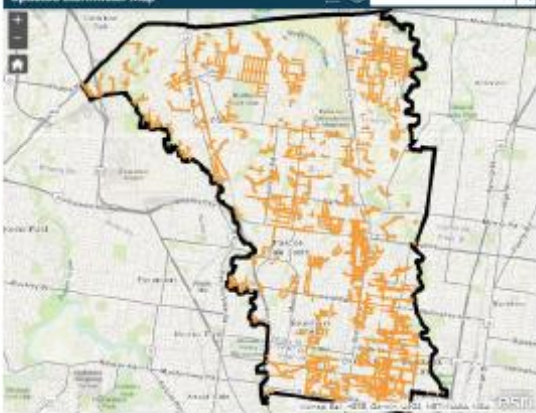
What is the map for?

The map is for people who want to build on land affected by stormwater flows in a 1 in 100 year storm event. Building on land needs a permit, so the map will go into the planning scheme. This is so Council and land developers can ensure that new development considers stormwater flows. The map also helps Council to identify areas for drainage improvements.

How do I use the following map?

This map is best seen on a desktop or laptop computer
If you have neither, consider visiting [one of our libraries](#)

Updated Stormwater Map



If you are vision impaired or you are having trouble reading this map, please contact Strategic Planning on 9149 1111

How will the proposed stormwater map affect new development on your property?

[Find out more](#)

Have Questions?

Get answers to frequently asked questions or ask your own question

[Go to the Q&A library](#)

Want to talk to us?

Book a time to meet and discuss your questions with us, in person

[Book a meeting time](#)

I live in an apartment above the ground floor. Why did I get this letter?

What is stormwater overland flow and how is it different from waterway flooding?

Can there be better drains?

Is this project about blocked or damaged drains?

What should I do in the event of a storm?

Navigation

- [Main project page](#)
- [Questions and answer library](#)
- [Ask your questions face-to-face](#)
- [Stormwater map for Council drainage areas](#)

Contact Us

Have questions or want to learn more about this project, contact us below:

Name: Paul Andrews, Senior Strategic Planner & Project Engagement Lead

Email: StrategicPlanning@merri-bek.vic.gov.au

To stay informed click the "+ Follow" button in the banner at the top of the page

How clear was the information we have provided on this website?

★ ★ ★ ★ ★ [Show more](#)

Do you want to tell us why you chose this star rating?

You have 100 characters left

Figure 4: Conversations Merri-bek landing page

I live in an apartment above the ground floor. Why did I get this letter? ^

We have written to property owners with land expected to be affected by 1 in 100-year stormwater overland flows.

If you live in or own an apartment and have received the letter, we want you to know that infrequent major storms may affect your building's street-level areas.

This may include shared common property, landscaped areas, carparking spaces, and basements accessed from the street level.

What is stormwater overland flow and how is it different from waterway flooding? ^

Stormwater overland flow happens in built-up areas when severe rainstorms happen. This stormwater flows downhill over land until it finds its way to a waterway.

This is different from waterway flooding. Waterway floods occur when the banks of a creek or river cannot contain all the stormwater flowing along the waterway. When this happens, flooding may occur on nearby land, including floodplains.

[Watch a short video about the difference between stormwater overland flow and waterway flooding.](#)

[Compare a photograph of stormwater overland flow and a photograph of flooding to see the difference.](#)

Can there be better drains? ^

Stormwater overland flow isn't caused by bad drains. The 1 in 100 year storm is a rare weather event. It causes very heavy rain downpours that overwhelm the local drains.

It is not feasible to upsize drains for the amount and intensity of stormwater that comes from a 1 in 100 year storm.

Council has a [Drainage Improvement Plan](#) which is being used to reduce stormwater impacts in locations that need improving the most.

Can there be better drains? ^

Stormwater overland flow isn't caused by bad drains. The 1 in 100 year storm is a rare weather event. It causes very heavy rain downpours that overwhelm the local drains.

It is not feasible to upsize drains for the amount and intensity of stormwater that comes from a 1 in 100 year storm.

Council has a [Drainage Improvement Plan](#) which is being used to reduce stormwater impacts in locations that need improving the most.

Is this project about blocked or damaged drains? ^

This project is not about blocked or damaged drains.

We appreciate you may want to contact us if you believe a drain needs some attention.

Council maintains around 24,000 pits and drains across Merri-bek. The majority of reported blocked pits are in fact not blocked at all. Drains can only cope with so much water. During heavy rainfall, water builds up above a drain.

If you know of a drain that is damaged, or still blocked some time after heavy rain has passed, use the links below to report it.

- [Report a Problem](#) if you believe a council drain is damaged or blocked.
- Use the [Melbourne Water](#) website if you believe there is an issue with a main drain.

What should I do in the event of a storm? ^

Victorian Emergency Service (SES) is the lead agency for emergencies.

You can find more information on storm preparedness in Merri-bek on our website: [Storms and flooding preparedness | merri-bek.vic.gov.au](#)

Figure 5: Accordions expanded on landing page

Question and answer library

+ Follow

Get answers to frequently asked questions or ask your own question

Home > Stormwater map for land development > Questions and answers

We have created a library of common questions and answers about stormwater maps. These are based on your questions submitted during the preparation of the interim stormwater map in 2021.

Below are 5 of the most asked questions. Click the down arrow to reveal their answers.

How is climate change affecting storms?



How was the stormwater map prepared?



How might this impact property value?



How might this impact property insurance?



How do I prepare for a storm?



The following Q&A library has six categories. We suggest starting with the first category **Understanding Stormwater** and then going through the other categories in order. Doing this gives access to information useful for the next category. We appreciate that you may prefer to go to the category that most interests you.

Click each category to go to the topic.



1. Understanding Stormwater

- What is a stormwater overland flow path?
- Is there a history of severe storms in Merri-bek?



2. Stormwater Maps

- Is this a new or updated map?
- Why is a property included if only a small portion is affected?



3. Planning Scheme

- What is a Special Building Overlay (SBO)?
- Who is affected by an SBO?



4. Land Development

- How should land development consider Council's stormwater maps?
- How do I go about finding out my property's flood level?



5. Stormwater Infrastructure

- What if repairs may be needed to Council drains in my local area?
- Does Council's maintenance affect stormwater overland flows?



6. Other Questions

- Is property insurance affected by the stormwater maps?
- What solutions are there for managing stormwater risks?

Closed

Ask your own question

If you have a question complete the following form so we can respond with an answer.

We aim to respond within five business days.

We will close this form on the 20 October 2023

Name Required

Phone number

Email Required

Property address (optional)

Giving your address means we can tailor our answer to your location. We will not use your address for any other reason.

Your question

Submit

Prefer to speak face-to-face?

Book a timeslot to meet and discuss any question you may have in-person. THESE SESSIONS HAVE NOW FINISHED.

Book a meeting time

Navigation

- [Main project page](#)
- [Questions and answer library](#)
- [Ask your questions face-to-face](#)
- [Stormwater map for Council drainage areas in Merri-bek](#)

Figure 6: Question and Answer child page on Conversations Merri-bek

How is climate change affecting storms?

Scientists are observing changes in our climate. Climate change will likely decrease yearly rainfall and create more storms.

National engineering guidelines, known as [Australian Rainfall and Runoff 2019](#), inform how stormwater mapping should consider climate change. These guidelines suggest creating maps that show how rainfall will increase because of climate change.

How was the stormwater map prepared?

Requirements to prepare stormwater maps come from engineering guidelines and specifications. The information includes details about drains, the shape and slope of the land, and land development. Specialist engineers, who have prepared stormwater maps for other councils, did the work. Separate reviewers check their work. For more information see the [Technical Report](#).

How might this impact property value?

Property values are determined by many factors. These factors include things like trends in interest rates, finance availability, changing property markets, demographic trends, location desirability, types of nearby properties, amenities, and services in the neighbourhood. Property characteristics and features are also relevant factors. This includes lot size, style and age of the property, renovation potential, and the layout of indoor and outdoor spaces.

To better understand the potential impact, Council contacted other municipalities where stormwater maps exist to find out if any additional information was available.

In 2016, Manningham City Council worked with specialist property advisors to give independent advice on whether their stormwater map would affect property values of the affected areas. Stonnington City Council did a similar assessment in 2004.

Both expert advisors found no connection between stormwater maps and property values, whether in the short or long term.

How might this impact property insurance?

We recommend you talk to your insurance provider about your insurance policies.

The Insurance Council of Australia (ICA) represents the insurance industry. [Their website](#) gives information about insurance matters. [The ICA website](#) says:

"... Storm or rainwater cover in your insurance policy may cover the situation where your house becomes inundated by rainwater that has fallen naturally from the sky. Though most insurers regard rainwater runoff as part of 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."

How do I prepare for a storm?

Council's [Storms and Flooding Preparedness](#) webpage gives information about this.

Figure 7: Accordions expanded on Question and Answer child page

1. Understanding Stormwater

+ Follow

Home > Stormwater map for land development > What is stormwater overland flow?

Describe the type of storm the map is associated with?

Intense storms with a lot of rainfall cause stormwater to move across the land, as it makes its way to drains and creeks. The storm's intensity influences how much runoff flows across the land, as well as how much runoff can get into our drains.

The stormwater map shows the location of the stormwater overland flow path for the 1 in 100 year storm, in our local drainage catchments.

What is a stormwater overland flow path?

It is the path stormwater takes when flowing over the land, as it makes its way to drains and creeks.

What does 1% AEP mean?

The 1% Annual Exceedance Probability (1% AEP) storm is a large storm. It has a 1% chance of happening in any one year.

The 1% AEP event is sometimes referred to as the 1 in 100 year or 100 year storm. This does not mean a place that experiences a 1% AEP storm will not see another for another 100 years. Large storms can happen more often.

Do we need the map if I do not recall a 1% AEP storm happening?

Yes, we need the map. Many people may not recall such a large storm affecting their neighbourhood. This is because the last local 1 in 100 year storm may have happened many years ago.

The 1 in 100 year standard helps us consider stormwater impacts on land development.

Is there a history of severe storms in Merri-bek?

Yes, Merri-bek has a history of infrequent but notable storms.

For example, in December 2011 a large storm moved across metropolitan Melbourne's northern and western suburbs. This storm caused stormwater overland flow paths that affected parts of Merri-bek.

More information about past storms in Merri-bek is available from the [Victorian State Emergency Services](#) website.

Is the risk of overland flow associated with the age of the infrastructure?

No. The risk is associated with the size of the storm.

Smaller, more frequent storms are normally contained in drains and roads. Larger, less frequent storms cause stormwater overland flow.

Click each category tile to explore each topic



2. Stormwater Map



3. Planning Scheme



4. Land Development



5. Stormwater Infrastructure



6. Other Questions



Back to the Q&A library

Ask your own question

Navigation

- [Main project page](#)
- [Questions and answers](#)
- [Ask your questions face-to-face](#)
- [Stormwater map for Council drainage areas](#)

Figure 8: Understanding Stormwater Q&A child page on Conversations Merri-bek

2. Stormwater Map

[Follow](#)

Home > Stormwater map for land development > Understanding stormwater overland flow map

The experts who created the stormwater map have prepared a technical report. This report gives the:

- Technical methods, guidelines, and specifications used to prepare the map.
- Sequence of technical studies done to prepare the map, included as appendices.
- Other details to explain how the map was created.

Download the technical report to find out more

Technical report (PDF 4.4MB)

What does the map show?

The map shows areas where there is a possibility that a rare 100-year stormwater overland flow might impact the land. These areas are located within the local drainage region, where the Council has its drains.

Melbourne Water has added a stormwater map for the larger drainage areas in Merri-bek to the planning scheme.

More information about the stormwater map is in a [Technical Report](#).

Is this a new or updated map?

This is an updated map. We now have [updated national guidelines](#) and more information, allowing us to update our understanding of stormwater flows in Merri-bek.

Why is the updated 2023 stormwater map different from the 2021 initial map?

Council wants the updated map to be informed by current data, methods and guidelines. You can find more information in a [Technical Report](#), including in [Appendix C](#).

Why do we refer to the 1 in 100-year storm?

It is the engineering and planning standard for managing stormwater risks for land development.

Where does the 1 in 100-year drainage standard come from?

Before the 1970s, the '1 in 5 year' storm was the drainage design standard. The '1 in 100 year' standard initially came from the Drainage of Land Act in 1974.

In 2016, the [Victorian Government's Floodplain Management Strategy](#) confirmed the 1 in 100 year standard.

How was the map prepared?

Requirements to prepare stormwater maps come from national [engineering guidelines](#) and specifications. Information about drains, the shape of land, and past severe storms are also used.

Specialist engineers, who have prepared stormwater maps for other councils, did the work. Separate reviewers check their work. Melbourne Water was also involved.

You can find more information in a [Technical Report](#).

Why is a property included if only a small portion is affected?

Portions of properties are included so future land development in the mapped area can consider the 1 in 100 year storm issues.

The reshaping of land can affect the passage of stormwater flows across the land. Therefore, the stormwater map sometimes includes portions of properties away from buildings.

If land is not affected by the map, does that mean there is no stormwater risk?

Significant storms can affect all land. The land shown on the stormwater map is where 1 in 100 year overland flow affects the land.

Why are there some straight edges in the updated stormwater map?

Some properties are not included in the mapped area where there is a very low stormwater risk in a 1 in 100-year storm event.

At these locations, the edge of the map is straight to match the boundary of the removed property.

This helps to show that a specific property is not a part of the map.

You can find more information in a [Technical Report](#).

Click each category tile to explore each topic



3. Planning Scheme



4. Land Development



5. Stormwater Infrastructure



6. Other Questions



Back to the Q&A library

Ask your own question



1. Understanding Stormwater

Navigation

- [Main project page](#)
- [Question and answer library](#)
- [Ask your questions face-to-face](#)
- [Stormwater map for Council drainage areas](#)

Figure 9: Stormwater Map Q&A child page on Conversations Merri-bek

3. Planning Scheme

+ Follow

Home > Stormwater map for land development > Stormwater overland flows and the planning scheme

Who is responsible for the stormwater drains in Merri-bek?

Council is the Local Drainage Authority and looks after our smaller, local drains.
Melbourne Water is the Main Drainage Authority and looks after creeks and our larger, main drains.
Melbourne Water is also the Floodplain Management Authority for all of Melbourne.
Landowners are responsible for their property drains.
On most occasions, stormwater runoff from properties goes downhill to Council's drains, then to Melbourne Water's larger drains before flowing into creeks.

What has the Local Drainage Authority done so far?

Council asked engineering experts to prepare an initial stormwater map. This initial map was released in 2021 and is being used by building surveyors for land development. Then, work continued so an updated map could be prepared because Council wanted to ensure new information was included and the changing [national engineering guidelines](#) were considered. The updated map is now being released.
You can find more information in a [Technical Report](#).

What is a Special Building Overlay (SBO)?

The Special Building Overlay is a planning tool, so the stormwater map can be part of the Merri-bek Planning Scheme.
Having an SBO, means land developers need a planning permit to develop on land that is affected by 1 in 100 year stormwater overland flow paths.

Is introducing a Special Building Overlay (SBO) a new idea or have others done this?

Others have done this. Melbourne Water and various councils have been preparing stormwater maps and putting them in planning schemes for over 20 years.

How is an SBO2 different from the SBO1?

The SBO Schedule 1 (SBO1) is for 1 in 100 year stormwater flows in Melbourne Water's drainage areas in Merri-bek. This stormwater map for Melbourne Water's areas is already part of the [Merri-bek Planning Scheme](#).
Council has prepared its stormwater map for the Council's drainage areas. A planning scheme amendment is expected to happen in the future so the Council's stormwater map can also be part of the Merri-bek Planning Scheme. This would result in a second schedule to the Special Building Overlay, known as an SBO2.

When would a Second Schedule to the Special Building Overlay (SBO2) be used?

The SBO2 would be used when the stormwater maps are part of the Merri-bek Planning Scheme. Then, the SBO2 is used when land development is proposed on land affected by the map for Council's local drainage areas.

Click each category tile to explore each topic



4. Land Development



5. Stormwater Infrastructure



6. Other Questions



Main Q&A Page

Ask your own question



1. Understanding Stormwater



2. Stormwater Map

Navigation

- [Main project page](#)
- [Questions and answer library](#)
- [Ask your questions face-to-face](#)
- [Stormwater map for Council drainage areas](#)

Figure 10: Planning Scheme Q&A child page on Conversations Merri-bek

4. Land Development

+ Follow

Home > Stormwater map for land development > Stormwater overland flows and property development

Who considers stormwater impacts when land is being developed?

It is a shared responsibility.

- Land developers and their consultants are responsible for addressing stormwater impacts when preparing their proposals.
- Registered Building Surveyors are responsible for issuing building permits that consider the impacts.
- Council is responsible for issuing planning permits that consider the impacts.

How should land development consider Council's stormwater map?

1. Firstly, make a flood level application to Council.
2. Consider asking a licensed land surveyor to prepare a land-level survey plan for the property. This plan should show the affected area and give land levels in the Australian Height Datum.
3. The designer of the development should consider how best to manage the 1 in 100 year risks and prepare preliminary plans.
4. We recommend contacting [Council's Urban Planning team](#) to discuss the proposal's preliminary plans. Do this before submitting a permit application.

What if land development wants to connect to a Council drain?

You need a Drainage Connection permit.

This permit lets Council know you are doing the work so we can check the drains afterwards.

There is more information about [Drainage Connection Permits on Council's website](#).

How do I go about finding out the flood level for my land?

If affected by:

- Council's map, go to [See if your property is affected](#) and submit a request.
- Melbourne Water's map in the planning scheme, go to [Melbourne Water's website](#) for more information.

What is the legal point of discharge and why is it relevant?

It is the location where Council requires a property to discharge its stormwater. The location is usually at Council's nearest stormwater drain.

Land developers must apply to Council for a 'legal point of discharge report'. A building surveyor must consider the report before issuing a building permit.

You can find more information about [Legal point of discharge on Council's website](#).

How does land development manage its own stormwater runoff?

Council includes conditions on planning permits for new development to manage stormwater runoff. This includes doing on-site stormwater retarding works to reduce impacts elsewhere. Also, new buildings have their floor levels constructed above the 1 in 100 year level of the stormwater.

Do land developers have to contribute to Council's drainage works program?

Yes. Council has a Development Contribution Plan (DCP) in the Merri-bek Planning Scheme. This plan requires land developers to make a financial contribution to infrastructure projects listed in a report.

You can find more information on the DCP at [Council's Development Contributions website](#).

Click each category tile to explore each topic



5. Stormwater Infrastructure



6. Other Questions



Back to the Q&A Library



1. Understanding Stormwater



2. Stormwater Map



3. Planning Scheme

Navigation

- [Main project page](#)
- [Question and answer library](#)
- [Ask your questions face-to-face](#)
- [Stormwater map for Council drainage areas](#)

Figure 11: Land Development Q&A child page on Conversations Merri-bek

5. Stormwater Infrastructure

+ Follow

Home > Stormwater map for land development > Stormwater infrastructure

Our [Drainage Infrastructure Fact Sheet](#) will tell you:

- What the local drainage network is
- How the local drainage network is different from the main drainage network
- Why the local drains aren't big enough to manage the 1 in 100 year storm
- What Council does to reduce the impact of severe storm events on local drains
- How Council invests in the local drainage network
- How Council does for local drainage maintenance
- What locations Council is prioritising to reduce stormwater risks

Can more local drains be earmarked for an upgrade?

Council's budget has to consider many things. This includes different types of infrastructure.

Council's Drainage Improvement Plan informs the budget. It includes places with the greatest need for drainage funding. The Victorian Government's rate capping affects how big the budget can be.

You can find more information about Council's planned drainage infrastructure improvements in the [Drainage Infrastructure Fact Sheet](#) on Council's website.

What if repairs may be needed to Council drains in my local area?

1. Go to Council's [eServices](#) website.
2. Click on the 'Register' button if you have not used this service before.
3. Click on the 'Sign In' button if you are already registered.
4. Then prepare your customer request by completing the online form.
5. This includes giving an answer to "What would you like to request or report to the Council?"
6. Upload attachments, such as low-resolution photos, to show the drainage issue.
7. Complete by clicking the 'Submit' button at the bottom of the page.

Does Council's maintenance affect stormwater overland flows?

100 year stormwater flows across the land because the drainage network is full.

Whilst blockages do happen this is not due to deficient maintenance. This is because severe storms generate significant rainfall, runoff, and debris as well.

You can find more information about Council's approach to drainage maintenance in the [Drainage Infrastructure Fact Sheet](#) on Council's website.

How does Council do street cleaning for the affected streets?

Council is reducing risks from severe stormwater runoff. This includes cleaning and repairs for drains. Manual cleaning happens for more susceptible pits and streets. The stormwater map also helps to identify these places.

You can find more information about Council's approach to drainage maintenance in the [Drainage Infrastructure Fact Sheet](#) on Council's website.

Download a Drainage Infrastructure Fact Sheet

Download (PDF 657kb)

Click each category tile to explore each topic



6. Other questions



Back to the Q&A library

Ask your own question



1. Understanding Stormwater



2. Stormwater Map



3. Planning Scheme



4. Land Development

Navigation

- [Main project page](#)
- [Question and answer library](#)
- [Ask your questions face-to-face](#)
- [Stormwater map for Council drainage areas](#)

Figure 12: Stormwater Infrastructure Q&A child page on Conversations Merri-bek

6. Other Questions

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[Home](#) > [Stormwater map for land development](#) > [Other questions](#)

What consultation has happened and what did this result in?

In 2021 Council prepared an initial stormwater map and invited people to information sessions. This helped to answer questions about the map and its use for land development. Then, building surveyors started to use the map for building permits.

In 2021 Council said the next step was to prepare a final map for the planning scheme. Doing this means future planning permits for development will have considered the final map.

There is a [Consultation Summary Report on Council's website](#), which describes the 2021 consultation for the initial maps.

Is there compensation for the stormwater map?

The Planning and Environment Act 1987 sets out when compensation can be considered.

Section 98 of the Act does not include compensation for the application of zones or overlays in planning schemes.

Special Building Overlays (SBOs) for stormwater maps do not prohibit land use or development.

Special Building Overlays (SBOs) do not reserve land for public purpose.

Is stormwater information included when land is bought or sold?

Yes. Council puts information in a property information database for conveyancers to use. Melbourne Water also does this.

What solutions are there for managing stormwater risks?

Council has various solutions, these include:

1. A [Drainage Improvement Plan](#) has identified priority locations where drainage works can reduce the impact of the 1 in 10 year storm.
2. Council is using this [Drainage Improvement Plan](#) to fund drainage works in places with the greatest need.
3. Council also funds other works to repair drains and does maintenance.
4. Council's approach to maintenance includes drain inspections and street sweeping.
5. Council prompts land developers to retard stormwater runoff and have areas where stormwater can get into the ground.
6. Council is guided to use the Victorian Government's planning system, which prompts using Special Building Overlays (SBOs) to get stormwater maps in planning schemes.
7. When a severe storm happens, working with the Victorian State Emergency Services and Victoria Police to manage risks.

Will Council's rates be affected by the stormwater map?

Property rates are not affected by the stormwater map. For more information about the calculation of property rates see the [Understand your rates page of Council's website](#).

Download a report about our 2021 Initial Stormwater Map Engagement

[2021 Engagement Summary Report \(PDF 1.58 MB\)](#)

Click each category tile to explore each topic



Back to the Q&A library

[Ask your own question](#)



1. Understanding Stormwater



2. Planning Scheme



3. Stormwater Map



4. Land Development



5. Stormwater Infrastructure

Navigation

- [Main project page](#)
- [Question and answer library](#)
- [Ask your questions face-to-face](#)
- [Stormwater map for Council drainage areas](#)

Figure 13: Other Questions Q&A child page on Conversations Merri-bek



Ask your questions face-to-face

Book to meet with our strategic planners at one of our information sessions.

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[Home](#) - [Stormwater map for land development](#) - Ask your questions face-to-face

Attendance at our information sessions is by booking only

Do you still have questions about stormwater mapping?

If you'd like to talk to us about your questions, book a time to meet with us at an information session. You must use the booking form on this page if you'd like to come to an information session. After completing the form, we will contact you to give you a 15-minute timeslot for your preferred session. If you would prefer to ask your question in writing, you can use the form on the [Questions and answers](#) page.

Bookings for each session will close two days before the session, unless the session is fully booked and is closed sooner.

Information Session Times



Tuesday 26 September 2023 10:00 am
Information Session 1
10AM - 12PM
Fawkner Senior Citizens Centre
77 Jukes Road, Fawkner



Tuesday 26 September 2023 02:00 pm
Information Session 2
2PM - 5PM
Coburg Civic Centre
90 Bell Street, Coburg



Tuesday 3 October 2023 04:00 pm
Information Session 3
4PM - 6PM
Brunswick Town Hall
233 Sydney Road, Brunswick



Saturday 7 October 2023 10:00 am
Information Session 4
10AM - 12PM
Glenroy Community Hub
50 Wheatshaf Road, Glenroy

Open

Book a time to meet with us

If you would like an appointment to speak with us face-to-face, you can complete the following form and an officer will get back to you. We endeavour to respond to all booking requests within five business days.

Full name Required

Email address Required

Phone number

Please give your property address. Doing this helps us tailor our advice to your needs. We will not use your address for any other reason.

Property address Required

Are you developing or have plans to develop your land? Required

☐ Yes, I am developing my land or have plans to develop my land.

☐ No, I do not plan to develop my land.

I would like to attend: Required

☐ Information Session 1 - Fawkner 26 September 10am-12pm

☐ Information Session 2 - Coburg 26 September 2pm-5pm

☐ Information Session 3 - Brunswick 3 October 4pm-6pm

☐ Information Session 4 - Glenroy 7 October 10am-12pm

Select the session that is most convenient. We will contact you to organise a 15-minute appointment time.

What questions would you like to ask us? Required

If you require any special assistance to attend this session, please describe the assistance below. This may include accessibility needs, translators, etc.

If you have any trouble filling out this form, please call customer service for assistance 9240 1111.

Submit

Navigation

- [Main project page](#)
- [Questions and answers](#)
- [Ask your questions face-to-face](#)
- [Stormwater map for Council drainage areas in Merri-bek](#)

Figure 14: Information Sessions child page on Conversations Merri-bek



Stormwater map for Council drainage areas

+ Follow

Home > Stormwater map for land development > Stormwater map for Council drainage areas

This page gives more information about what it means to own land affected by Council's stormwater map

My property is affected by the proposed stormwater map. What does this mean?

The map shows land that is expected to experience stormwater flows from a 1 in 100 year storm event. The map indicates where an existing risk exists and is based on land conditions, past storms, buildings, roads, drainage pipes and other infrastructure across Merri-bek City. The map does not create a new risk.

How will the map be used?

The map is used when a landowner wants to submit a development proposal to Council. This is so we can help landowners, building surveyors and architects to keep new buildings and structures away from places where stormwater flows over land. This will help to protect affected and neighbouring land and buildings from the impacts of stormwater flows.



No plans to develop your land?

The stormwater map is only used when a landowner wants to build on their land. If you don't have any plans to develop your land, the map is not used.

Still have questions?
Browse our Q&A Library >



You want to develop your land in the future?

The map is used to help prepare design drawings for your future development proposal. Your architect and building surveyor need to consider the stormwater map before any drawings are prepared and given to Council.

Read some FAQs on land development >



You're ready to develop your land?

Our urban planners will work with you to plan any building works.

More information on preparing your application >

Prefer to speak face-to-face?

Book a timeslot to meet and discuss any question you may have in-person.

Book a meeting time

Timeline

- ✓ Prelim A - Interim Council stormwater map prepared
Feb 2021
- ✓ Prelim B - Interim Council stormwater map shared with landowners
March - April 2021
- ✓ Prelim C - Interim Council stormwater map designated for building permits
August 2021
- ✓ Prelim D - Interim local drainage stormwater map given to Melbourne Water
August 2021
- ✓ Prelim E - Melbourne Water completed city-wide stormwater models
Mid 2023
- ✓ Stage 1 - Updated Council stormwater map validated
August 2023
- ★ Stage 2 - Updated Council stormwater map shared with affected landowners
1 September - 20 October 2023
- Stage 3 - Council meeting to consider the stormwater map
Late 2023 (tentative)

Still have questions?
Browse our Q&A Library >

Read some FAQs on land development >

More information on preparing your application >

☆ Stage 3 - Council meeting to consider the stormwater map
Late 2023 (tentative)

☆ Stage 4 - Updated Council map declared for building permits
Late 2023 (tentative)

[See less](#)

What are the next steps?

We will consider all questions and summarise what people have said to us in a report which will be made available to the community in the future.

Following the question period, we will start the process to have the map declared for use by building surveyors.

We will then consider asking the Victorian Government to begin a process for putting the map in the planning scheme. We will contact you again when this happens.

Document Library

 **Letter to landowners for stormwater map-affected properties**
PDF (285.77 KB)

 **Stormwater Maps Information Brochure**
PDF (1.38 MB)

 **Key messages in community languages**
PDF (285.77 KB)

 **Drainage Infrastructure Fact Sheet**
PDF (457.11 KB)

 **Technical Report**
PDF (4.24 MB)

 **Technical Report - Appendix A**
PDF (17.44 MB)

 **Technical Report - Appendix C**
PDF (2.07 MB)

 **Technical Report - Appendix D**
PDF (2.49 MB)

 **Technical Report - Appendix E**
PDF (4.75 MB)

 **Technical Report - Appendix F**
PDF (1.81 MB)

 **2021 Engagement Summary Report**
PDF (1.58 MB)

[See more](#)

Navigation

- [Main project page](#)
- [Question and answer library](#)
- [Ask your questions face-to-face](#)
- Stormwater map for Council drainage areas

Contact Us

Have questions or want to learn more about this project, contact us below:

Name Paul Andrews, Senior Strategic Planner & Project Engagement Lead

Email StrategicPlanning@merri-bek.vic.gov.au

To stay informed

Click the "Follow" button in the banner at the top of the page

Figure 15: Stormwater Infrastructure Q&A child page on Conversations Merri-bek

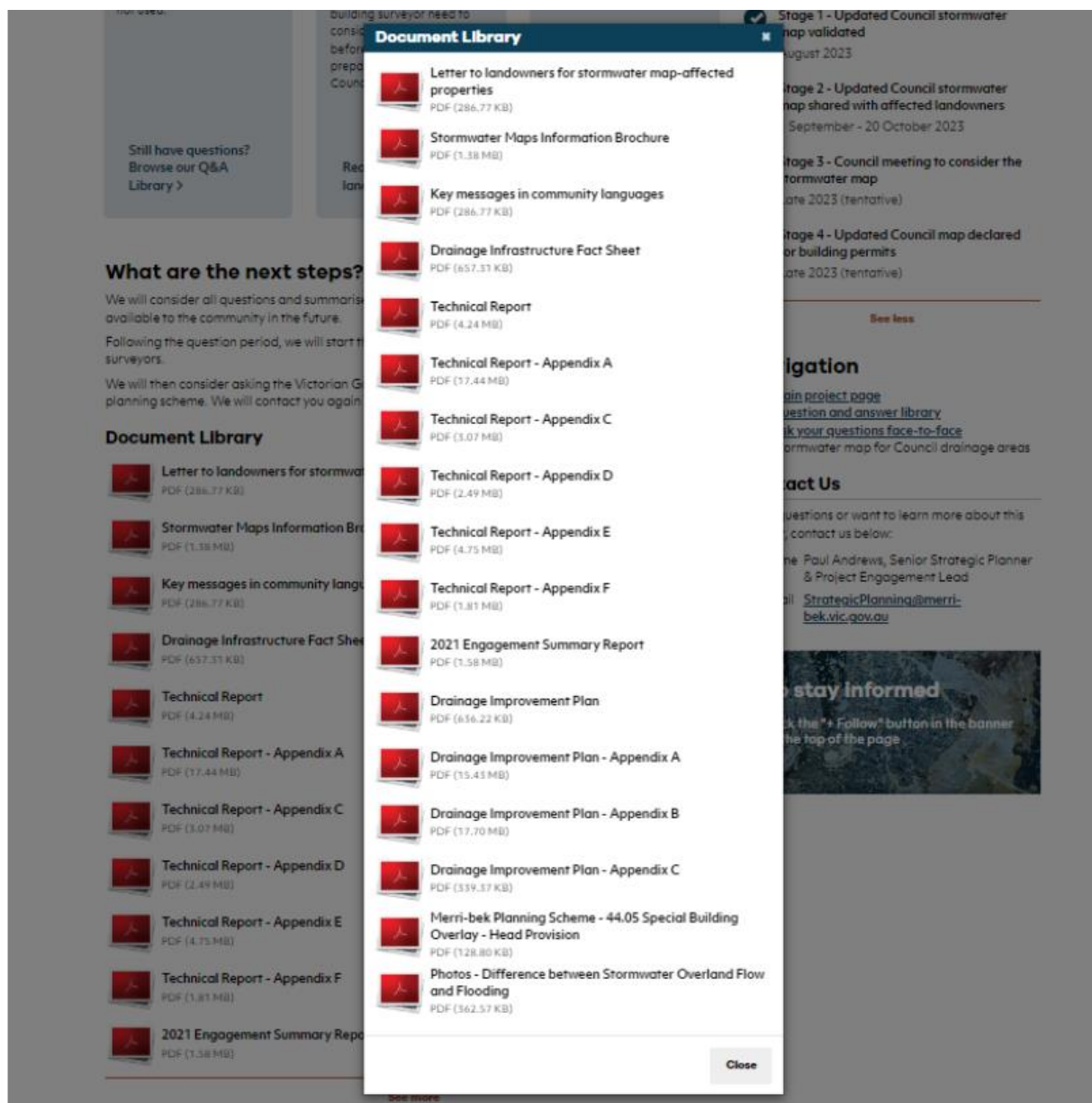


Figure 15: Document library on Stormwater Map for Council Drainage Areas child page

Appendix E: Summary of submissions

Submitter ID	Submitter Query	Council Response
1	Question about map extent over property. Provided extra information about their property.	Reviewed extent, property removed from stormwater map.
2	Cannot read online map legend.	Updated map legend, shared accessibility information.
3	Question about property value and insurance.	Provided information.
4	Cannot find property on online map.	Property address given was in another municipality.
5	Question about property development impacts.	Provided information about property development, building and planning permit process.
6	Question about stormwater impact on their property.	Provided advice on the modelling and ways people can help reduce stormwater impacts
7	Provided additional information about their property.	Reviewed extent, property retained in stormwater map.
8	Question about neighbouring property impacts on stormwater flows.	Provided information on stormwater flows.
9	Question about Council's drainage investment and improvement plans.	Provided information on Council's Drainage Improvement Plan.
10	Questions about map extent, neighbouring development and property values.	Provided information and answered questions.
11	Question on ways they can help mitigate stormwater impacts on their property.	Provided information and answered questions.
12	Questions about map extent, Council's drainage improvement plans and property values.	Provided information and answered questions.
13	Wanted to know why their street was impacted by stormwater flows.	Provided technical information and answered questions.
14	Question about property value and insurance.	Provided information and answered questions.
15	Considering doing a renovation and had questions about stormwater impacts.	Provided information on stormwater management and lodging building/planning permit applications.
16	Concerned about stormwater risk to their property.	Provided information on how to help protect against stormwater flows.
17	Question about how stormwater might impact their property.	Provided information and answered.
18	Had a question about how to read the online map.	Shared accessibility information and assisted customer to read the map.
19	Seeking more information on why the map affects their property.	Provided information and answered questions.
20	Seeking more information on why the map affects their property.	Provided information and answered questions.
21	Seeking more information on why the map affects their property.	Provided information and answered questions.

22	Seeking more information on why the map affects their property.	Provided information and answered questions.
23	Seeking more information on why the map affects their property.	Provided information and answered questions.
24	Questions about why the map impacts their property and shared extra information about their property.	Reviewed extent, property removed from stormwater map.
25	Had a question about rainfall during a 1 in 100-year storm event and how it might impact their property.	Provided modelling information and answered questions.
26	Had a question about the building and planning permit process.	Provided building and planning permit process information.
27	Seeking more information about Council's emergency management plan	Provided Council's emergency management plan and further information on emergency management arrangements across agencies.
28	Seeking more information on potential stormwater impacts on for their property	Provided information and answered questions
29	Seeking more information on why the map affects their property.	Provided information and answered questions.
30	Seeking more information on why the map affects their property.	Provided information and answered questions.
31	Wanted assistance at booking an appointment at an information session.	Assisted customer with booking appointment at an information session.
32	Seeking information on Council programs to help adapt to and mitigate against stormwater impacts	Provided information and answered questions.
33	Seeking more information on why the map affects their property.	Provided information and answered questions.
34	Wanted to know what the flood level for their property was.	Directed customer to lodge a flood level application via Council's website.
35	Considering doing a renovation and had questions about stormwater impacts.	Provided information on stormwater management and lodging building/planning permit applications.
36	Question about stormwater impacts from a neighbouring development.	Provided information and answered questions.
37	Seeking information on Council programs to help adapt to and mitigate against stormwater impacts	Provided information and answered questions.
38	Had technical questions relating to the modelling methodology.	Provided technical reports, answered questions.
39	Wanted to know what the flood level for their property was.	Directed customer to lodge a flood level application via Council's website.
40	Had questions on property development and permit requirements.	Provided information on stormwater management and lodging building/planning permit applications.
41	Had questions on property value and how stormwater might impact theirs and neighbouring properties.	Provided information and answered questions.
42	Had technical questions relating to the modelling methodology and how the modelling impacted their property.	Provided technical reports, information and answered questions.

43	Seeking information on how stormwater is expected to impact their street.	Provided information and answered questions.
44	Seeking further information on Council's drainage program and stormwater mitigation and adaptation strategies.	Provided information and answered questions.
45	Seeking further information on stormwater impacts to their property and seeking information on potential WSUD interventions in the public domain.	Provided information and answered questions.
46	Seeking insurance information.	Provided information and answered questions.
47	Had questions about street cleansing and drainage upgrades.	Provided information and answered questions.
48	Seeking insurance information and information on drainage upgrades.	Provided information and answered questions.
49	Question about map extent over property. Provided extra information about their property.	Reviewed extent, property removed from stormwater map.
50	Seeking information about local drainage upgrades.	Provided information and answered questions.
51	Had questions on property development and permit requirements.	Provided information on stormwater management and lodging building/planning permit applications.
52	Seeking insurance information.	Provided information and answered questions.
53	Seeking more information on potential stormwater impacts on for their property	Provided information and answered questions
54	Seeking information on Council programs to help adapt to and mitigate against stormwater impacts	Provided information and answered questions.