

City of Bayside

Storm and Flood Emergency Plan

A Sub-Plan of the Municipal Emergency Management Plan

For Bayside City Council
And
VICSES Unit Moorabbin

Version 5.1
Reviewed May 2019



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Distribution List

Copy No.	Issue To:		Date
	Position	Organisation	
Original	MEMP Committee Executive Officer	Bayside City Council	
1	Council Office Copy	Bayside City Council	
2	MEMP Committee Chairman	Bayside City Council	
3	MERO	Bayside City Council	
4	Deputy MERO	Bayside City Council	
5	MRM	Bayside City Council	
6	MERC	VICPOL	
7	RERC	VICPOL	
8	REMI	VICPOL	
9	Deputy MERC	VICPOL	
10	ROEM	VICSES Central RHQ	
11	VICSES Controller	VICSES (Moorabbin Unit)	
12	Team Leader Hydrology & Flood Warnings	Melbourne Water	
13	Flood Warning Manager	Bureau of Meteorology (Flood Warning)	
14	Regional Emergency Management Officer	VicRoads	
15	EM Unit	Ambulance Victoria	
16	Emergency Management Officer	Department of Education (DEECD)	
17	Emergency Management Coordinator	Department of Human Services	
18	Commander	MFB	
19	ICCs – Mulgrave & Sunshine	VICSES	
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Document Transmittal Form / Amendment Certificate

This Municipal Flood Emergency Plan will be amended, maintained and distributed as required by VICSES in consultation with Bayside City Council.

Suggestions for amendments to this Plan should be forwarded to:

Regional Manager
 Central Region
 Victoria State Emergency Service
 Unit 6, 3-5 Gilda Court
 Mulgrave, Victoria 3170.

Amendments listed below have been included in this Plan and promulgated to all registered copyholders.

Amendment Number	Date of Amendment	Amendment Entered By	Summary of Amendment
1	Aug 2102	Ross Butler	Addition of Mapping
2	May 2013	D.S & M.P.	Update to Plan re Council detail
3	June 2014	Ross Butler	Appendix A, B, C, F & G Updated
4	Sept 2014	Anthony Stasiak	Further update to June 2014 following Council consultation
5	May 2019	Ross Butler	Update of Appendix A, B, C, F, G & I
5.1	Sept 2020	Ross Butler	Update of sandbag collection details

This Plan may be maintained on the City of Bayside or VICSES Website.

List of Abbreviations & Acronyms

The following abbreviations and acronyms are used in the plan:

The following abbreviations and acronyms are used in the Plan			
AAR	After Action Review	FZ	Floodway Zone
AEP	Annual Exceedance Probability	IC	Incident Controller
AHD	Australian Height Datum (the height of a location above mean sea level in metres)	ICC	Incident Control Centre
AIDR	Australian Institute of Disaster Resilience	IMT	Incident Management Team
AIIMS	Australasian Inter-service Incident Management System	IMS	Incident Management System
AoCC	Area of Operations Control Centre / Command Centre	EMLO	Emergency Management Liaison Officer
ARI	Average Recurrence Interval	LSIO	Land Subject to Inundation Overlay
ARMCANZ	Agricultural & Resource Management Council of Australia & New Zealand	MECC	Municipal Emergency Coordination Centre
AV	Ambulance Victoria	MEMP	Municipal Emergency Management Plan
BoM	Bureau of Meteorology	MEMPC	Municipal Emergency Management Planning Committee
CEO	Chief Executive Officer	MERC	Municipal Emergency Response Coordinator
CERA	Community Emergency Risk Assessment	MERO	Municipal Emergency Resource Officer
CFA	Country Fire Authority	MFB	Metropolitan Fire and Emergency Services Board
CMA	Catchment Management Authority	MRM	Municipal Recovery Manager
RERC	Regional Emergency Response Coordinator	PMF	Probable Maximum Flood
RERCC	Regional Emergency Response Coordination Centre	RCC	Regional Control Centre
DHHS	Department of Health and Human Services	RDO	Regional Duty Officer
Dol	Department of Infrastructure	SBO	Special Building Overlay
DEDJTR	Department of Economic Development, Jobs, Transport, Resources	SCC	State Control Centre
DELWP	Department of Environment, Land, Water and Planning	SERP	State Emergency Response Plan
EMMV	Emergency Management Manual Victoria	SEWS	Standard Emergency Warning Signal
EMT	Emergency Management Team	SHERP	State Health Emergency Response Plan
EO	Executive Officer	SOP	Standard Operating Procedure
FO	Floodway Overlay	VicPol	Victoria Police
FWS	Flood Warning System	VICSES	Victoria State Emergency Service

Glossary

Below are terms defined for the purpose of this plan:

Term	Definition
Annual Recurrence Interval (ARI)	The average, or expected, value of the period between exceedances of a given rainfall or flow total accumulated over a given duration
Annual Exceedance Probability (AEP)	The probability that a given total rainfall or flow is accumulated over a given duration will be exceeded in any one year
Flash flooding	Sudden unexpected flooding caused by local heavy rainfall or rainfall in another area. Often defined as flooding which occurs within six hours of the rain which causes flooding.
Flood mapping	The process where the extent of flooding is documented in mapping software based on flood studies and surface elevations
Floodplain	Area of land adjacent to a creek, river, estuary, lake, dam or artificial channel, which is subject to inundation.
Hot spot	A known flood problem area which has a history of repeat flooding of a road, crossing or property, often highlighted through anecdotal information and customer complaints. It is a localised issue which will vary from council to council.
Natural drainage system	Flow paths which are largely undeveloped by human sources, these include rivers, streams, natural depressions and wetlands. All natural systems greater than 60 ha are managed by Melbourne Water.
Overland flooding	Flooding by local runoff caused by heavier than usual rainfall. Overland flooding can be caused by local flow exceeding the capacity of an urban stormwater drainage system or by the backwater effects of mainstream flooding causing urban stormwater drainage system to overflow. For local government areas this is over the 5 year ARI in residential or over 10yr ARI in commercial/industrial. For Melbourne Water catchment areas this is for all other ARIs up to the 100yr ARI. Note that not all overland flows cause flooding under the definition in the Knox City Service Plan Appendices.
Retarding Basin	A Retarding Basin is a large, open, free draining basin that temporarily stores collected stormwater runoff. These basins are normally maintained in a dry condition between storm events.
Stormwater drainage system	A series of drains and waterways into which surface and stormwater flows. Features of a stormwater drainage system can include underground pipe drains, open channels, retarding basins, floodways, waterway improvements, water sensitive urban design, integrated water management systems and environment protection measures. All drainage under 60 ha is maintained and operated by Bayside City Council
Stormwater Runoff	The amount of rainfall that enters the stormwater drainage system, (via pits, pipes, retarding basins, water sensitive structures, harvesting tanks and overland flow paths) after water which is not absorbed into the ground has been taken into account.

Part 1. INTRODUCTION

1.1 Municipal Endorsement

This MFEP has been prepared by the Bayside City Council with the authority of the Bayside City Council MEMPC pursuant to Section 20 of the Emergency Management Act 1986 (as amended).

This MFEP is a sub plan to the Bayside City Council MEMP. It is consistent with the EMMV and the Victoria Flood Management Strategy (DNRE, 1998a), and takes into account the outcomes of the CERA process undertaken by the MEMPC.

The MFEP is consistent with the VICSES Central Region Flood Emergency Plan and the State Flood Emergency Plan.

This MFEP is a result of the cooperative efforts of the Bayside City Council MFPC and its member agencies.

Minor and administrative amendments will be made to this MFEP from time to time without representing the Plan to the MEMPC. Any major structural or policy changes will be considered before adoption.

This Plan is endorsed by the Bayside City Council MEMPC as a sub-plan to the MEMP.

Endorsement

.....	
David Smith	Date
MERO – Bayside City Council	
.....	
Ray Jasper	
Regional Manager VICSES Central Region	Date

1.2 The Municipality

An outline of City of Bayside in terms of its location, demography and other general matters is provided in the MEMP. An outline of the flood threat is provided in **Appendix A** of this Plan.

1.3 Purpose and Scope of this Flood Emergency Plan

The purpose of this MFEP is to detail arrangements agreed for the planning, preparedness/prevention, response and recovery from flood incidents within City of Bayside.

As such, the scope of the Plan is to:

- Identify the Flood Risk to City of Bayside;
- Support the implementation of measures to minimise the causes and impacts of flood incidents within City of Bayside;
- Detail Response and Recovery arrangements including preparedness, Incident Management, Command and Control; and
- Identify linkages with Local, Regional and State emergency and wider planning arrangements with specific emphasis on those relevant to flood.

1.4 Municipal Flood Planning Committee (MFPC)

Membership of the Bayside City Council MFPC will comprise of the following representatives from the following agencies and organisations:

- VICSES (i.e. Unit Controller and Regional Officer – Emergency Management) (**Chair**),
- Bayside City Council,
- VicPol (i.e. MERC,
- Melbourne Water as required ,
- DH as required,
- DHHS as required,
- DELWP as required,
- Water Authorities as required,
- BoMas required,
- Local community representatives and
- Other agencies as required

1.5 Responsibility for Planning, Review and Maintenance of this Plan

This MFEP must be maintained in order to remain effective.

VICSES through the MFPC has responsibility for preparing, reviewing, maintaining and distributing this Plan.

The MFPC will meet at least once per year.

The Plan should be reviewed and where necessary, arrangements and information contained in it should be amended:

- Following any new flood or stormwater drainage study;
- Following a change in non-structural and/or structural flood mitigation measures; or

- After the occurrence of a significant flood event within the Municipality.

1.6 Endorsement of the Plan

The MFEP will be circulated to the Bayside City Council MEMPC members in order to seek acceptance and endorsement of the Plan and its inclusion as a sub-plan of the MEMP.

Part 2. PREVENTION / PREPAREDNESS ARRANGEMENTS

2.1 Community Awareness for all Types of Flooding

Details of this MFEP will be released to the community through local media, VICSES FloodSafe program and websites (VICSES and the Municipality) upon formal adoption by Bayside City Council.

VICSES with the support of Bayside City Council and Melbourne Water will coordinate community education programs for flooding within the council area (i.e. Local Flood Guides and public events).

A CEP to support this Plan will be developed in conjunction with the VICSES local unit. The VICSES local unit will lead the delivery of the CEP with support from the Bayside City Council and VICSES Region.

2.2 Structural Flood Mitigation Measures

The following summary of structural flood mitigation measures exist within the Council area:

- Retarding Basins are located at Elsternwick Park and Avoca Street.

Refer to **Appendix C** for detailed information of structural flood mitigation measures.

2.3 Non-structural Flood Mitigation Measures

2.3.1 Exercising the Plan

Arrangements for exercising this Plan will be at the discretion of the MEMPC. This Plan should be regularly exercised, preferably on an annual basis.

2.3.2 Flood Warning

Arrangements for flood warning are contained within the State Flood Emergency Plan (see <http://www.ses.vic.gov.au/prepare/em-planning/state-plans>), Section 3.7 of the EMMV and on the BoM website. (see <http://www.bom.gov.au>)

Specific details of local flood warning system arrangements are provided in **Appendix E**.

2.3.3 Flood Wardens

Flood Wardens provide a means of gathering information in real time on flood behaviour along a stream system, and a network for the distribution of information and warnings to communities.

There are **no** Flood Wardens within the City of Bayside.

Part 3. RESPONSE ARRANGEMENTS

3.1 Introduction

3.1.1 Activation of Response

Flood response arrangements may be activated by the VICSES Central Region RDO or IC.

The VICSES Central Region RDO / IC will activate agencies as required and is documented in the VICSES Central Region and State Flood Emergency Plans.

3.1.2 Responsibilities

There are a number of agencies with specific roles that will act in support of VICSES and provide support to the community in the event of a serious flood within the City of Bayside. These agencies will be engaged through the EMT.

The general roles and responsibilities of supporting agencies are as agreed within the Bayside City Council MEMP, Part 7 of the EMMV, VICSES Central Region Flood Emergency Plan and State Flood Emergency Plans.(see <http://www.ses.vic.gov.au/prepare/em-planning/state-plans>).

3.1.3 Municipal Emergency Coordination Centre (MECC)

The function, location, establishment and operation of the MECC will be as detailed in the Bayside City Council MEMP.

Liaison with the MECC will be through the VICSES Central Region RDO / IC or established ICC.

3.1.4 Escalation

Most flood incidents are of local concern and an appropriate response can usually be coordinated using local resources. However, when these resources are exhausted, the State's arrangements provide for further resources to be made available, firstly from neighbouring Municipalities (on a regional basis) and then on a Statewide basis.

Resourcing and event escalation arrangements are described in Section 3.6 of the EMMV.

3.2 Strategic Control Priorities

To provide guidance to the IMT, the following strategic control priorities shall form the basis of incident action planning processes:

1. Protection and preservation of life is paramount - this includes:
 - a. Safety of emergency services personnel, and;
 - b. Safety of community members including vulnerable community members and visitors/tourist located within the incident area.
2. Issuing of community information and community warnings detailing incident information that is timely, relevant and tailored to assist community members make informed decisions about their safety.;
3. Protection of critical infrastructure and community assets that supports community resilience;
4. Protection of residential property as a place of primary residence;
5. Protection of assets supporting individual livelihoods and economic production that supports individual and community financial sustainability
6. Protection of environmental and conservation values that considers the cultural, biodiversity, and social values of the environment;

Circumstances may arise where the IC is required to vary these priorities, with the exception being that the protection of life should remain the highest. This shall be done in consultation with the State Controller and relevant stakeholders based on sound incident predictions and risk assessments.

3.3 Command, Control and Coordination

The Command, Control and Coordination arrangements in this MFEP must be consistent with those detailed in the VICSES Central Region Flood Emergency Plan and State Flood Emergency Plans. For further information, refer to Sections 3.4, 3.5 and 3.6 of the EMMV.

The specific details of the Command, Control and Coordination arrangements for this plan are to be provided in **Appendix C**.

3.3.1 Control

Functions 5(a) and 5(c) at Part 2 of *the Victoria State Emergency Service Act 1986 (as amended)* detail the authority for VICSES to plan for and respond to flood.

Section 7.1 of the EMMV prepared under the *Emergency Management Act 1986 (as amended)*, identifies VICSES as the Control Agency for flood. It identifies DELWP as the Control Agency responsible for dam safety as well as water and waste water service disruption related incidents and other emergencies

All flood response activities within the City of Bayside including those arising from a dam failure or retarding basin / levee bank failure incident will therefore be under the control of the appointed IC, or their delegated representative.

3.3.2 Incident Controller (IC)

An IC will be appointed by the VICSES (as the Control Agency) to command and control available resources in response to a flood event on the advice of the BoM (or other reliable source) that a flood event will occur or is occurring. The IC responsibilities are as defined in Section 3.5 of the EMMV

3.3.3 Incident Control Centre (ICC)

As required, the IC will establish an ICC from which to initiate incident response command and control functions. The decision as to if and when the ICC should be activated, rests with the Control Agency (i.e. VICSES).

Pre-determined ICC locations are

- Dandenong ICC
- Sunshine ICC

3.3.4 Divisions and Sectors

To ensure that effective Command and Control is in place, the IC may establish Divisions and Sectors depending upon the complexity of the event and resource capacities.

The following Sector may be established to assist with the management of flooding within the Municipality:

- Moorabbin SES Unit: 2D Bricker Street, Cheltenham

Currently the following location has been identified as a possible Divisional Command Point for events within the City of Bayside.

- Glen Eira SES Unit 92 Bignell Road, Bentleigh

3.3.5 Incident Management Team (IMT)

The IC will form an IMT.

Refer to Section 3.5 of the EMMV for further guidance on IMTs. .

3.3.6 Emergency Management Team (EMT)

The IC will establish a multi-agency EMT to assist the flood response. The EMT will consist of key personnel (with appropriate authority) from stakeholder agencies and relevant organisations who need to be informed of strategic issues related to incident control and who are able to provide high level strategic guidance and policy advice to the IC for consideration in developing incident management strategies.

Organisations required within the EMT (including Bayside City Council) will provide an EMLO to the ICC if and as required as well as other staff and / or resources identified as being necessary, within the capacity of the organisation.

Refer to Section 3.5 of the EMMV for further guidance on EMTs.

3.3.7 On Receipt of a Flood Watch / Severe Weather Warning

The VICSES Central Region RDO / IC will undertake actions as defined within the flood intelligence cards; **Appendix C**. General considerations by the VICSES Central Region RDO / IC will be as follows:

- Review flood intelligence to assess likely flood consequences;
- Monitor weather and flood information(see www.bom.gov.au);
- Assess Command and Control requirements;
- Review local resources and consider needs for further resources regarding personnel, property protection, flood rescue and air support;
- Notify and brief appropriate officers. This includes RCC (if established), SCC (if established), Council, other emergency services through the EMT;
- Assess ICC readiness (including staffing of IMT and EMT) and open if required;
- Ensure flood bulletins and community information are prepared and issued to the community;
- Monitor watercourses and undertake reconnaissance of low-lying areas;
- Develop media and community information management strategy;
- Ensure flood mitigation works are being checked by owners;
- Develop and issue incident action plan, if required; and
- Develop and issue situation report, if required.

3.3.8 On Receipt of the First and Subsequent Flood Warnings

VICSES Central Region RDO / IC will undertake actions as suggested within the flood intelligence cards in **Appendix C**. General considerations by the VICSES Central Region RDO / IC will be as follows:

- Develop an appreciation of current flood levels and predicted levels. Are floodwaters rising, peaking or falling?
- Review flood intelligence to assess likely flood consequences and consider:
 - What areas may be at risk of inundation;
 - What areas maybe at risk of isolation;
 - What areas maybe at risk of indirect affects as a consequence of power, gas, water, telephone, sewerage, health, transport or emergency service infrastructure interruption; and
 - The characteristics of the populations at risk.
- Determine what the at-risk community need to know and do as the flood develops
- Warn the at-risk community including ensuring that an appropriate warning and community information strategy is implemented including details of:
 - The current flood situation;
 - Flood predictions;
 - What the consequences of predicted levels may be;
 - Public safety advice;
 - Who to contact for further information; and
 - Who to contact for emergency assistance.
- Liaise with relevant asset owners as appropriate (i.e. water and power utilities).
- Implement response strategies as required based upon flood consequence assessment.

- Continue to monitor the flood situation (see www.bom.gov.au/vic/flood/).
- Continue to conduct reconnaissance of low-lying areas.

3.4 Community Information and Warnings

Guidelines for the distribution of community information and warnings are contained in the VICSES Central Region Flood Emergency Plan and State Flood Emergency Plan.

Community information and warnings communication methods available but not necessarily relevant in Bayside include:

- Emergency Alert;
- Phone messages (including SMS);
- Radio and Television;
- Two-way radio;
- Mobile and fixed public address systems;
- Sirens;
- Verbal Messages (i.e. Doorknocking);
- Agency Websites;
- VICSES Flood Storm Information Line;
- Variable Message Signs (i.e. road signs);
- Community meetings;
- Newspapers;
- Email;
- Telephone trees;
- Community Flood Wardens;
- Fax Stream;
- Newsletters;
- Letter drops;
- Social media and/or social networking sites (i.e. twitter and/or facebook).

Refer to **Appendix C and E** for the specific details of how community information and warnings are to be provided.

The release of flood bulletins and information with regard to response activities at the time of a flood event is the responsibility of VICSES, as the Control Agency.

Council has the responsibility to assist VICSES to warn individuals within the community including activation of flood warning systems, where they exist. Responsibility for public information, including media briefings, rest with VICSES as the Control Agency.

Other agencies such as CFA, DEPI and VICPOL may be requested to assist VICSES with the communication of community flood warnings.

In cases where severe flash flooding is predicted, dam failure is likely or flooding necessitating evacuation of communities is predicted, the IC may consider the use of the Emergency Alert System and SEWS.

DH will coordinate information regarding public health and safety precautions.

3.5 Media Communication

The IC through the Public Information Unit established at the ICC will manage Media communication. If the ICC is not established the VICSES Central Region RDO will manage all media communication.

3.6 Impact assessment

An impact assessment can be conducted in accordance with Part 3 of the EMMV to assess and record the extent and nature of damage caused by flooding. This information may then be used to provide the basis for further needs assessment and recovery planning by DHS and recovery agencies.

3.7 Preliminary Deployments

When flooding is expected to be severe enough to cut access to towns, suburbs and/or communities the IC will consult with relevant agencies to ensure that resources are in place if required to provide emergency response. These resources might include emergency service personnel, food items and non-food items such as medical supplies, shelter, assembly areas, relief centres etc.

3.8 Response to Flash Flooding

Emergency management response to flash flooding should be consistent with the guideline for the emergency management of flash flooding contained within the VICSES Central Region Flood Emergency Plan and State Flood Emergency Plan.

When conducting pre-event planning for flash floods the following steps should be followed, and in the order as given:

1. Determine if there are barriers to evacuation by considering warning time, safe routes and resources available;
2. If evacuation is possible, then evacuation should be the adopted strategy and it must be supported by a public information capability and a rescue contingency plan;
3. Where it is likely people will become trapped by floodwaters due to limited evacuation options safety advice needs to be provided to people at risk advising them not to attempt to flee by entering floodwater if they become trapped, and that it may be safer to seek the highest point within the building and to telephone 000 if they require rescue. This advice needs to be provided even when evacuation may be possible, due the likelihood that not all community members will evacuate.
4. For buildings known to be structurally un-suitable an earlier evacuation trigger will need to be established (return to step 1 of this cycle).
5. If an earlier evacuation is not possible then specific preparations must be made to rescue occupants trapped in structurally unsuitable buildings either pre-emptively or as those people call for help.

During a flash flood it will often be difficult, due the rapid development of flooding, to establish emergency relief centres ahead of actually triggering the evacuation as is normal practice but this is insufficient justification for not adopting evacuation.

Refer to **Appendix C** for response arrangements for flash flood events. Refer to the VicRoads website for road closures (<https://traffic.vicroads.vic.gov.au/>)

3.9 Evacuation

The decision to recommend or warn people to prepare to evacuate or to evacuate immediately rests with the IC.

Once the decision is made VicPol are responsible for the coordination of the evacuation process. VICSES and other agencies will assist where practical. VICSES is responsible for the development and communication of evacuation warnings.

VicPol and/or Australian Red Cross may take on the responsibility of registering people affected by a flood emergency including those who have been evacuated.

Refer to Section 3.8 of the EMMV for further guidance on evacuations for flood emergencies.

Refer to **Appendix D** of this Plan for detailed evacuation arrangements for City of Bayside.

3.10 Flood Rescue

VicPol as the designated Control Agency for water rescue coordinates rescues undertaken during flood events.

In order to activate water rescue services, VICSES as a Control Agency for overall flood response, will identify areas at risk of requiring rescue and notify the Officer in Charge of the Water Police Search and Rescue Squad to request pre-deployment of rescue resources to those areas.

In conducting rescues VicPol may require the assistance of appropriately trained and equipped personnel. In these circumstances, appropriately trained and equipped VICSES units or other agencies may carry out rescues.

Rescue operations may be undertaken where voluntary evacuation is not possible, has failed or is considered too dangerous for an at-risk person or community. An assessment of available flood rescue resources (if not already done prior to the event) should be undertaken prior to the commencement of Rescue operations.

3.11 Aircraft Management

Aircraft can be used for a variety of purposes during flood operations including evacuation, resupply, reconnaissance, intelligence gathering and emergency travel.

Air support operations will be conducted in line with the State Aircraft Unit Policy 01 – Air Operations

Suitable airbase facilities are located at:

- Moorabbin Airport
- Essendon Airport

3.12 Resupply

Communities, neighbourhoods or households can become isolated during floods as a consequence of road closures or damage to roads, bridges and causeways. Under such circumstances, the need may arise to resupply isolated communities and/or properties with essential items.

When predictions and/or intelligence indicate that communities, neighbourhoods and/or households may become isolated, VICSES will advise businesses and/or households that they should stock up on essential items.

After the impact, VICSES can support isolated communities through assisting with the transport of essential items to isolated communities and assisting with logistics functions.

Resupply operations are to be included as part of the emergency relief arrangements with VICSES working with the relief agencies to service communities that are isolated.

3.13 Essential Infrastructure and Property Protection

Essential Infrastructure and Property (e.g. residences, businesses, roads, power supply etc.) may be affected in the event of a flood.

The IC will ensure that owners of Essential Infrastructure are kept advised of the flood situation. Essential Infrastructure providers must keep the IC informed of their status and ongoing ability to provide services.

Supplies of sandbags are available through the VICSES Regional Headquarters. The IC will determine the priorities related the use of sandbags, which will be consistent with the strategic priorities.

If VICSES sandbags are becoming limited in supply, then priority will be given to protection of Essential Infrastructure.

Property may be protected by:

- Sandbagging to minimise entry of water into buildings;
- Encouraging businesses and households to lift or move contents; and
- Construction of temporary levees in consultation with Melbourne Water, local government and VICPOL and within appropriate approval frameworks.

The IC will ensure that owners of Essential Infrastructure are kept advised of the flood situation. Essential Infrastructure providers must keep the IC informed of their status and ongoing ability to provide services.

Refer to **Appendix C** for further specific details of essential infrastructure that may require protection against flooding.

3.14 Disruption to Services

Disruption to services other than essential infrastructure and property can occur in flood events. Refer to **Appendix C** for specific details of likely disruption to services and proposed arrangements to respond to service disruptions in City of Bayside.

3.15 Road Closures

Bayside City Council and VicRoads will carry out their formal functions of road closures including observation and placement of warning signs and road blocks to its designated local and regional roads, bridges, walking and bike trails. Bayside City Council staff may also liaise with and advise VicRoads as to the need or advisability of erecting warning signs and / or of closing roads and bridges under its jurisdiction. VicRoads are responsible for designated main roads and highways and Councils are responsible for the designated local and regional road network.

VICROADS and Bayside City will communicate community information regarding road closures.

3.16 Dam Failure

DELWP is the Control Agency for dam safety incidents (e.g. breach, failure or potential breach / failure of a dam), however VICSES is the Control Agency for any flooding that may result.

There are no major dams on public land within the City of Bayside.

There is a major private dam in the Royal Melbourne Golf Course, Cheltenham,

3.17 Waste Water related Public Health Issues and Critical Sewerage Assets

Inundation of critical sewerage assets including septic tanks and sewerage pump stations may result in water quality problems within the Municipality. Where this is likely to occur or has occurred the responsibility agency for the critical sewerage asset should undertake the following:

- Advise VICSES of the security of critical sewerage assets to assist preparedness and response activities in the event of flood;
- Maintain or improve the security of critical sewerage assets;
- Check and correct where possible the operation of critical sewerage assets in times of flood;
- Advise the ICC in the event of inundation of critical sewerage assets.

It is the responsibility of the Bayside City Council Environmental Health Officer to inspect and report on any water quality issues relating to flooding.

3.18 After Action Review

VICSES will coordinate the after action review arrangements of flood operations as soon as practical following an event.

All agencies involved in the flood incident should be represented at the after action review.

Part 4. EMERGENCY RELIEF AND RECOVERY ARRANGEMENTS

4.1 General

Arrangements for recovery from a flood incident within City of Bayside are detailed in the Bayside City Council MEMP.

4.2 Emergency Relief

The decision to recommend the opening of an emergency relief centre rests with the IC. ICs are responsible for ensuring that relief arrangements have been considered and implemented where required under the State Emergency Relief and Recovery Plan (Part 4 of the EMMV).

The range and type of emergency relief services to be provided in response to a flood event will be dependent upon the size, impact, and scale of the flood. Refer to Section 4.4 of the EMMV for further information.

Suitable relief facilities identified for use during floods are detailed in the Bayside City Council MEMP as well as details for relief arrangements.

4.3 Animal Welfare

Matters relating to the welfare of livestock, companion animals and wildlife (including feeding and rescue) are to be referred to DELWP.

Requests for emergency supply and/or delivery of fodder to stranded livestock or for livestock rescue are passed to DELWP.

Matters relating to the welfare of wildlife are to be referred to DELWP.

4.4 Transition from Response to Recovery

VICSES as the Control Agency is responsible for ensuring effective transition from response to recovery. This transition will be conducted in accordance with existing arrangements as detailed in Section 3.10 of the EMMV.

APPENDIX A - FLOOD THREATS FOR CITY OF BAYSIDE

General

The City of Bayside covers an area of 37 square kilometres in the south-east suburbs of Melbourne, ranging from 8 to 20 kilometres from the central business district (CBD). It is bounded by the City of Port Phillip to the north, the City of Glen Eira to the north-east, the City of Kingston to the south-east, and Port Phillip Bay to the west.

The City of Bayside encompasses nine suburbs either completely or partially contained within the municipality, including Beaumaris, Black Rock, Brighton, Brighton East, Cheltenham, Hampton, Hampton East, Highett, and Sandringham. Bayside is an established area that has developed since the arrival of the Brighton Beach Rail Line in 1861. Significant land development occurred intermittently up to 1950s when the last remaining package of land was sub-divided.

Older areas of housing are located in the north of Bayside, and in coastal suburbs, such as Brighton. Newer housing areas are in the south and inland. Most recent residential development is in-fill housing and redevelopment.

Approximately 3 per cent of land-use with the municipality is industrial use, predominately in Highett, Sandringham and Cheltenham in the south. Redevelopment is expected in the near future for many of these sites.

Bayside contains a number of commercial regions and educational, recreational and community facilities. The Nepean Highway passes along the east of the municipality and forms much of the boundary and main transport link to the Melbourne CBD. Bayside is a rapidly growing and diverse community. In 2018, the municipality had an estimated population of 105,718, with 25.3 percent of residents born in a non-English speaking country.

Major features of Bayside typically reflect the earlier era from which the municipality was developed. Retail areas tend to be smaller, local shopping strips located in suburban centres. There are no large shopping or entertainment centres within the municipality. Recreational areas are dominated by the beach/coastal area to the west and a large number of public and private golf courses (eight in total), with many smaller recreational parks and fields throughout the municipality.

Riverine Flooding

Large severe floods generally occur as a result of a moist warm airflow from northern Australia bringing moderate to heavy rainfall over a period of 12 hours or more following a prolonged period of general rainfall. The period of general rainfall “wets up” the catchments and (partially) fills both the on-stream dams and the natural floodplain storage. These combine to increase the runoff generated during the subsequent period of heavy rainfall.

Large but less severe floods result from sequences of cold fronts during winter and spring that progressively wet up the catchments and fill the on-stream dams and the natural floodplain storage. Prolonged moderate to heavy rain leads to major flooding.

Bayside is not located within a catchment and therefore it does **not** contain any major streams or rivers. The Elster Creek/Elwood Canal and other channel systems drain directly into Port Phillip Bay.

Flash Flooding and Overland Flows

Short duration, high intensity rainfall (usually associated with thunderstorms) can also cause localised flooding within the municipality along overland flow paths when the local urban drainage system surcharges. Such events, which are mainly confined to the summer months, do not generally create widespread flooding since they only last for a short time and affect limited areas. Flooding from these storms occurs with little warning and localised damage can be severe.

High intensity rainfall such as associated with thunderstorms is likely to lead to flash flooding and / or overland flows, across the urbanised parts of the municipality.

Blocked or capacity impaired stormwater drains can also lead to overland flows and associated flooding; the drain surcharges and excess water flows above ground.

Most flooding in Bayside is from overland flows where stormwater flows exceed the capacity of the drainage network. This occurs primarily as a result of intense rainfall events when the underground system reaches capacity.

Tidal Flooding and Storm Surges

Moderate to heavy rainfall, coupled with a high or incoming tide from Port Phillip Bay can exacerbate flooding within the municipality or create areas of flooding in and around the drainage network. Due to the proximity of the Municipality to Port Phillip Bay and its flat terrain, tidal flows from Port Phillip Bay may reduce the capacity of the stormwater drains to discharge runoff back into the bay, while extreme storm events can cause backflow to the point where water surcharges back above ground around the drainage pits and channels.

There has been one recent occurrence of a storm surge in Bayside as well as four historical cases affecting coastal areas of Bayside and the neighbouring municipalities of Port Phillip and Kingston.

- On the 24th June 2014, tide levels reached 1.28m AHD. Storm surge affected low lying coastal areas including Half Moon Bay in Black Rock with damage caused to the rock wall adjacent to the car park as well as the pier. Flooding also occurred at the Brighton Baths carpark.
- On the 7th November 1994, tide levels reached 1.28m AHD causing flooding in neighbouring Kingston at Patterson Lakes.
- In November 1934, a storm surge caused significant flooding along Elwood Canal and possibly further upstream. Runoff from the upstream catchment was likely to be a contributing factor. The extent of flooding is unknown.
- In May 1935, a storm surge caused significant flooding along Elwood Canal and possibly further upstream. Runoff from the upstream catchment was likely to be a contributing factor.
- In November 1935, a storm surge and wave action caused the Elwood seawall to fail with significant flooding of adjacent areas.

Description of Major Waterways and Drains

The Bayside municipality lies entirely within the Melbourne Water defined Dandenong catchment. As opposed to a major catchment system that is drained by a single large waterway (e.g. the Yarra River), the Dandenong catchment is composed of many small catchments draining directly to Port Phillip Bay.

The only notable waterway within Bayside is a short length of Elster Creek (**Appendix G**). Elster Creek is the only unlined channel in the municipality and consists of a 1,100m length of low flow open waterway with constructed, open channels at the upstream and downstream end.

Elster Creek consists of a combined creek/lined channel/large diameter pipe serving a large upstream catchment. Downstream of this, the system enters a neighbouring municipality (City of Port Phillip) and feeds into the Elwood Canal which enters Port Phillip Bay.

There is also a short section of a lined channel running through Melbourne Water's Avoca St retarding basin. Otherwise, all other stormwater systems are underground and discharge to Port Phillip Bay, either directly within Bayside or through neighbouring municipalities.

Melbourne Water Drains & Waterways	Suburb/s	Melbourne Water Drains & Waterways	Suburb/s
Abbot St Main Drain	Sandringham	Hoyt Street Drain	Brighton and Hampton
Banks Ave Main Drain	Hampton, Highett and Sandringham	May Street Main Drain	Hampton
Brighton Central Main Drain	Brighton and Brighton East	Meek Street Drain	Brighton, Brighton East and Hampton East
Coral Ave Drain	Beaumaris	Moorabbin Main Drain	Brighton East
Elster Creek	Brighton and Brighton East	Nautilus Street Drain	Beaumaris
Elwood Diversion Drain	Brighton	Park Street Main Drain	Brighton
Gilarth Street Main Drain	Cheltenham, Hampton and Highett	Pellatt Street Drain	Beaumaris
Grenville Street Main Drain	Hampton	Royal Avenue Drain	Sandringham
Highett Main Drain	Hampton, Hampton East and Highett	Well Street Main Drain	Brighton and Brighton East

Table A1 – Melbourne Water Drains and Waterways within the City of Bayside

Flood Mitigation Systems

Flood mitigation has predominantly been developed in the form of two (2) Retarding Basins. These flood mitigation systems are as follows in the tables below. To view their locations and connecting waterway/drainage systems, see Map B in **Appendix F**. No Pumping Stations or Levees exist within the municipality.

Retarding Basins

Melbourne Water Retarding Basin	On Drain/ Waterway	Area	Storage Capacity	Spillway Crest Level	Full Supply Level	Embankment Crest Height (Level)	ANCOLD Hazard Rating	Houses In Flow Path (dam breach)	Melway Reference
Avoca Street	Gilarth St Main Drain	1.598 ha	43 ML	31.5m AHD	32.5m AHD	1.63m (33m AHD)	Low	Unavailable	77 C10
Elsternwick Park	Elster Creek (Elwood Canal)	22.41 ha	114 ML	No spillway	3.15m AHD	0.9m (3.3m AHD)	Medium	8	67 E4

Table A2 – Melbourne Water Retarding Basins within the City of Bayside

A number of reserves and parklands also act as retarding basins during flooding events. These include:

Reserve / Park	On Drain / Waterway	Location	Melway Reference
Castlefield Reserve	May Street Main Drain	Ludstone Street Hampton	76 J5
Sandringham Athletics Centre	Grenville Street Main Drain	Glamis Avenue Hampton	76 K6
Glamis Avenue Reserve	Grenville Street Main Drain	Glamis Avenue Hampton	76 K6
Banksia Reserve	Pellatt Street Drain	Oak Street Beaumaris	86 E7
A W Oliver Baseball Park	Highbett Main Drain	Summit Avenue Moorabbin	77 B6
G L Basterfield Park	Highbett Main Drain	Kelsall Court Hampton East	77 C7
Widdop Crescent Reserve	Highbett Main Drain	Widdop Crescent Hampton East	77 B6

Table A3 – Reserves or Parklands along waterways and drains within the City of Bayside

Sewerage Infrastructure

Sewerage Infrastructure of note during a severe flood event located within the City of Bayside is contained within the following two tables. To view their locations, view mapping in **Appendix F**.

Sewer Pumping Stations

Sewerage Pumping Station	On Drain / Waterway	Bank / Side of Waterway	Operator	Location	Melway Reference
Beaumaris	Local Drainage		South East Water	2 Reserve Road, Beaumaris	86 C9
Black Rock	Local Drainage		South East Water	6 Fourth Street, Black Rock	85 K6
Shandford Avenue	Meek Street Drain		South East Water	Shandford Avenue, Brighton	67 C8

Table A4 – Sewer Pumping Stations within or close to the City of Bayside

Sewer Emergency Relief Points

Contact the Melbourne Water EMLO/Duty Officer for information on any recent or planned releases at a Sewer Emergency Relief Point as part of a Dynamic Risk Assessment (DRA) if work is to be conducted at or downstream of the outlet.

On Drain / Waterway	Bank / Side of Waterway	Operator	Location	Melway Reference
Grenville Street Main Drain		Melbourne Water	Beach Road at Grenville Street, Hampton	76 E5
Meek Street Drain		Melbourne Water	Corner St Kilda Street and Meek Street, Brighton	67 C8

Table A5 – Sewer Emergency Relief Points within or close to the City of Bayside

Flood Warning System

Within the City of Bayside, Melbourne Water has three hydrographic monitoring sites in the Municipality. These are outlined in the table below. These gauges can be monitored online through <http://www.melbournewater.com.au/waterdata/rainfallandrivervelleveldata/Pages/Rainfall-and-river-level-new.aspx> or through the Bureau of Meteorology at: http://www.bom.gov.au/cgi-bin/wrap_fwo.pl?IDV60201.html. To view their locations, see mapping in **Appendix F**.

Melbourne Water Hydrographic Monitoring Station	Station No.	Location	Stream Level & Flow Gauge	Rain Gauge	Melway Reference
Elster Creek, Elsternwick	229660A	East side of the drain, Head Street, Elsternwick	✓	✓	67 F6
Hampton	586036	Hampton Bowling Club, Fewster Street, Hampton		✓	76 J6
Sandringham	586184	South East Water's Service Reservoir within the Bayside Waste & Recycling Centre, Talinga Road, Cheltenham		✓	86 D1

Table A6 – Hydrographic Monitoring Stations within the City of Bayside

Other gauges located in adjoining Municipalities that may assist in flood warning for the City of Bayside are outlined below. To view their locations, see mapping in **Appendix F**.

Melbourne Water Hydrographic Monitoring Station	Station No.	Location	Stream Level	Rain Gauge	Tide Level Gauge	Melway Reference
Caulfield South	586115	341 North Road, Caulfield South		✓		68 B8
Elster Creek, Elwood	229725A	Foam Street, Elwood	✓			67 D3
St Kilda Marina	229670A	St Kilda Marina, Marine Pde, St Kilda		✓	✓	57 K12

Table A7 – Hydrographic Monitoring Stations within adjacent Municipalities to the City of Bayside

The BoM does not issue formal flood warnings for Elster Creek due to its rapid response to rainfall. This is due to the urban surrounds which quickly direct stormwater into drains and waterways. This results in rapid stream rises during thunderstorms and heavy rainfall creating a short lead time for response.

For flood warnings in neighbouring catchments, these will be placed on the Bureau's website (<http://www.bom.gov.au/vic/warnings/index.shtml>). While the City of Bayside monitors these warnings in times of high rainfall, there are no specific guidelines to advise how these situations should be responded to.

Historic Floods

Significant floods (with high flood gauge levels and likely flooding consequences to property and infrastructure) to have occurred within the City of Bayside are as follows in the tables below. Table A8 highlights flash flooding events to have occurred along the Elster Creek in Brighton, whereas Table A9 details storm surge events to have affected Port Phillip Bay. Where available, radar loops of the storm can be accessed by clicking on the flood event date.

Flash Flood Event	Elster Creek Elsternwick (229660A) Creek Level
Normal Water Level	0.1m
Minor	-
Moderate	-
Major	-
1 st December 1934	2.23m
1949	2.16m
15 th July 1952	2.69m
4 th November 1957	3.32m
14 th July 1963	2.77m
22 nd November 1988	2.25m
23 rd January 1991	2.54m
27 th January 1993	2.43m
22 nd February 1993	2.18m
2 nd November 1993	2.12m
17 th November 1993	2.27m
11 th December 1993	2.22m
27 th December 1993	2.38m
5 th January 1995	2.22m
1 st January 1996	2.34m
5 th April 2000	2.29m
22 nd December 2000	2.28m
3 rd December 2003	2.22m
30 th January 2004	2.54m
25 th February 2006	2.31m
22 nd December 2007	2.16m
20 th October 2009	2.14m
6th March 2010	2.21m
4th February 2011	2.94m
9th November 2011	2.15m
26th November 2011	2.35m
25th May 2012	2.00m
29th December 2016	2.80m
5th February 2017	2.22m
19th December 2017	2.33m

Table A8 – Historical Floods along Elwood Canal

Storm Surge Event (Southbank impacted by Riverine Flows)	Port Phillip Bay St Kilda (229670A) Bay Level
Normal Tide Level	-0.4m to 0.2m
Minor	-
Moderate	-
Major	-
29 th June 1980	1.09m
16 th October 1984	1.18m
25 th July 1988	1.00m
27 th June 1990	1.02m
15 th August 1991	1.03m
11 th September 1991	1.03m
8 th September 1993	1.19m
27 th May 1994	1.21m
6 th November 1994	1.27m
7 th November 1994	1.28m
10 th February 1996	1.15m
15 th May 1999	1.00m
19 th June 2004	1.12m
2 nd July 2008	1.06m
26 th April 2009	1.19m
5th July 2011	1.11m
23rd March 2012	1.00m
24th June 2014	1.28m
1st August 2014	1.09m
13th July 2016	1.05m

Table A9 – Historical Storm Surges on Port Phillip Bay at St Kilda and the lower Yarra at Southbank

Dam Failure

No dams, either in or upstream of the City of Bayside are expected to affect the Municipality from flooding.

Service Reservoirs located within the Municipality are listed below.

Service Reservoir	Location	Owner	Material	Reservoir Capacity	Melway Reference
Bayside Waste and Recycling Centre	Bayside Waste and Recycling Centre, Talinga Road Sandringham	South East Water	Unavailable	Unavailable	86 D1

Table A10 – Melbourne Water Service Reservoirs in the City of Bayside

APPENDIX B - TYPICAL FLOOD PEAK TRAVEL TIMES

Note that because only one gauge on Elster Creek / Elwood Canal is in operation, flood peak travel times are currently unavailable. However, as a general rule, because of the small catchment size it is expected that floodwaters travelling from the upper reaches of the catchment in the City of Glen Eira would take less than one hour to travel to sections of the Creek in the City of Bayside and the City of Port Phillip.

APPENDIX C1 – ELSTER CREEK FLOOD EMERGENCY PLAN

Overview of Flooding Consequences

This Summary table is generated from Victorian Government data. The State of Victoria does not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for error, loss or damage which may arise from reliance upon it. All persons access this information should make appropriate enquiries to assess the currency of the data.

Summary of Consequences in a 1% AEP (100yr ARI) flood along Elster Creek in Bayside					
Property					
Properties	102				
Residential	63				
Commercial	39	Martin Street Commercial Precinct			
Industrial	0				
Public Land	0				
Rural	0				
Community Infrastructure					
Health Facilities	0		Child Care / Kindergartens	0	
Care Facilities	0		Community Venues	0	
Retirement Villages	1	Oak Grange	Places of Worship	0	
Schools / Colleges	0		Prisons	0	
Essential Infrastructure					
Major Roads	3	Hawthorn Rd, Nepean Hwy and North Rd	Police Stations	0	
Major Rail	0		Government Buildings	0	
Bus Routes	5	219, 220, 626, 630 & 978	Sewerage Facilities	0	
Power Facility	0		Levees	0	
Comms Services	0		Drainage Facilities	1	Elsternwick Par R.B.
Emergency Services	0		Airports / Airfields	0	
Tourism / Recreation					
Sports Facilities	0		Caravan Parks	0	
Recreation Facilities	0		Camping Grounds	0	
Government Boundaries					
Local Gov't Areas	1	Bayside	CMA	1	Port Phillip & Westport
Adjacent LGAs	2	Glen Eira & Port Phillip	CFA District	0	
SES Unit Area	1	Moorabbin	MFB District	1	Southern

Table C1.1 – Consequence Summary of 1% AEP flood along Elster Creek in Bayside

North Brighton and Brighton East are located approximately 12km south east of Melbourne in an established residential area. Elster Creek is the prominent watercourse in the area which flows into the Elsternwick Main Drain and then into Elwood Canal in the City of Port Phillip. High Intensity, short duration rainfall events can cause flash flooding in and around North Brighton and Brighton East, while prolonged rainfall may see Elster Creek and Elsternwick Main Drain flood. The area sees moderate to slow water movement due to the relatively flat terrain in the area. As a result,

flooding may last for a number of hours or days where ponding occurs. See mapping in **Appendix F** for more insight into flooding in the area.

Warning Times

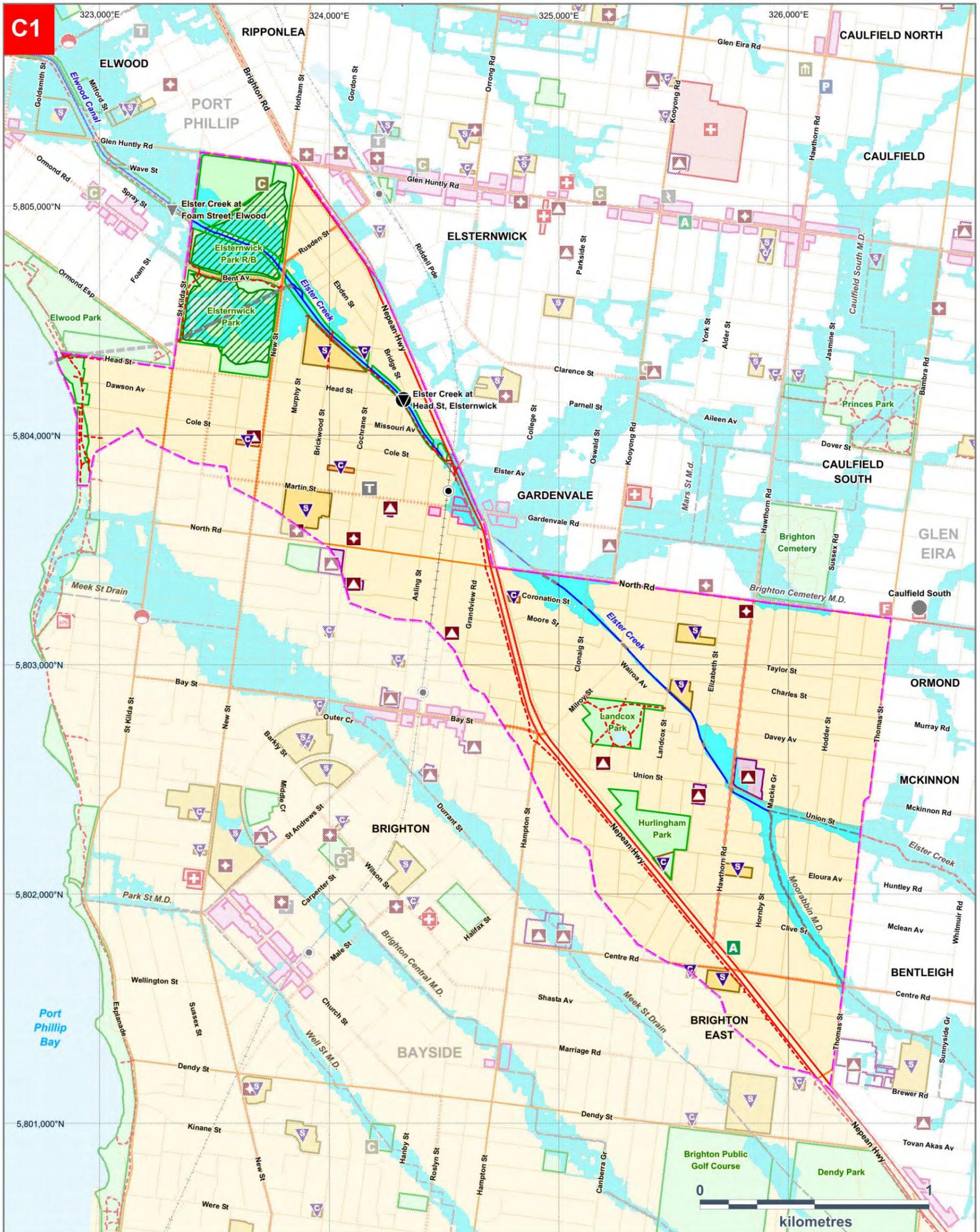
Whilst there is a hydrographic/telemetry stations (level gauge) on Elster Creek, warning times within the municipality are limited due to the small catchment size and absence of river gauges upstream. Melbourne Water does not provide any flood warning service at this point, due to the generally short warning times available.

Melbourne Water Hydrographic Monitoring Station	Station No.	Location	Stream Level & Flow Gauge	Rain Gauge	Melway Reference
Elster Creek, Elsternwick	229660A	East side of the drain, Head Street, Elsternwick	✓	✓	67 F6
Elster Creek, Elwood	229725A	Foam Street, Elwood	✓		67 D3

Table C1.2 – Hydrographic Monitoring Stations within the Elster Creek catchment

This Gauge may provide some warning of expected flooding. See the Melbourne Water website for more information on these gauges: <http://www.melbournewater.com.au/waterdata/rainfallandriverveldata/Pages/Rainfall-and-river-level-new.aspx>. It is advised that residents monitor the Bureau of Meteorology's website <http://www.bom.gov.au/> and the VicEmergency website <https://emergency.vic.gov.au/> for any thunderstorm, flood or severe weather warnings present for their area.

Areas of Flood Risk



Map Produced by VICSES May 2019

CITY OF BAYSIDE

Version 3, May 2019

C1. Areas of flood risk along Elster Creek

- | | | |
|---------------------------------|----------------------------------|------------------------|
| Waterbody | Bus Route (PTV) | Telephone Exchange |
| 1% AEP Riverine Flood Extent | Tramway | Police Station |
| 1% AEP Flash Flood Extent | Boundary for this Appendix | Community Centre |
| Reserve / Park | Melbourne Water Stormwater Drain | Power Terminal Station |
| Commercial Precinct | Waterway | Rain Gauge |
| Melbourne Water Retarding Basin | Bicycle / Walking Trail | Stream Level Gauge |
| Ambulance Station | Sewer Emergency Relief Point | Hospital |
| Aged Care Facility | Sewer Pumping Station | School / College |
| Place Of Worship | Child Care / Kindergarten | |



VICTORIA **Melbourne Water**

This map publication is presented by the Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information have not been independently verified by the Victoria State Emergency Service. No liability is accepted for any damage, loss or injury caused by errors or omissions in this information or for any action taken by any person in reliance upon it.

Figure C1 – Areas of flood risk along Elster Creek in the City of Bayside

Properties at Flood Risk

Properties listed in the table below are at risk from flooding along Elster Creek in the City of Bayside. As more intelligence becomes available, this list may change. This table has been populated based on modelling work as part of the Elwood Canal (GHD, March 2010) flood mapping and risk assessment program. Note that any multi-lot properties situated above ground floor likely impacted by isolation only with flooding on ground floor impacting access to common areas and/or carpark and storage facilities. Information on above ground-floor properties is not available in this list.

This Property Flood Risk Table is presented by the Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information have not been independently verified by the Victoria State Emergency Service. No liability is accepted for any damage, loss or injury caused by errors or omissions in this information or for any action taken by any person in reliance upon it.

Properties at risk from Flooding over ground floor along Elster Creek in Bayside						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	3/19 Beddoe Avenue	Brighton East	Elster Creek	Flash
		✓	4/19 Beddoe Avenue	Brighton East	Elster Creek	Flash
		✓	4 Brown Street	Brighton East	Elster Creek	Flash
		✓	15A Clinton Street	Brighton East	Moorabbin Main Drain	Flash
		✓	1/15 Clinton Street	Brighton East	Moorabbin Main Drain	Flash
		✓	2/15 Clinton Street	Brighton East	Moorabbin Main Drain	Flash
		✓	3/15 Clinton Street	Brighton East	Moorabbin Main Drain	Flash
		✓	4/15 Clinton Street	Brighton East	Moorabbin Main Drain	Flash
		✓	16 Clinton Street	Brighton East	Moorabbin Main Drain	Flash
		✓	21 Clinton Street	Brighton East	Moorabbin Main Drain	Flash
		✓	35 Clinton Street	Brighton East	Elster Creek	Flash
		✓	25 Clive Street	Brighton East	Moorabbin Main Drain	Flash
		✓	27 Clive Street	Brighton East	Moorabbin Main Drain	Flash
		✓	38 Clive Street	Brighton East	Moorabbin Main Drain	Flash
		✓	46 Clonaig Street	Brighton East	Elster Creek	Flash
	✓	✓	19 Coronation Street	Brighton East	Elster Creek	Flash
		✓	21 Coronation Street	Brighton East	Elster Creek	Flash
	✓	✓	23 Coronation Street	Brighton East	Elster Creek	Flash
		✓	1/25 Coronation Street	Brighton East	Elster Creek	Flash
✓	✓	✓	2/25 Coronation Street	Brighton East	Elster Creek	Flash
		✓	27 Coronation Street	Brighton East	Elster Creek	Flash
		✓	29 Coronation Street	Brighton East	Elster Creek	Flash
	✓	✓	29 Dunoon Court	Brighton East	Elster Creek	Flash
		✓	18 Elizabeth Street	Brighton East	Elster Creek	Flash
		✓	1/15 Gillard Street	Brighton East	Moorabbin Main Drain	Flash
		✓	2/15 Gillard Street	Brighton East	Moorabbin Main Drain	Flash
		✓	3/15 Gillard Street	Brighton East	Moorabbin Main Drain	Flash
		✓	4/15 Gillard Street	Brighton East	Moorabbin Main Drain	Flash
		✓	17 Gillard Street	Brighton East	Moorabbin Main Drain	Flash

Properties at risk from Flooding over ground floor along Elster Creek in Bayside

Properties at risk from Flooding over ground floor along Elster Creek in Bayside						
Residential		Commercial	Industrial	Rural	Public Use	
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
	✓	✓	20 Gillard Street	Brighton East	Moorabbin Main Drain	Flash
	✓	✓	20A Gillard Street	Brighton East	Moorabbin Main Drain	Flash
		✓	8 Griffiths Grove	Brighton East	Elster Creek	Flash
		✓	692 Hawthorn Road	Brighton East	Elster Creek	Flash
		✓	692A Hawthorn Road	Brighton East	Elster Creek	Flash
	✓	✓	694 Hawthorn Road	Brighton East	Elster Creek	Flash
		✓	694A Hawthorn Road	Brighton East	Elster Creek	Flash
		✓	72/695 Hawthorn Road	Brighton East	Elster Creek	Flash
		✓	110/707 Hawthorn Road	Brighton East	Elster Creek	Flash
		✓	144 Martin Street	Brighton	Elster Creek	Flash
		✓	146 Martin Street	Brighton	Elster Creek	Flash
		✓	148 Martin Street	Brighton	Elster Creek	Flash
		✓	150 Martin Street	Brighton	Elster Creek	Flash
		✓	152 Martin Street	Brighton	Elster Creek	Flash
		✓	154 Martin Street	Brighton	Elster Creek	Flash
		✓	156 Martin Street	Brighton	Elster Creek	Flash
		✓	157F Martin Street	Brighton	Elster Creek	Flash
		✓	1/157O Martin Street	Brighton	Elster Creek	Flash
		✓	1/157S Martin Street	Brighton	Elster Creek	Flash
		✓	2/157S Martin Street	Brighton	Elster Creek	Flash
		✓	2/157O Martin Street	Brighton	Elster Creek	Flash
		✓	3/157O Martin Street	Brighton	Elster Creek	Flash
		✓	3/157S Martin Street	Brighton	Elster Creek	Flash
		✓	4/157O Martin Street	Brighton	Elster Creek	Flash
		✓	158 Martin Street	Brighton	Elster Creek	Flash
		✓	159 Martin Street	Brighton	Elster Creek	Flash
	✓	✓	160 Martin Street	Brighton	Elster Creek	Flash
		✓	162 Martin Street	Brighton	Elster Creek	Flash
		✓	163 Martin Street	Brighton	Elster Creek	Flash
		✓	164 Martin Street	Brighton	Elster Creek	Flash
		✓	165 Martin Street	Brighton	Elster Creek	Flash
	✓	✓	166 Martin Street	Brighton	Elster Creek	Flash
		✓	167 Martin Street	Brighton	Elster Creek	Flash
	✓	✓	168 Martin Street	Brighton	Elster Creek	Flash
	✓	✓	169 Martin Street	Brighton	Elster Creek	Flash
	✓	✓	1/170 Martin Street	Brighton	Elster Creek	Flash
	✓	✓	2/170 Martin Street	Brighton	Elster Creek	Flash
		✓	3/170 Martin Street	Brighton	Elster Creek	Flash
		✓	4/170 Martin Street	Brighton	Elster Creek	Flash
		✓	5/170 Martin Street	Brighton	Elster Creek	Flash

Properties at risk from Flooding over ground floor along Elster Creek in Bayside						
Residential		Commercial		Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	6/170 Martin Street	Brighton	Elster Creek	Flash
		✓	171 Martin Street	Brighton	Elster Creek	Flash
		✓	173 Martin Street	Brighton	Elster Creek	Flash
	✓	✓	518 New Street	Brighton	Elster Creek	Flash
	✓	✓	524 New Street	Brighton	Elster Creek	Flash
		✓	4/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	5/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	6/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	7/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	8/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	9/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	10/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	11/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	12/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	13/196-200 North Road	Brighton East	Elster Creek	Flash
		✓	3/202-208 North Road	Brighton East	Elster Creek	Flash
		✓	212 North Road	Brighton East	Elster Creek	Flash
	✓	✓	22 Rogers Avenue	Brighton East	Moorabbin Main Drain	Flash
	✓	✓	1/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	2/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	3/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	4/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	5/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	6/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	7/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	8/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	9/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	10/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	24/16-18 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	20 Spink Street	Brighton	Elster Creek	Flash
	✓	✓	1/87 Thomas Street	Brighton East	Elster Creek	Flash
	✓	✓	10/87 Thomas Street	Brighton East	Elster Creek	Flash
✓	✓	✓	88 Union Street	Brighton East	Elster Creek	Flash
Totals						
2	31	102				

Table C1.3 – Properties at risk of flooding over ground-floor in Elster Creek catchment in the City of Bayside

Isolation

No major isolation risks exist for areas around Brighton and Brighton East. Some localised short-duration isolation may occur due to flash flooding.

Essential Infrastructure

During an event, see the Public Transport Victoria’s Website for details on delays or alterations to services. <http://ptv.vic.gov.au/live-travel-updates/>. A map of Public Transport routes within the City of Bayside is available via the website at: https://www.ptv.vic.gov.au/assets/default-site/more/maps/Local-area-maps/Metropolitan/a6d71099a7/3_Bayside_LAM.pdf

Apart from the roads outlined below, all other essential infrastructure and services areas around Brighton and Brighton East are expected to remain predominantly dry during an intense rainfall event.

Road Closures

The following roads are subject to closure during flooding within the Elster Creek catchment. Check the VicRoads website for more details: <https://traffic.vicroads.vic.gov.au/>

VicRoads Roads affected in a 1% AEP event
• Hawthorn Road, Brighton East, between Union Street and Cheeseman Street
• Nepean Highway, Brighton, northbound lanes between Gardenvale Road and Elster Avenue
• North Road, Brighton East, south of Brighton Cemetery
• North Road, Brighton East, between Nepean Highway and Kooyong Road

Table C1.4 – VicRoads Possible Road Closures during a flooding event

Bayside City Council Roads affected in a 1% AEP event			
Brighton	Brighton East		
• New Street	• Beddoe Avenue	• Coronation Street	• Union Street
• Martin Street	• Clinton Street	• Parklands Crescent	
• Spink Street	• Clive Street	• Rogers Avenue	
		• Thomas Street	

Table C1.5 – Bayside City Council Possible Road Closures during a flooding event

Flood Mitigation Systems

Retarding Basins

Melbourne Water Retarding Basin	On Drain/ Waterway	Area	Storage Capacity	Spillway Crest Level	Full Supply Level	Embankment Crest Height (Level)	ANCOLD Hazard Rating	Houses In Flow Path (dam breach)	Melway Reference
Elsternwick Park	Elster Creek (Elwood Canal)	22.41 ha	114 ML	No spillway	3.15m AHD	0.9m (3.3m AHD)	Medium	8	67 E4

Table C1.6 – Melbourne Water Retarding Basins within the Elster Creek catchment in the City of Bayside

Levees and Pumping Stations

No formal Pumping Stations or Levees exist around Brighton and Brighton East

Sewerage Infrastructure

There is no sewerage Infrastructure expected to impact or be impacted by floodwaters during severe flood events around Elster Creek.

Command, Control and Coordination

VICSES will assume overall control of the response to flood incidents. Other agencies will be requested to support operations as detailed in this Plan. Control and coordination of a flood incident shall be carried out at the lowest effective level and in accordance with the State Emergency Response Plan (EMMV Part 3). During significant events, VICSES will conduct incident management using multi-agency resources.

Flood Impacts & Operational Considerations (Intelligence Cards)

The table on the following pages provide a breakdown of the possible consequences of flooding along Elster Creek at various creek heights within Bayside. This table is to be used only as a guide as no two floods at a location will have identical impacts.

Intelligence Cards have been included for the following locations:

- Elster Creek at Elsternwick

FLOOD INTELLIGENCE CARD – ELSTERNWICK GAUGE, ELSTER CREEK

Version 3 – May 2019



Note: flood intelligence records are approximations. This is because no two floods at a location, even if they peak at the same height, will have identical impacts. Flood intelligence cards detail the relationship between flood magnitude and flood consequences. More details about flood intelligence and its use can be found in the Australian Emergency Management Manuals flood series.

This Flood Intelligence Card publication is presented by the Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information have not been independently verified by the Victoria State Emergency Service. No liability is accepted for any damage, loss or injury caused by errors or omissions in this information or for any action taken by any person in reliance upon it.

LOCATION	East side of the drain, Head Street, Elsternwick
MELWAY REF:	67 F6
STREAM:	Elster Creek (Elwood Canal)
GAUGE NUMBER:	229660A
GAUGE ZERO:	1.854m AHD
GAUGE TYPE	Stream Level, Flow and Rain

MINOR:	2.1m (original flood class level) (No flood warning for site due to quick response catchment)
MODERATE:	2.3m (original flood class level) (No flood warning for site due to quick response catchment)
MAJOR	2.6m (original flood class level) (No flood warning for site due to quick response catchment)
LEVEE HEIGHT:	Not Applicable
TELEMETRIC/MANUAL	Telemetric
HIGHEST RECORDED FLOOD:	3.32m (4th November 1957)

Creek Height	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
2.1	Original Minor Flood Class Level	<ul style="list-style-type: none"> Note: This is the original minor flood class level for this site, no automatic flood warning is issued due to the quick response of this catchment 	
2.3	Original Moderate Flood Class Level	<ul style="list-style-type: none"> Note: This is the original moderate flood class level for this site, no automatic flood warning is issued due to the quick response of this catchment 	
2.38	December 1993 Flood Peak Level		
2.50	20% AEP (5 year ARI) Flood Level		
2.54	23 rd January 1991 Flood Level Peak	Event Summary <ul style="list-style-type: none"> 30.6mm of rain fell in 2 hours leading to flooding of sections of Elsternwick Main Drain. 98 properties flood affected, 15 above floor level 	
2.6	Original Major Flood Class Level	<ul style="list-style-type: none"> Note: This is the original major flood class level for this site, no automatic flood warning is issued due to the quick response of this catchment 	
2.66	10% AEP (10 year ARI) Flood Level	Water Over Road (above 300mm depth) <ul style="list-style-type: none"> Beddoe Avenue Brighton East Clive Street Brighton East 	Council to provide road closure signage if required.

Creek Height	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
2.78	5% AEP (20 year ARI) Flood Level	<p>Properties at Flood Risk (over-floor) 2 Properties in Total</p> <ul style="list-style-type: none"> • 2/25 Coronation Street Brighton East • 88 Union Street Brighton East <p>Water Over Road (above 300mm depth)</p> <ul style="list-style-type: none"> • Clive Street Brighton East • Clinton Street Brighton East • Beddoe Avenue Brighton East 	VicSES will provide warnings using OSOM and SMSER as required based on the predications provided by BoM regarding flood levels and the risk of Flash Flooding. The Central Duty officer in conjunction with the Regional Agency Controller will maintain operational awareness and form an appropriate response arrangement to suit the level of incident
2.90	2% AEP (50 year ARI) Flood Level	<p>Properties at Flood Risk (over-floor) 31 Properties in Total</p> <p>Elster Creek</p> <ul style="list-style-type: none"> • 19, 23 & 2/25 Coronation Street, Brighton East • 29 Dunoon Court, Brighton East • 694 Hawthorn Road, Brighton East • 160, 166, 168, 169, 1/170 & 2/170 Martin Street, Brighton • 518 & 524 New Street, Brighton • Shops 1-4/16-18, Units 5-10/16-18, 24/16-18 & 20 Spink Street, Brighton • 1/87 & 10/87 Thomas Street, Brighton East • 88 Union Street, Brighton East <p>Moorabbin Main Drain</p> <ul style="list-style-type: none"> • 20 & 20A Gillard Street, Brighton East • 22 Rogers Avenue, Brighton East <p>Community Infrastructure Likely Flooded</p> <ul style="list-style-type: none"> • Oak grange Retirement Village on Hawthorn Road, Brighton East, at risk of flooding over floor. <p>Water Over Road (above 300mm depth)</p> <ul style="list-style-type: none"> • Thomas St, Brighton East • Clinton St, Brighton East • Parklands Cres, Brighton East • Clive St, Brighton East • Beddoe Avenue Brighton East 	<p>VicSES to respond as per request by request basis.</p> <p>Retirement village to implement emergency evacuation plan if requires</p> <p>Council to provide road closure signage if required.</p>
2.93	February 2011 Flood Level Peak	<p>Event Summary</p> <ul style="list-style-type: none"> • 106mm of rain fell over the Elwood Canal Catchment in 3 hours 	
3.03	1% AEP (100 year ARI) Flood Level	<p>Properties at Flood Risk (over floor) 102 Properties in Total</p> <p>Elster Creek</p> <ul style="list-style-type: none"> • 3/19 & 4/19 Beddoe Avenue, Brighton East • 4 Brown Street, Brighton East • 35 Clinton Street, Brighton East • 46 Clonaig Street, Brighton East 	VicSES to respond as per request by request basis.

Creek Height	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • 19, 21, 23, 1/25, 2/25, 27 & 29 Coronation Street, Brighton East • 29 Dunoon Court, Brighton East • 18 Elizabeth Street, Brighton East • 8 Griffiths Grove, Brighton East • 692, 692A, 694, 694A, 72/695 & 110/707 Hawthorn Road, Brighton East • 144, 146, 148, 150, 152, 154, 156, 157F, Shops 1-4/157O, 1/157S, 2/157S, 158, 159, 160, 162, 163, 164, 165, 166, 167, 168, 169, Shops 1-6-170, 171 & 173 Martin Street, Brighton • 518 & 524 New Street, Brighton • Units 4-13/196-200, 3/202-208 & 212 North Road, Brighton East • Shops 1-4/16-18, Units 5-10/16-18, 24/16-18 & 20 Spink Street, Brighton • 1/87 & 10/87 Thomas Street, Brighton East • 88 Union Street, Brighton East <p>Moorabbin Main Drain</p> <ul style="list-style-type: none"> • 15A, 1/15, 2/15, 3/15, 4/15, 16 & 21 Clinton Street, Brighton East • 25, 27 & 38 Clive Street, Brighton East • 1/15, 2/15, 3/15, 4/15, 17, 20 & 20A Gillard Street, Brighton East • 22 Rogers Avenue, Brighton East <p>Community Infrastructure Likely Flooded</p> <ul style="list-style-type: none"> • Oak grange Retirement Village on Hawthorn Road, Brighton East, at risk of flooding over floor. <p>Essential Infrastructure Likely Impacted</p> <ul style="list-style-type: none"> • Bus Route 630 along Martin Street, Brighton • Bus Routes 219, 220, 626 & 978 along North Road, Brighton East • Bus Route 626 along Hawthorn Road, Brighton East <p>Water Over Road (above 300mm depth)</p> <ul style="list-style-type: none"> • Thomas St, Brighton East • Clinton St, Brighton East • Parklands Cres, Brighton East • Clive St, Brighton East • Coronation St, North Brighton • Spink St Brighton • Martin St Brighton • Union St Brighton East • Beddoe Avenue Brighton East • Rogers Ave Brighton East • Hawthorn Road Brighton East • North Road Brighton East • Nepean Highway Brighton (Northbound lanes) • New Street Brighton 	<p>Retirement village to implement emergency evacuation plan if requires</p> <p>Council to provide road closure signage if required.</p>
3.27	November 1957 Flood Level Peak		

Creek Height	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
3.34m		<ul style="list-style-type: none"> • Breakout level of Elster Creek at Gauging Station 	

Table C1.7 – Breakdown of likely consequences at various Elsternwick gauge level heights along Elster Creek and Elwood Canal with operational considerations

APPENDIX C2 – BAYSIDE FLOOD EMERGENCY PLAN

Overview of Flooding Consequences

This Summary table is generated from Victorian Government data. The State of Victoria does not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for error, loss or damage which may arise from reliance upon it. All persons access this information should make appropriate enquiries to assess the currency of the data.

Summary of Consequences in a 1% AEP (100yr ARI) flood around Brighton, Hampton, Sandringham and Highett

Property					
Properties	672				
Residential	647				
Commercial	22				
Industrial	0				
Public Land	3	Sandringham Athletics Track and Widdop Reserve			
Rural	0				
Community Infrastructure					
Health Facilities	0		Child Care / Kindergartens	0	
Care Facilities	0		Community Venues	1	Hampton Scout Group
Retirement Villages	2	Halcyon Senior Citizens; Mayflower Retirement Community	Places of Worship	0	
Schools / Colleges	4	Berendale School; Brighton Grammar; Sandringham College Highett Campus; St Leonard's College			
Essential Infrastructure					
Major Roads	7	Bay Rd; Beach Rd; Bluff Rd; Centre Rd; Hampton St; North Rd; & South Rd	Police Stations	0	
Major Rail	1	Sandringham Line between Hampton and Brighton Beach and north of Middle Brighton station	Government Buildings	0	
Bus Routes	9	626; 703; 708; 811; 812; 822; 823; 828; & 922	Sewerage Facilities	3	1 Pumping Station and 2 Emergency Relief Points
Power Facility	0		Levees	0	
Comms Services	0		Drainage Facilities	1	Avoca St Retarding Basin
Emergency Services	0		Airports / Airfields	0	
Tourism / Recreation					
Sports Facilities	1	Sandringham Athletics Centre	Caravan Parks	0	
Recreation Facilities	3	Basterfield Park; Castlefield Reserve; & Widdop Crescent	Camping Grounds	0	
Government Boundaries					
Local Gov't Areas	1	Bayside	CMA	1	Port Phillip & Westernport
Adjacent LGAs	1	Kingston	CFA District	0	
SES Unit Area	1	Moorabbin	MFB District	1	Southern

Table C2.1 – Consequence Summary of 1% AEP flood around Brighton, Hampton, Sandringham and Highett

The area comprising Brighton, Hampton, Sandringham and Highett is located approximately 13km south east of Melbourne in an established residential area. There are no prominent open watercourses running through the area however the area is serviced by an extensive drainage network that includes among others; the Brighton Central Main Drain, Meek St Drain, Well St Main Drain and Gilarth St Main Drain. High Intensity, short duration rainfall events can cause flash flooding in and around Brighton, Hampton, Sandringham and Highett. The area sees moderate to slow water movement due to the relatively flat terrain in the region. Flooding as a result may last up to a number of days due to ponding. See mapping in **Appendix F** for more insight into flooding in the area.

Warning Times

Warning times for flooding are limited as there are no major water courses and their associated hydrographic/telemetry stations (river gauges) within the area. Melbourne Water does not provide any flood warning service at this point, due to the generally short warning times available.

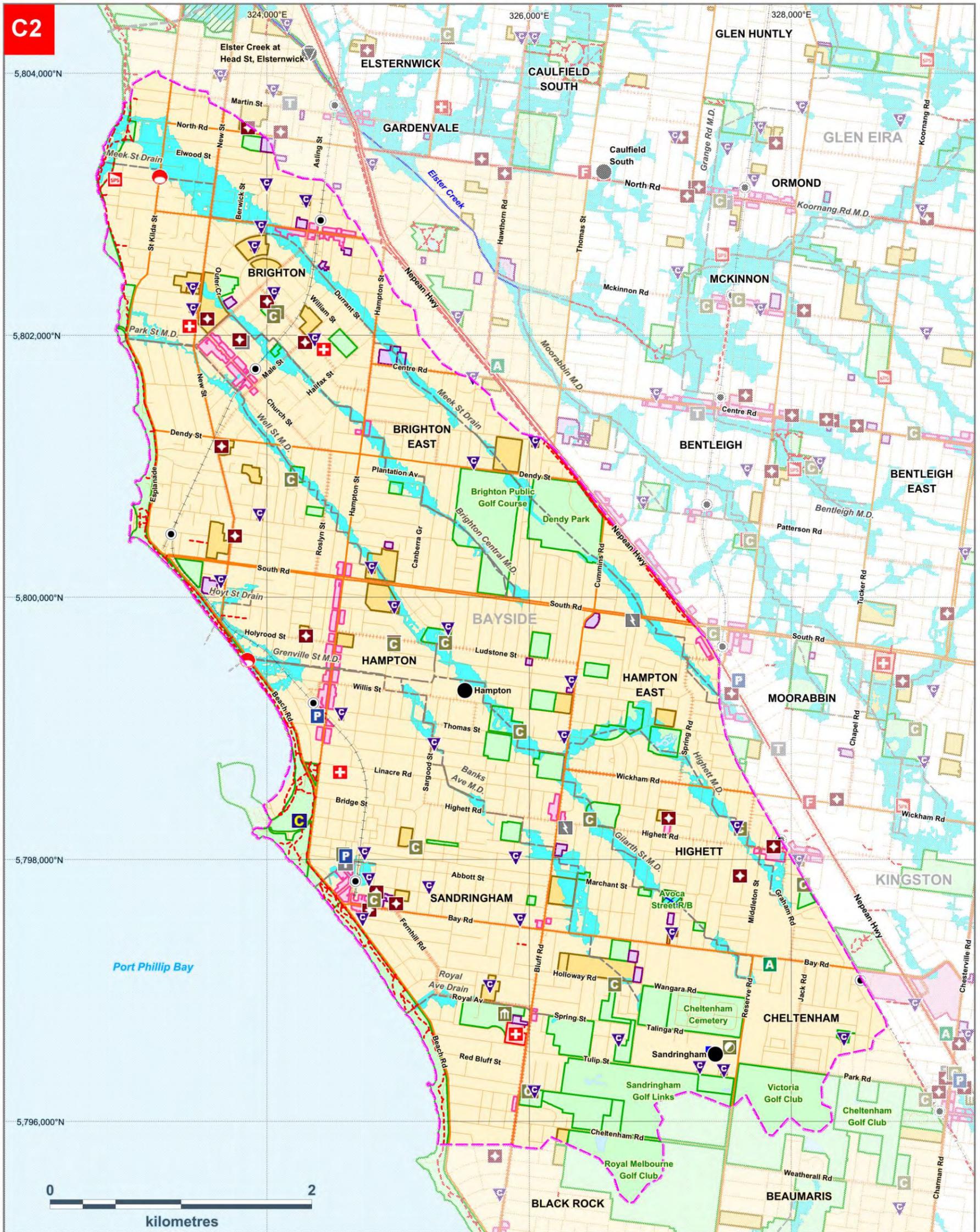
Melbourne Water Hydrographic Monitoring Station	Station No.	Location	Stream Level & Flow Gauge	Rain Gauge	Melway Reference
Hampton	586036	Hampton Bowling Club, Fewster Street, Hampton		✓	76 J6
Sandringham	586184	South East Water's Service Reservoir within the Bayside Waste & Recycling Centre, Talinga Road, Cheltenham		✓	86 D1

Table C2.2 – Hydrographic Monitoring Stations around Brighton, Hampton, Sandringham and Highett

Rain Gauges at Hampton and Sandringham may provide some warning of expected flooding. See the Melbourne Water website for more information on gauges:

<http://www.melbournewater.com.au/waterdata/rainfallandriverleveldata/Pages/Rainfall-and-river-level-new.aspx>. It is advised that residents monitor the Bureau of Meteorology's website <http://www.bom.gov.au/> and the VicEmergency website <https://emergency.vic.gov.au/> for any thunderstorm, flood or severe weather warnings present for their area.

Areas of Flood Risk



Map Produced by VICSES May 2019

CITY OF BAYSIDE

Version 3. May 2019

C2. Areas of flood risk between Brighton and Cheltenham

- | | | | |
|---------------------------------|----------------------------------|------------------------|-----------------|
| Waterbody | Bus Route (PTV) | Telephone Exchange | Fire Station |
| 1% AEP Flash Flood Extent | Tramway | Police Station | Hospital |
| Reserve / Park | Melbourne Water Stormwater Drain | Community Centre | Municipal Depot |
| Commercial Precinct | Waterway | Power Terminal Station | |
| Melbourne Water Retarding Basin | Bicycle / Walking Trail | Rain Gauge | |
| Aged Care Facility | Sewer Emergency Relief Point | Stream Level Gauge | |
| School / College | Sewer Pumping Station | Coast Guard Flotilla | |
| Boundary for this Appendix | Child Care / Kindergarten | Place Of Worship | |
| Ambulance Station | Municipal Offices | | |



SES VICTORIA **Melbourne Water**

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Figure C2 – Areas affected around Meek Street Drain, Brighton Central MD and Hampton/ Highbury/ Sandringham in the City of Bayside

Properties at Flood Risk

Properties listed in the table below are at risk from flooding over-floor around Brighton, Hampton, Sandringham and Highett. As more intelligence becomes available, this list may change. This table has been populated based on modelling work as part of the Meek Street Drain (Lawson&Treloar, October 2000), Park Street Drain (BMT WBM, March 2010) and the DS-City of Bayside (CMPS&F, April 1998) flood mapping and risk assessment programs. Note that any multi-lot properties situated above ground floor likely impacted by isolation only with flooding on ground floor impacting access to common areas and/or carpark and storage facilities. Information on above ground-floor properties is not available in this list.

This Property Flood Risk Table is presented by the Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information have not been independently verified by the Victoria State Emergency Service. No liability is accepted for any damage, loss or injury caused by errors or omissions in this information or for any action taken by any person in reliance upon it.

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	3 Anne Crescent	Brighton	Meek Street Drain	Flash
✓	✓	✓	5 Ashwood Avenue	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	7 Ashwood Avenue	Highett	Banks Avenue Main Drain	Flash
		✓	14 Austin Road	Hampton	Banks Avenue Main Drain	Flash
✓	✓	✓	71-73 Bay Street	Brighton	Meek Street Drain	Flash
	✓	✓	156-158 Bay Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	168 Bay Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	1/171 Bay Road	Sandringham	Banks Avenue Main Drain	Flash
✓	✓	✓	174 Bay Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	181 Bay Road	Sandringham	Banks Avenue Main Drain	Flash
✓	✓	✓	184 Bay Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	184 Bay Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	196 Bay Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	198 Bay Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	200 Bay Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	202-204 Bay Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	212 Bay Street	Brighton	Meek Street Drain	Flash
	✓	✓	301 Bay Road	Cheltenham	Gilarth Street Main Drain	Flash
	✓	✓	303 Bay Road	Cheltenham	Gilarth Street Main Drain	Flash
	✓	✓	1/305 Bay Road	Cheltenham	Gilarth Street Main Drain	Flash
	✓	✓	2/305 Bay Road	Cheltenham	Gilarth Street Main Drain	Flash
✓	✓	✓	17 Beach Road	Hampton	Grenville Street Main Drain	Flash
		✓	33 Beach Road	Hampton	Grenville Street Main Drain	Flash
	✓	✓	2 Bent Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	4 Bent Street	Brighton	Meek Street Drain	Flash
		✓	2 Berwick Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	7 Berwick Street	Brighton	Meek Street Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
✓	✓	✓	8 Berwick Street	Brighton	Meek Street Drain	Flash
		✓	10 Berwick Street	Brighton	Meek Street Drain	Flash
	✓	✓	14 Berwick Street	Brighton	Meek Street Drain	Flash
	✓	✓	24 Berwick Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	6 Bleazby Avenue	Brighton	Brighton Central Main Drain	Flash
	✓	✓	8 Bleazby Avenue	Brighton	Brighton Central Main Drain	Flash
	✓	✓	10 Bleazby Avenue	Brighton	Brighton Central Main Drain	Flash
	✓	✓	366 Bluff Road	Sandringham	Banks Avenue Main Drain	Flash
✓	✓	✓	1/450 Bluff Road	Hampton	Gilarth Street Main Drain	Flash
✓	✓	✓	2/450 Bluff Road	Hampton	Gilarth Street Main Drain	Flash
		✓	452 Bluff Road	Hampton	Gilarth Street Main Drain	Flash
		✓	454A Bluff Road	Hampton	Gilarth Street Main Drain	Flash
	✓	✓	454 Bluff Road	Hampton	Gilarth Street Main Drain	Flash
✓	✓	✓	456B Bluff Road	Hampton	Gilarth Street Main Drain	Flash
✓	✓	✓	456A Bluff Road	Hampton	Gilarth Street Main Drain	Flash
✓	✓	✓	1/458 Bluff Road	Hampton	Gilarth Street Main Drain	Flash
✓	✓	✓	2/458 Bluff Road	Hampton	Gilarth Street Main Drain	Flash
		✓	1/462 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	2/462 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	3/462 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	4/462 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	5/462 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	6/462 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	7/462 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	8/462 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	1/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	2/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	3/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	4/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	5/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	6/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	7/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	8/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	9/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	10/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	11/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	12/464 Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	1/466A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	2/466A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	3/466A Bluff Road	Hampton East	Highett Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	4/466A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	1/468A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	2/468A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	3/468A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	4/468A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	1/470A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	2/470A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	3/470A Bluff Road	Hampton East	Highett Main Drain	Flash
		✓	4/470A Bluff Road	Hampton East	Highett Main Drain	Flash
	✓	✓	1 Bolton Avenue	Hampton	Hoyt Street Drain	Flash
	✓	✓	3 Bolton Avenue	Hampton	Hoyt Street Drain	Flash
		✓	5 Bolton Avenue	Hampton	Hoyt Street Drain	Flash
	✓	✓	41 Bright Street	Brighton East	Meek Street Drain	Flash
	✓	✓	1 Bryson Avenue	Brighton	Brighton Central Main Drain	Flash
		✓	3B Bryson Avenue	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	2/5 Bryson Avenue	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	3/5 Bryson Avenue	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	4/5 Bryson Avenue	Brighton	Brighton Central Main Drain	Flash
	✓	✓	34 Burrows Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	36F Burrows Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	36R Burrows Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	38 Burrows Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	40 Burrows Street	Brighton	Well Street Main Drain	Flash
		✓	10 Carpenter Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	51 Carpenter Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	53 Carpenter Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	58 Carpenter Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	111 Carpenter Street	Brighton	Meek Street Drain	Flash
		✓	115 Carpenter Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	25 Centre Road	Brighton East	Meek Street Drain	Flash
✓	✓	✓	34 Champion Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	36 Champion Street	Brighton	Well Street Main Drain	Flash
		✓	38 Champion Street	Brighton	Well Street Main Drain	Flash
	✓	✓	39 Champion Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	41 Champion Street	Brighton	Well Street Main Drain	Flash
	✓	✓	43 Champion Street	Brighton	Well Street Main Drain	Flash
		✓	6 Charming Street	Hampton East	Meek Street Drain	Flash
✓	✓	✓	42 Charming Street	Hampton East	Meek Street Drain	Flash
		✓	1 Chatsworth Avenue	Brighton	Meek Street Drain	Flash
		✓	1/1 Chatsworth Avenue	Brighton	Meek Street Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential		Commercial	Industrial	Rural	Public Use	
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	2/1 Chatsworth Avenue	Brighton	Meek Street Drain	Flash
		✓	3/1 Chatsworth Avenue	Brighton	Meek Street Drain	Flash
		✓	4/1 Chatsworth Avenue	Brighton	Meek Street Drain	Flash
	✓	✓	6 Chatsworth Avenue	Brighton	Meek Street Drain	Flash
	✓	✓	9 Chatsworth Avenue	Brighton	Meek Street Drain	Flash
		✓	10 Clements Street	Highett	Banks Avenue Main Drain	Flash
	✓	✓	12 Clements Street	Highett	Banks Avenue Main Drain	Flash
		✓	15 Clements Street	Highett	Banks Avenue Main Drain	Flash
		✓	19 Clements Street	Highett	Banks Avenue Main Drain	Flash
	✓	✓	1 Cochrane Street	Brighton	Meek Street Drain	Flash
	✓	✓	5 Cochrane Street	Brighton	Meek Street Drain	Flash
		✓	1/1 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	2/1 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	3/1 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	4/1 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	5/1 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	6/1 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	7/1 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	8/1 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	1/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	2/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	3/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	4/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	5/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	6/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	7/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	8/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	9/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	10/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	11/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	12/3 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	1/5 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	2/5 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	3/5 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	4/5 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	5/5 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	6/5 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	7/5 Cooke Avenue	Hampton East	Highett Main Drain	Flash
		✓	8/5 Cooke Avenue	Hampton East	Highett Main Drain	Flash
	✓	✓	48 Dalmont Street	Highett	Gilarth Street Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
✓	✓	✓	55 Dendy Street	Brighton	Well Street Main Drain	Flash
	✓	✓	56A Dendy Street	Brighton	Well Street Main Drain	Flash
	✓	✓	57 Dendy Street	Brighton	Well Street Main Drain	Flash
	✓	✓	58 Dendy Street	Brighton	Well Street Main Drain	Flash
	✓	✓	59 Dendy Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	1/127 Dendy Street	Brighton East	Brighton Central Main Drain	Flash
		✓	1/129 Dendy Street	Brighton East	Brighton Central Main Drain	Flash
		✓	2/129 Dendy Street	Brighton East	Brighton Central Main Drain	Flash
		✓	3/129 Dendy Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	1/136 Dendy Street	Brighton East	Brighton Central Main Drain	Flash
✓	✓	✓	2/136 Dendy Street	Brighton East	Brighton Central Main Drain	Flash
		✓	144 Dendy Street	Brighton East	Brighton Central Main Drain	Flash
		✓	20 Dumaresq Street	Brighton East	Meek Street Drain	Flash
		✓	42 Duncan Street	Sandringham	Banks Avenue Main Drain	Flash
	✓	✓	9 Durrant Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	11 Durrant Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	15 Durrant Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	19 Durrant Street	Brighton	Meek Street Drain	Flash
	✓	✓	22 Durrant Street	Brighton	Meek Street Drain	Flash
		✓	24 Durrant Street	Brighton	Meek Street Drain	Flash
	✓	✓	29 Durrant Street	Brighton	Meek Street Drain	Flash
		✓	35 Durrant Street	Brighton	Meek Street Drain	Flash
		✓	41A Durrant Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	41 Durrant Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	43 Durrant Street	Brighton	Meek Street Drain	Flash
		✓	63 Durrant Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	69 Durrant Street	Brighton	Meek Street Drain	Flash
	✓	✓	73 Durrant Street	Brighton	Meek Street Drain	Flash
	✓	✓	75 Durrant Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	79 Durrant Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	2 Edgar Street	Brighton	Meek Street Drain	Flash
		✓	2A Edgar Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	1A Farleigh Grove	Brighton	Park Street Main Drain	Flash
		✓	1/49 Fewster Road	Hampton	Grenville Street Main Drain	Flash
	✓	✓	51 Fewster Road	Hampton	Grenville Street Main Drain	Flash
		✓	4 Garden Avenue	Brighton East	Brighton Central Main Drain	Flash
		✓	3 Gatehouse Place	Brighton	Well Street Main Drain	Flash
		✓	16 Gilarth Street	Highett	Gilarth Street Main Drain	Flash
		✓	18 Gilarth Street	Highett	Gilarth Street Main Drain	Flash
	✓	✓	20 Gilarth Street	Highett	Gilarth Street Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	24 Gilarth Street	Highett	Gilarth Street Main Drain	Flash
✓	✓	✓	1 Glamis Avenue	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	3 Glamis Avenue	Hampton	Grenville Street Main Drain	Flash
		✓	80 Glencairn Avenue	Brighton East	Meek Street Drain	Flash
		✓	84 Glencairn Avenue	Brighton East	Meek Street Drain	Flash
	✓	✓	86 Glencairn Avenue	Brighton East	Meek Street Drain	Flash
		✓	88 Glencairn Avenue	Brighton East	Meek Street Drain	Flash
		✓	90 Glencairn Avenue	Brighton East	Meek Street Drain	Flash
	✓	✓	93 Glencairn Avenue	Brighton East	Meek Street Drain	Flash
		✓	94 Glencairn Avenue	Brighton East	Meek Street Drain	Flash
	✓	✓	96 Glencairn Avenue	Brighton East	Meek Street Drain	Flash
	✓	✓	101 Glencairn Avenue	Brighton East	Meek Street Drain	Flash
	✓	✓	6A Gordon Street	Hampton	Hoyt Street Drain	Flash
	✓	✓	6 Gordon Street	Hampton	Hoyt Street Drain	Flash
✓	✓	✓	10 Gordon Street	Hampton	Hoyt Street Drain	Flash
		✓	17 Gordon Street	Hampton	Hoyt Street Drain	Flash
✓	✓	✓	32-34 Graham Road	Highett	Highett Main Drain	Flash
		✓	83 Grange Road	Sandringham	Banks Avenue Main Drain	Flash
		✓	1 Grant Street	Brighton East	Meek Street Drain	Flash
✓	✓	✓	8 Grant Street	Brighton East	Meek Street Drain	Flash
✓	✓	✓	11 Grant Street	Brighton East	Meek Street Drain	Flash
✓	✓	✓	13 Grant Street	Brighton East	Meek Street Drain	Flash
	✓	✓	15 Grant Street	Brighton East	Meek Street Drain	Flash
	✓	✓	9 Grenville Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	11 Grenville Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	13 Grenville Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	17 Grenville Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	19 Grenville Street	Hampton	Grenville Street Main Drain	Flash
		✓	4 Halifax Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	6 Halifax Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	7 Halifax Street	Brighton	Well Street Main Drain	Flash
		✓	8 Halifax Street	Brighton	Well Street Main Drain	Flash
		✓	8A Halifax Street	Brighton	Well Street Main Drain	Flash
	✓	✓	650 Hampton Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	654 Hampton Street	Brighton	Well Street Main Drain	Flash
		✓	740 Hampton Street	Brighton	Brighton Central Main Drain	Flash
		✓	740S Hampton Street	Brighton	Brighton Central Main Drain	Flash
		✓	742 Hampton Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	744 Hampton Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	746 Hampton Street	Brighton	Brighton Central Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential		Commercial	Industrial	Rural	Public Use	
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
	✓	✓	748 Hampton Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	750 Hampton Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	752 Hampton Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	754 Hampton Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	756A Hampton Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	756 Hampton Street	Brighton	Brighton Central Main Drain	Flash
		✓	4/781 Hampton Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	5/781 Hampton Street	Brighton	Brighton Central Main Drain	Flash
		✓	6/781 Hampton Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	842 Hampton Street	Brighton	Meek Street Drain	Flash
		✓	1/844 Hampton Street	Brighton	Meek Street Drain	Flash
		✓	2/844 Hampton Street	Brighton	Meek Street Drain	Flash
		✓	3/844 Hampton Street	Brighton	Meek Street Drain	Flash
		✓	4/844 Hampton Street	Brighton	Meek Street Drain	Flash
	✓	✓	32 Hanby Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	34 Hanby Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	36 Hanby Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	37 Hanby Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	38 Hanby Street	Brighton	Well Street Main Drain	Flash
	✓	✓	1 Harston Street	Sandringham	Abbott Street Main Drain	Flash
		✓	3 Harston Street	Sandringham	Abbott Street Main Drain	Flash
✓	✓	✓	4 Harston Street	Sandringham	Abbott Street Main Drain	Flash
✓	✓	✓	5 Harston Street	Sandringham	Abbott Street Main Drain	Flash
✓	✓	✓	6 Harston Street	Sandringham	Abbott Street Main Drain	Flash
✓	✓	✓	2/1 Haynes Street	Highett	Gilarth Street Main Drain	Flash
		✓	4 Heathfield Road	Brighton East	Well Street Main Drain	Flash
		✓	6 Heathfield Road	Brighton East	Well Street Main Drain	Flash
	✓	✓	132 Highett Road	Highett	Gilarth Street Main Drain	Flash
	✓	✓	134 Highett Road	Highett	Gilarth Street Main Drain	Flash
		✓	1/136 Highett Road	Highett	Gilarth Street Main Drain	Flash
	✓	✓	2/136 Highett Road	Highett	Gilarth Street Main Drain	Flash
		✓	3/136 Highett Road	Highett	Gilarth Street Main Drain	Flash
	✓	✓	1/138 Highett Road	Highett	Gilarth Street Main Drain	Flash
	✓	✓	2/138 Highett Road	Highett	Gilarth Street Main Drain	Flash
	✓	✓	3/138 Highett Road	Highett	Gilarth Street Main Drain	Flash
✓	✓	✓	1/140 Highett Road	Highett	Gilarth Street Main Drain	Flash
✓	✓	✓	2/140 Highett Road	Highett	Gilarth Street Main Drain	Flash
✓	✓	✓	3/140 Highett Road	Highett	Gilarth Street Main Drain	Flash
✓	✓	✓	4/140 Highett Road	Highett	Gilarth Street Main Drain	Flash
		✓	2/469 Highett Road	Highett	Highett Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	2/471 Highett Road	Highett	Highett Main Drain	Flash
✓	✓	✓	8/24 Holyrood Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	9/24 Holyrood Street	Hampton	Grenville Street Main Drain	Flash
		✓	1/1 Howitt Avenue	Hampton East	Highett Main Drain	Flash
		✓	2 Howitt Avenue	Hampton East	Highett Main Drain	Flash
✓	✓	✓	3A Howitt Avenue	Hampton East	Highett Main Drain	Flash
		✓	4 Howitt Avenue	Hampton East	Highett Main Drain	Flash
		✓	6 Howitt Avenue	Hampton East	Highett Main Drain	Flash
		✓	23 June Street	Highett	Gilarth Street Main Drain	Flash
✓	✓	✓	25 June Street	Highett	Gilarth Street Main Drain	Flash
		✓	27 June Street	Highett	Gilarth Street Main Drain	Flash
✓	✓	✓	3 Katoomba Street	Hampton East	Meek Street Drain	Flash
		✓	5 Katoomba Street	Hampton East	Meek Street Drain	Flash
		✓	9 Katoomba Street	Hampton East	Meek Street Drain	Flash
✓	✓	✓	1 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	1/3 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	2/3 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	5 Keith Street	Hampton East	Highett Main Drain	Flash
	✓	✓	7 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	9 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	11 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	13 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	15 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	1/17 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	2/17 Keith Street	Hampton East	Highett Main Drain	Flash
		✓	25 Keith Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	19 Kerferd Street	Hampton	Banks Avenue Main Drain	Flash
		✓	10 Killeen Avenue	Brighton East	Well Street Main Drain	Flash
✓	✓	✓	4 King Street	Hampton East	Meek Street Drain	Flash
	✓	✓	6 King Street	Hampton East	Meek Street Drain	Flash
✓	✓	✓	8 King Street	Hampton East	Meek Street Drain	Flash
✓	✓	✓	14 King Street	Hampton East	Meek Street Drain	Flash
	✓	✓	16 King Street	Hampton East	Meek Street Drain	Flash
	✓	✓	43 Kingston Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	47 Kingston Street	Hampton	Grenville Street Main Drain	Flash
		✓	16 Laburnum Street	Brighton	Brighton Central Main Drain	Flash
		✓	1/20 Laburnum Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	2/20 Laburnum Street	Brighton	Brighton Central Main Drain	Flash
		✓	32 Lansell Avenue	Highett	Banks Avenue Main Drain	Flash
	✓	✓	34 Lansell Avenue	Highett	Banks Avenue Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential		Commercial	Industrial	Rural	Public Use	
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
	✓	✓	36 Lansell Avenue	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	1 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	2 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	3 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	4 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	5 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
		✓	6 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	7 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
		✓	8 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	9 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
		✓	10 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	11 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	13 Lawrence Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	9 Lawson Parade	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	26 Lawson Parade	Highett	Banks Avenue Main Drain	Flash
	✓	✓	9 Lewis Street	Brighton	Meek Street Drain	Flash
		✓	11 Lindsay Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	23 Lindsay Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	1 Little Avenue	Hampton East	Highett Main Drain	Flash
✓	✓	✓	2A Little Avenue	Hampton East	Highett Main Drain	Flash
		✓	2 Little Avenue	Hampton East	Highett Main Drain	Flash
✓	✓	✓	2 Livingston Street	Highett	Highett Main Drain	Flash
✓	✓	✓	3 Livingston Street	Highett	Highett Main Drain	Flash
		✓	2 Loller Street	Brighton	Brighton Central Main Drain	Flash
		✓	4 Loller Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	6 Loller Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	8 Loller Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	10 Loller Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	12 Loller Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	14 Loller Street	Brighton	Brighton Central Main Drain	Flash
		✓	27 Lucas Street	Brighton East	Brighton Central Main Drain	Flash
		✓	31 Lucas Street	Brighton East	Brighton Central Main Drain	Flash
✓	✓	✓	33 Lucas Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	35 Lucas Street	Brighton East	Brighton Central Main Drain	Flash
		✓	37 Lucas Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	41 Lucas Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	44 Lucas Street	Brighton East	Brighton Central Main Drain	Flash
✓	✓	✓	46A Lucas Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	48 Lucas Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	50 Lucas Street	Brighton East	Brighton Central Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	76 Ludstone Street	Hampton	Grenville Street Main Drain	Flash
		✓	78 Ludstone Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	80 Ludstone Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	24 Male Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	26 Male Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	28 Male Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	30 Male Street	Brighton	Brighton Central Main Drain	Flash
		✓	32 Male Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	33 Male Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	34 Male Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	35 Male Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	35A Male Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	37 Male Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	39 Male Street	Brighton	Brighton Central Main Drain	Flash
	✓	✓	41 Male Street	Brighton	Brighton Central Main Drain	Flash
		✓	43 Male Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	96 Male Street	Brighton	Meek Street Drain	Flash
	✓	✓	115 Male Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	2 Marion Street	Brighton	Meek Street Drain	Flash
		✓	2 May Street	Hampton	Grenville Street Main Drain	Flash
		✓	25 Meek Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	39 Meek Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	40 Meek Street	Brighton	Meek Street Drain	Flash
	✓	✓	8A Miller Street	Highett	Gilarth Street Main Drain	Flash
	✓	✓	1/2 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
	✓	✓	2/2 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
	✓	✓	3/2 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
	✓	✓	4/2 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	14 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
	✓	✓	15 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	16 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	17 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	18 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	19 Moira Avenue	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	1/8 Muir Street	Highett	Highett Main Drain	Flash
✓	✓	✓	2/8 Muir Street	Highett	Highett Main Drain	Flash
✓	✓	✓	3/8 Muir Street	Highett	Highett Main Drain	Flash
✓	✓	✓	4/8 Muir Street	Highett	Highett Main Drain	Flash
✓	✓	✓	5/8 Muir Street	Highett	Highett Main Drain	Flash
		✓	2/12 Muir Street	Highett	Highett Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential		Commercial	Industrial	Rural	Public Use	
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
	✓	✓	15 Muir Street	Hampton East	Highett Main Drain	Flash
✓	✓	✓	19 Munro Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	21 Munro Street	Brighton	Well Street Main Drain	Flash
		✓	23 Munro Street	Brighton	Well Street Main Drain	Flash
		✓	28A Munro Street	Brighton	Well Street Main Drain	Flash
	✓	✓	14 New Street	Hampton	Hoyt Street Drain	Flash
✓	✓	✓	230B New Street	Brighton	Brighton Central Main Drain	Flash
		✓	361 New Street	Brighton	Meek Street Drain	Flash
	✓	✓	369 New Street	Brighton	Meek Street Drain	Flash
	✓	✓	379 New Street	Brighton	Meek Street Drain	Flash
		✓	37 Nicol Street	Highett	Gilarth Street Main Drain	Flash
		✓	39 Nicol Street	Highett	Gilarth Street Main Drain	Flash
✓	✓	✓	1 Norwood Street	Sandringham	Royal Avenue Drain	Flash
	✓	✓	9 Noyes Street	Highett	Banks Avenue Main Drain	Flash
		✓	68 Orlando Street	Hampton	Grenville Street Main Drain	Flash
		✓	72 Orlando Street	Hampton	Grenville Street Main Drain	Flash
		✓	74 Orlando Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	3/97 Orlando Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	1/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	2/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	3/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	4/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	5/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	6/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	7/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	8/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	9/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	10/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	11/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	12/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	14/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	15/32 Outer Crescent	Brighton	Meek Street Drain	Flash
	✓	✓	40 Outer Crescent	Brighton	Meek Street Drain	Flash
		✓	1/1 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	2/1 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	3/1 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	4/1 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	1/2 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	2/2 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	3/2 Overend Close	Hampton East	Highett Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	4/2 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	5/2 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	6/2 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	7/2 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	8/2 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	1/3 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	2/3 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	3/3 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	4/3 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	1/4 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	2/4 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	3/4 Overend Close	Hampton East	Highett Main Drain	Flash
		✓	4/4 Overend Close	Hampton East	Highett Main Drain	Flash
	✓	✓	7 Ozone Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	3 Park Street	Brighton	Park Street Main Drain	Flash
✓	✓	✓	19 Park Street	Brighton	Park Street Main Drain	Flash
	✓	✓	2 Pearson Street	Brighton	Meek Street Drain	Flash
	✓	✓	1/29 Pine Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	2/29 Pine Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	3/29 Pine Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	4/29 Pine Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	5/29 Pine Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	30 Pine Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	32 Pine Street	Brighton East	Brighton Central Main Drain	Flash
		✓	34 Pine Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	21 Plantation Avenue	Brighton East	Brighton Central Main Drain	Flash
		✓	23 Plantation Avenue	Brighton East	Brighton Central Main Drain	Flash
		✓	1/33 Plantation Avenue	Brighton East	Brighton Central Main Drain	Flash
		✓	1 Poole Avenue	Hampton	Grenville Street Main Drain	Flash
		✓	1 Porter Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	5 Raymond Court	Brighton East	Meek Street Drain	Flash
✓	✓	✓	11 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	15 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	17 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	19 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash
		✓	21 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	23 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash
		✓	24 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	26 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	34 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
✓	✓	✓	1/36 Raynes Park Road	Hampton	Grenville Street Main Drain	Flash
	✓	✓	4 Regworth Court	Highett	Banks Avenue Main Drain	Flash
	✓	✓	6 Regworth Court	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	8 Regworth Court	Highett	Banks Avenue Main Drain	Flash
		✓	9 Regworth Court	Highett	Banks Avenue Main Drain	Flash
	✓	✓	1/10 Regworth Court	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	2/10 Regworth Court	Highett	Banks Avenue Main Drain	Flash
		✓	11 Regworth Court	Highett	Banks Avenue Main Drain	Flash
✓	✓	✓	12 Regworth Court	Highett	Banks Avenue Main Drain	Flash
	✓	✓	14 Regworth Court	Highett	Banks Avenue Main Drain	Flash
	✓	✓	16 Regworth Court	Highett	Banks Avenue Main Drain	Flash
		✓	18 Regworth Court	Highett	Banks Avenue Main Drain	Flash
	✓	✓	38 Roslyn Street	Brighton	Well Street Main Drain	Flash
	✓	✓	42A Roslyn Street	Brighton	Well Street Main Drain	Flash
	✓	✓	42 Roslyn Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	44 Roslyn Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	51 Roslyn Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	1/53 Roslyn Street	Brighton	Well Street Main Drain	Flash
	✓	✓	2/53 Roslyn Street	Brighton	Well Street Main Drain	Flash
	✓	✓	10 Royal Avenue	Sandringham	Royal Avenue Drain	Flash
✓	✓	✓	12 Royal Avenue	Sandringham	Royal Avenue Drain	Flash
✓	✓	✓	15 Royal Avenue	Sandringham	Royal Avenue Drain	Flash
✓	✓	✓	18 Royal Avenue	Sandringham	Royal Avenue Drain	Flash
✓	✓	✓	20 Royal Avenue	Sandringham	Royal Avenue Drain	Flash
✓	✓	✓	24 Royal Avenue	Sandringham	Royal Avenue Drain	Flash
		✓	1/1 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	2/1 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	3/1 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	1/2 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	2/2 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	3/2 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	4/2 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	1/3 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	2/3 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	3/3 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	4/3 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	1/4 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	2/4 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	3/4 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	4/4 Scarborough Drive	Hampton East	Highett Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	5/4 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	6/4 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	7/4 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	8/4 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	1/5 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	2/5 Scarborough Drive	Hampton East	Highett Main Drain	Flash
		✓	3/5 Scarborough Drive	Hampton East	Highett Main Drain	Flash
✓	✓	✓	77 Service Street	Hampton	Banks Avenue Main Drain	Flash
	✓	✓	79 Service Street	Hampton	Banks Avenue Main Drain	Flash
		✓	52 Shasta Avenue	Brighton East	Meek Street Drain	Flash
		✓	163 South Road	Brighton East	Well Street Main Drain	Flash
	✓	✓	318 South Road	Hampton East	Meek Street Drain	Flash
	✓	✓	320 South Road	Hampton East	Meek Street Drain	Flash
✓	✓	✓	324 South Road	Hampton East	Meek Street Drain	Flash
✓	✓	✓	1/324 South Road	Hampton East	Meek Street Drain	Flash
✓	✓	✓	2/324 South Road	Hampton East	Meek Street Drain	Flash
✓	✓	✓	4/324 South Road	Hampton East	Meek Street Drain	Flash
✓	✓	✓	5/324 South Road	Hampton East	Meek Street Drain	Flash
✓	✓	✓	326 South Road	Hampton East	Meek Street Drain	Flash
✓	✓	✓	15 St Andrews Street	Brighton	Brighton Central Main Drain	Flash
✓	✓	✓	17 St Andrews Street	Brighton	Brighton Central Main Drain	Flash
		✓	82 St Andrews Street	Brighton	Meek Street Drain	Flash
	✓	✓	355 St Kilda Street	Brighton	Meek Street Drain	Flash
	✓	✓	360 St Kilda Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	362 St Kilda Street	Brighton	Meek Street Drain	Flash
		✓	365 St Kilda Street	Brighton	Meek Street Drain	Flash
	✓	✓	380 St Kilda Street	Brighton	Meek Street Drain	Flash
	✓	✓	1/380 St Kilda Street	Brighton	Meek Street Drain	Flash
	✓	✓	2/380 St Kilda Street	Brighton	Meek Street Drain	Flash
	✓	✓	3/380 St Kilda Street	Brighton	Meek Street Drain	Flash
	✓	✓	4/380 St Kilda Street	Brighton	Meek Street Drain	Flash
		✓	2 Talofa Avenue	Brighton East	Meek Street Drain	Flash
✓	✓	✓	8 Talofa Avenue	Brighton East	Meek Street Drain	Flash
✓	✓	✓	10A Talofa Avenue	Brighton East	Meek Street Drain	Flash
✓	✓	✓	10 Talofa Avenue	Brighton East	Meek Street Drain	Flash
	✓	✓	12 Talofa Avenue	Brighton East	Meek Street Drain	Flash
		✓	14 Talofa Avenue	Brighton East	Meek Street Drain	Flash
	✓	✓	16 Talofa Avenue	Brighton East	Meek Street Drain	Flash
		✓	8 Teddington Road	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	12 Teddington Road	Hampton	Grenville Street Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
✓	✓	✓	14 Teddington Road	Hampton	Grenville Street Main Drain	Flash
		✓	73 Thomas Street	Hampton	Banks Avenue Main Drain	Flash
		✓	75 Thomas Street	Hampton	Banks Avenue Main Drain	Flash
✓	✓	✓	166A Thomas Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	168 Thomas Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	170 Thomas Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	170A Thomas Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	172 Thomas Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	174 Thomas Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	176 Thomas Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	178 Thomas Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	180 Thomas Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	219 Thomas Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	221 Thomas Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	1 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
		✓	2 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	3 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	6 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	7 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	8 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	9 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	9A Thorburn Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	11 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	1/13 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	2/13 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	15 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
	✓	✓	17 Thorburn Street	Hampton	Grenville Street Main Drain	Flash
		✓	6 Tovell Street	Brighton	Meek Street Drain	Flash
		✓	7 Tovell Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	9 Tovell Street	Brighton	Meek Street Drain	Flash
		✓	10 Tovell Street	Brighton	Meek Street Drain	Flash
✓	✓	✓	4 Tracey Crescent	Brighton	Well Street Main Drain	Flash
		✓	1/6 Tracey Crescent	Brighton	Well Street Main Drain	Flash
✓	✓	✓	2/6 Tracey Crescent	Brighton	Well Street Main Drain	Flash
		✓	3/6 Tracey Crescent	Brighton	Well Street Main Drain	Flash
✓	✓	✓	6 Vaucluse Street	Brighton	Meek Street Drain	Flash
		✓	1 Wagstaff Court	Brighton	Meek Street Drain	Flash
✓	✓	✓	3 Wagstaff Court	Brighton	Meek Street Drain	Flash
✓	✓	✓	4 Wagstaff Court	Brighton	Meek Street Drain	Flash
	✓	✓	2 Walstab Street	Brighton East	Brighton Central Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential		Commercial	Industrial	Rural	Public Use	
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
	✓	✓	2A Walstab Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	7 Walstab Street	Brighton East	Brighton Central Main Drain	Flash
✓	✓	✓	9 Walstab Street	Brighton East	Brighton Central Main Drain	Flash
	✓	✓	13 Walstab Street	Brighton East	Brighton Central Main Drain	Flash
		✓	15 Walstab Street	Brighton East	Brighton Central Main Drain	Flash
		✓	2 Webb Street	Brighton	Park Street Main Drain	Flash
✓	✓	✓	6 Webb Street	Brighton	Park Street Main Drain	Flash
	✓	✓	24A Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	24B Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	28A Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	28B Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	28C Well Street	Brighton	Well Street Main Drain	Flash
		✓	34 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	1/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	2/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	3/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	4/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	5/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	6/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	7/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	8/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	9/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	10/40 Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	44A Well Street	Brighton	Well Street Main Drain	Flash
	✓	✓	2/54 Well Street	Brighton	Well Street Main Drain	Flash
✓	✓	✓	68C Well Street	Brighton	Well Street Main Drain	Flash
		✓	169 Were Street	Brighton	Well Street Main Drain	Flash
		✓	53 Whyte Street	Brighton	Well Street Main Drain	Flash
		✓	1/1 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	2/1 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	3/1 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	4/1 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	1/3 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	2/3 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	3/3 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	4/3 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	1/5 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	2/5 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	3/5 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	4/5 Wickham Road	Hampton East	Highett Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	1/7 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	2/7 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	3/7 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	4/7 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	1/9 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	2/9 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	3/9 Wickham Road	Hampton East	Highett Main Drain	Flash
		✓	4/9 Wickham Road	Hampton East	Highett Main Drain	Flash
	✓	✓	1 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	1/2 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	2/2 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	3/2 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	4/2 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	1/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	2/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	3/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	4/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	5/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	6/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	7/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	8/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	9/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	10/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	11/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	12/4 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	1/6 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	2/6 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	3/6 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	4/6 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	1/8 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	2/8 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	3/8 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	4/8 Widdop Crescent	Hampton East	Highett Main Drain	Flash
		✓	41-45 Widdop Crescent	Hampton East	Highett Main Drain	Flash
	✓	✓	7 Willis Street	Hampton	Grenville Street Main Drain	Flash
✓	✓	✓	9 Willis Street	Hampton	Grenville Street Main Drain	Flash
		✓	96 Willis Street	Hampton	Banks Avenue Main Drain	Flash
	✓	✓	97 Willis Street	Hampton	Banks Avenue Main Drain	Flash
		✓	98 Willis Street	Hampton	Banks Avenue Main Drain	Flash
✓	✓	✓	99 Willis Street	Hampton	Banks Avenue Main Drain	Flash

Properties at risk from Flooding over ground floor around Brighton, Hampton, Sandringham and Highett						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	47 Wilson Street	Highett	Gilarth Street Main Drain	Flash
	✓	✓	49 Wilson Street	Highett	Gilarth Street Main Drain	Flash
		✓	3 Worthing Road	Highett	Highett Main Drain	Flash
		✓	17 Wright Street	Brighton	Meek Street Drain	Flash
	✓	✓	19 Wright Street	Brighton	Meek Street Drain	Flash
Totals						
202	387	672				

Table C2.3 – Properties at risk of flooding around Brighton, Hampton, Sandringham, Highett and Cheltenham

Isolation

No major isolation risks exist for areas around Brighton, Brighton East, Hampton, Hampton East, Sandringham, Highett and Cheltenham. Some localised short-duration isolation may occur due to flash flooding.

Essential Infrastructure

There is potential for inundation of the **Sandringham railway line** between Hampton Station and Brighton Beach Station, and north of Middle Brighton Station.

During an event, see the Public Transport Victoria's Website for details on delays or alterations to services. <http://ptv.vic.gov.au/live-travel-updates/>. A map of Public Transport routes within the City of Bayside is available via the website at: https://www.ptv.vic.gov.au/assets/default-site/more/maps/Local-area-maps/Metropolitan/a6d71099a7/3_Bayside_LAM.pdf

Apart from the roads outlined below, all other essential infrastructure and services areas around Bayside are expected to remain predominantly dry during an intense rainfall event.

Road Closures

The following roads are subject to closure during flooding around Meek Street Drain, Brighton Central Main Drain and Hampton/ Highett/ Sandringham. Check the VicRoads website for more details: <https://traffic.vicroads.vic.gov.au/>

VicRoads Roads affected in a 1% AEP event
• Bay Road, Sandringham between Lansell Avenue and Noyes St
• Beach Road, Hampton between New Street and Willis Street
• Bluff Road, Hampton at Wickham Road
• Centre Road, Brighton East between Hampton Street and Davies Street
• Hampton Street, Brighton East between Pine Street and Marriage Road and in Brighton at Were Street
• North Road, Brighton between Begonia Road Brighton and Magnolia Road Brighton
• South Road, Brighton East at St Leonards College and between Glencairn Avenue and Welwyn Avenue

Table C2.4 – VicRoads Possible Road Closures during a flooding event

Bayside City Council Roads affected in a 1% AEP event			
Brighton	• Grant Street	• Thomas Street	• June Street
• Anne Crescent	• Killeen Avenue	• Thorburn Street	• Lansell Avenue
• Berwick Street	• Laburnum Street	• Wales Street	• Lawson Avenue
• Bleazby Avenue	• Lucas Street	• Willis Street	• Livingstone Street
• Champion Street	• Pine Street	Hampton East	• Marchant Street
• Chatsworth Avenue	• Plantation Avenue	• Cooke Avenue	• Maroona Road
• Dendy Street	• Raymond Court	• Crest Avenue	• Miller Street
• Durrant Street	• Studley Road	• Dane Street	• Moira Avenue
• Edgar Street	• Tattong Road	• Howitt Avenue	• Morley Crescent
• Halifax Street	• Walstab Street	• Keith Street	• Muir Street
• Hanby Street	• Weatherly Grove	• Kelsall Court	• Nicol Street
• Lawrence Street	• Were Street	• King Street	• Noyes Street
• Loller Street	Cheltenham	• Little Avenue	• Regworth Court
• Male Street	• Arnold Street	• Overend Close	• Wilson Street
• Maskell Street	• Reserve Road	• Parkview Crescent	• Worthing Road
• Meek Street	Hampton	• Seaton Road	Sandringham
• Munro Street	• Austin Road	• Spring Road	• Duncan Street
• Nooks Court	• Earlsfield Road	• Summit Avenue	• George Street
• Outer Crescent	• Fewster Road	• Terrens Close	• Grange Road
• Park Street	• Garden Street	• Wickham Road	• Kenneth Street
• Pearson Street	• Glamis Avenue	• Widdop Crescent	• Wangara Road
• Roslyn Street	• Grenville Street	Highett	
• Sheridan Court	• Holyrood Street	• Advantage Road	
• Willansby Avenue	• Kerferd Street	• Clements Street	
Brighton East	• Kingston Street	• Dalmont Street	
• Bourneville Avenue	• Ludstone Street	• Frederico Street	
• Canberra Avenue	• May Street	• Gilarth Street	
• Dendy Street	• Poole Avenue	• Graham Road	
• Dumaresq Street	• Porter Street	• Herbert Street	
• Garden Avenue	• Raynes Park Road	• Highett Road	
• Glencairn Avenue	• Teddington Road	• Holyrood Street	

Table C2.5 – Bayside City Council Possible Road Closures during a flooding event

Flood Mitigation

Retarding Basins

Melbourne Water Retarding Basin	On Drain/Waterway	Area	Storage Capacity	Spillway Crest Level	Full Supply Level	Embankment Crest Height (Level)	ANCOLD Hazard Rating	Houses In Flow Path (dam breach)	Melway Reference
Avoca Street	Gilarth St Main Drain	1.598 ha	43 ML	31.5m AHD	32.5m AHD	1.63m (33m AHD)	Low	Unavailable	77 C10

Table C2.6 – Melbourne Water Retarding Basins around Brighton, Hampton, Sandringham and Highett

No formal Pumping Stations or Levees exist around Bayside.

Sewerage Infrastructure

Sewerage Infrastructure of note during a severe flood event located around Brighton, Hampton, Sandringham and Highett is contained within the following two tables.

Sewer Pumping Stations

Sewerage Pumping Station	On Drain / Waterway	Bank / Side of Waterway	Operator	Location	Melway Reference
Shandford Avenue	Meek Street Drain		South East Water	Shandford Avenue, Brighton	67 C8

Table C2.7 – Sewer Pumping Stations around Brighton, Hampton, Sandringham and Highett

Sewer Emergency Relief Points

There are Sewer Emergency Relief Points around Brighton, Hampton, Sandringham and Highett that will likely affect floodwater conditions should they be activated. Contact the Operator EMLO/Duty Officer for information on any recent or planned releases at a Sewer Emergency Relief Point as part of a Dynamic Risk Assessment (DRA) if work is to be conducted at or downstream of the outlet.

On Drain / Waterway	Bank / Side of Waterway	Operator	Location	Melway Reference
Grenville Street Main Drain		Melbourne Water	Beach Road at Grenville Street, Hampton	76 E5
Meek Street Drain		Melbourne Water	Corner St Kilda Street and Meek Street, Brighton	67 C8

Table C2.8 – Sewer Emergency Relief Points around Brighton, Hampton, Sandringham and Highett

Command, Control and Coordination

VICSES will assume overall control of the response to flood incidents. Other agencies will be requested to support operations as detailed in this Plan. Control and coordination of a flood incident shall be carried out at the lowest effective level and in accordance with the State Emergency Response Plan (EMMV Part 3). During significant events, VICSES will conduct incident management using multi-agency resources.

Flood Impacts & Operational Considerations (Intelligence Cards)

The tables on the following pages provide a breakdown of the possible consequences of flooding along the stormwater drains in Brighton, Brighton East, Hampton, Hampton East, Sandringham and Highett at various rain totals and intensities. These tables are to be used only as a guide as no two floods at a location will have identical impacts.

Intelligence Cards have been included for the following locations:

- Brighton and Brighton East Stormwater Drains
- Hampton, Hampton East, Sandringham and Highett Stormwater Drains

FLOOD INTELLIGENCE CARD – BRIGHTON AND BRIGHTON EAST STORMWATER DRAINS (UNGAUGED)

Version 3 – May 2019



Note: flood intelligence records are approximations. This is because no two floods at a location, even if they peak at the same height, will have identical impacts. Flood intelligence cards detail the relationship between flood magnitude and flood consequences. More details about flood intelligence and its use can be found in the Australian Emergency Management Manuals flood series.

This Flood Intelligence Card publication is presented by the Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information have not been independently verified by the Victoria State Emergency Service. No liability is accepted for any damage, loss or injury caused by errors or omissions in this information or for any action taken by any person in reliance upon it.

CLOSEST RAIN GAUGE	Hampton
LOCATION	Hampton Bowling Club, Fewster Street, Hampton
MELWAY REF:	76 J6

GAUGE NUMBER	586036
GAUGE TYPE	Rain
TELEMETRIC/MANUAL	Telemetric

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
11mm in 10 mins; 19mm in 30 mins; 24mm in 1 hour; 30mm in 2 hours; 34mm in 3 hours; or 43mm in 6 hours Note: rainfall depths are a very rough method of estimating flood events and have been used due to the un-gauged nature of the catchment. This should be used as a guide only.	20% AEP (5 year ARI)	<p>Properties at Flood Risk (over ground floor)</p> <p>17 Properties in Total</p> <p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> 6 Bleazby Avenue, Brighton 4/5 Bryson Avenue, Brighton 2/136 Dendy Street, Brighton East 1, 3 & 5 Lawrence Street, Brighton 6 & 8 Loller Street, Brighton <p>Well Street Main Drain</p> <ul style="list-style-type: none"> 41 Champion Street, Brighton 55 Dendy Street, Brighton 6 & 7 Halifax Street, Brighton 654 Hampton Street, Brighton 51 & 1/53 Roslyn Street, Brighton 4 & 2/6 Tracey Crescent, Brighton <p>Water Over Road (above 300mm depth)</p> <p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> Lawrence Street Brighton Male Street Brighton Plantation Avenue Brighton East <p>Well Street Main Drain</p> <ul style="list-style-type: none"> Champion Street Brighton 	<p>VICSES will provide warnings using OSOM and SMSER as required based on the predications provided by BoM regarding flood levels and the risk of Flash Flooding. The Central Duty officer in conjunction with the Regional Agency Controller will maintain operational awareness and form an appropriate response arrangement to suit the level of incident</p> <p>VICSES to respond as per request by request basis.</p> <p>Council to provide road closure signage if required.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
<p>14mm in 10 mins; 23mm in 30 mins; 29mm in 1 hour; 36mm in 2 hours; 40mm in 3 hours; or 50mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>	<p>10% AEP (10 year ARI)</p>	<ul style="list-style-type: none"> • Tracey Crescent Brighton <p>Properties at Flood Risk (over ground floor) 30 Properties in Total</p> <ul style="list-style-type: none"> • Brighton Central Main Drain • 6 Bleazby Avenue, Brighton • 3/5 & 4/5 Bryson Avenue, Brighton • 51 Carpenter Street, Brighton • 2/136 Dendy Street, Brighton East • 1, 3, 5, 7, 9, 11 & 13 Lawrence Street, Brighton • 6, 8 & 10 Loller Street, Brighton • 37 Male Street, Brighton • 9 Walstab Street, Brighton East • Park Street Main Drain • 1A Farleigh Grove, Brighton • Well Street Main Drain • 38 Burrows Street, Brighton • 36 & 41 Champion Street, Brighton • 55 Dendy Street, Brighton • 6 & 7 Halifax Street, Brighton • 654 Hampton Street, Brighton • 21 Munro Street, Brighton • 51 & 1/53 Roslyn Street, Brighton • 4 & 2/6 Tracey Crescent, Brighton <p>Water Over Road (above 300mm depth)</p> <p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> • Canberra Avenue Brighton East • Garden Avenue Brighton East • Lawrence Street Brighton • Male Street Brighton • Pine Street Brighton East • Plantation Avenue Brighton East <p>Well Street Main Drain</p> <ul style="list-style-type: none"> • Champion Street Brighton • Tracey Crescent Brighton 	<p>VICSES to respond as per request by request basis.</p> <p>Council to provide road closure signage if required.</p>
<p>16mm in 10 mins; 27mm in 30 mins; 34mm in 1 hour; 41mm in 2 hours;</p>	<p>5% AEP (20 year ARI)</p>	<p>Properties at Flood Risk (over ground floor) 110 Properties in Total</p> <p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> • 6 Bleazby Avenue, Brighton • 2/5, 3/5 & 4/5 Bryson Avenue, Brighton 	<p>VICSES will provide warnings using OSOM and SMSER as required based on the predications provided by BoM regarding flood levels and the risk of Flash Flooding. The Central Duty officer in</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
<p>46mm in 3 hours; or 57mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>		<ul style="list-style-type: none"> • 51 & 58 Carpenter Street, Brighton • 1/127 & 2/136 Dendy Street, Brighton East • 750, 752, 754, 756A & 756 Hampton Street, Brighton • 1, 3, 5, 7, 9, 11 & 13 Lawrence Street, Brighton • 6, 8, 10 & 12 Loller Street, Brighton • 33 & 46A Lucas Street, Brighton East • 28, 33, 35, 37 & 39 Male Street, Brighton • 230B New Street, Brighton • 15 & 17 St Andrews Street, Brighton • 9 Walstab Street, Brighton East <p>Meek Street Drain</p> <ul style="list-style-type: none"> • 71-73, 168, 174, 184, 184, 196, 198, 200, 202-204 & 212 Bay Street, Brighton • 4 Bent Street, Brighton • 7 & 8 Berwick Street, Brighton • 111 Carpenter Street, Brighton • 25 Centre Road, Brighton East • 42 Charming Street, Hampton East • 11, 15, 19, 41, 43, 69 & 79 Durrant Street, Brighton • 2 Edgar Street, Brighton • 8, 11 & 13 Grant Street, Brighton East • 3 Katoomba Street, Hampton East • 4, 8 & 14 King Street, Hampton East • 96 Male Street, Brighton • 2 Marion Street, Brighton • 39 & 40 Meek Street, Brighton • 324, 1/324, 2/324, 4/324, 5/324 & 326 South Road, Hampton East • 362 St Kilda Street, Brighton • 8, 10A & 10 Talofa Avenue, Brighton East • 9 Tovell Street, Brighton • 6 Vaucluse Street, Brighton • 3 & 4 Wagstaff Court, Brighton <p>Park Street Main Drain</p> <ul style="list-style-type: none"> • 1A Farleigh Grove, Brighton • 19 Park Street, Brighton • 6 Webb Street, Brighton <p>Well Street Main Drain</p> <ul style="list-style-type: none"> • 36F, 36R, 38 & 40 Burrows Street, Brighton • 34, 36 & 41 Champion Street, Brighton • 55 Dendy Street, Brighton • 6 & 7 Halifax Street, Brighton • 654 Hampton Street, Brighton 	<p>conjunction with the Regional Agency Controller will maintain operational awareness and form an appropriate response arrangement to suit the level of incident</p> <p>VICES to respond as per request by request basis.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • 34, 36, 37 & 38 Hanby Street, Brighton • 19 & 21 Munro Street, Brighton • 44, 51 & 1/53 Roslyn Street, Brighton • 4 & 2/6 Tracey Crescent, Brighton • 68C Well Street, Brighton <p>Community Infrastructure Likely Flooded</p> <p>Well Street Main Drain</p> <ul style="list-style-type: none"> • St Leonard’s College Brighton Campus at 163 South Road, Brighton East with flooding to grounds <p>Water Over Road (above 300mm depth)</p> <p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> • Canberra Avenue Brighton East • Dendy Street Brighton East • Garden Avenue Brighton East • Glencairn Avenue Brighton East • Lawrence Street Brighton • Lucas Street Brighton East • Male Street Brighton • Pine Street Brighton East • Plantation Avenue Brighton East • Walstab Street Brighton East • Weatherly Grove Brighton <p>Well Street Main Drain</p> <ul style="list-style-type: none"> • Champion Street Brighton • Tracey Crescent Brighton 	
<p>20mm in 10 mins; 33mm in 30 mins; 41mm in 1 hour; 49mm in 2 hours; 49mm in 3 hours; or 68mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>	<p>2% AEP (50 year ARI)</p>	<p>Properties at Flood Risk (over ground floor)</p> <p>233 Properties in Total</p> <p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> • 6, 8 & 10 Bleazby Avenue, Brighton • 1, 2/5, 3/5 & 4/5 Bryson Avenue, Brighton • 51, 53 & 58 Carpenter Street, Brighton • 1/127, 1/136 & 2/136 Dendy Street, Brighton East • 744, 746, 748, 750, 752, 754, 756A, 756 & 5/781 Hampton Street, Brighton • 2/20 Laburnum Street, Brighton • 1, 2, 3, 4, 5, 7, 9, 11 & 13 Lawrence Street, Brighton • 23 Lindsay Street, Brighton • 6, 8, 10, 12 & 14 Loller Street, Brighton • 33, 35, 41, 44, 46A, 48 & 50 Lucas Street, Brighton East • 24, 26, 28, 30, 33, 34, 35, 35A, 37, 39 & 41 Male Street, Brighton • 230B New Street, Brighton • 1/29, 2/29, 3/29, 4/29, 5/29, 30 & 32 Pine Street, Brighton East 	<p>VICSES to respond as per request by request basis.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • 21 Plantation Avenue, Brighton East • 15 & 17 St Andrews Street, Brighton • 2, 2A, 7, 9 & 13 Walstab Street, Brighton East • Meek Street Drain • 71-73, 156-158, 168, 174, 184, 184, 196, 198, 200, 202-204 & 212 Bay Street, Brighton • 2 & 4 Bent Street, Brighton • 7, 8, 14 & 24 Berwick Street, Brighton • 41 Bright Street, Brighton East • 111 Carpenter Street, Brighton • 25 Centre Road, Brighton East • 42 Charming Street, Hampton East • 6 & 9 Chatsworth Avenue, Brighton • 1 & 5 Cochrane Street, Brighton • 9, 11, 15, 19, 22, 29, 41, 43, 69, 73, 75 & 79 Durrant Street, Brighton • 2 Edgar Street, Brighton • 86, 93, 96 & 101 Glencairn Avenue, Brighton East • 8, 11, 13 & 15 Grant Street, Brighton East • 842 Hampton Street, Brighton • 3 Katoomba Street, Hampton East • 4, 6, 8, 14 & 16 King Street, Hampton East • 9 Lewis Street, Brighton • 96 & 115 Male Street, Brighton • 2 Marion Street, Brighton • 39 & 40 Meek Street, Brighton • 369 & 379 New Street, Brighton • Units 1-15/32 & 40 Outer Crescent, Brighton • 2 Pearson Street, Brighton • 5 Raymond Court, Brighton East • 318, 320, 324, 1/324, 2/324, 4/324, 5/324 & 326 South Road, Hampton East • 355, 360, 362, 380, 1/380, 2/380, 3/380 & 4/380 St Kilda Street, Brighton • 8, 10A, 10, 12 & 16 Talofa Avenue, Brighton East • 9 Tovell Street, Brighton • 6 Vaucluse Street, Brighton • 3 & 4 Wagstaff Court, Brighton • 19 Wright Street, Brighton • Park Street Main Drain • 1A Farleigh Grove, Brighton • 3 & 19 Park Street, Brighton • 6 Webb Street, Brighton • Well Street Main Drain • 34, 36F, 36R, 38 & 40 Burrows Street, Brighton 	

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • 34, 36, 39, 41 & 43 Champion Street, Brighton • 55, 56A, 57, 58 & 59 Dendy Street, Brighton • 6 & 7 Halifax Street, Brighton • 650 & 654 Hampton Street, Brighton • 32, 34, 36, 37 & 38 Hanby Street, Brighton • 19 & 21 Munro Street, Brighton • 38, 42A, 42, 44, 51, 1/53 & 2/53 Roslyn Street, Brighton • 4 & 2/6 Tracey Crescent, Brighton • 24A, 24B, 28A, 28B, 28C, Units 1-10/40, 44A, 2/54 & 68C Well Street, Brighton <p>Community Infrastructure Likely Flooded</p> <p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> • Brighton Grammar School, 90 Outer Crescent, Brighton with flooding to grounds. <p>Well Street Main Drain</p> <ul style="list-style-type: none"> • St Leonard’s College Brighton Campus at 163 South Road, Brighton East with flooding to grounds <p>Water Over Road (above 300mm depth)</p> <p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> • Bourneille Avenue Brighton East • Canberra Avenue Brighton East • Dendy Street Brighton East • Garden Avenue Brighton East • Glencairn Avenue Brighton East • Hampton Street Brighton East • Lawrence Street Brighton • Lucas Street Brighton East • Male Street Brighton • Outer Crescent Brighton • Pine Street Brighton East • Plantation Avenue Brighton East • Walstab Street Brighton East • Weatherly Grove Brighton <p>Well Street Main Drain</p> <ul style="list-style-type: none"> • Champion Street Brighton • Dendy Street Brighton • Halifax Street Brighton • Hampton Street Brighton • Roslyn Street Brighton • Tracey Crescent Brighton • Were Street Brighton East 	
23mm in 10 mins;	1% AEP (100 year ARI)	<p>Properties at Flood Risk (over ground floor)</p> <p>319 Properties in Total</p>	VICSES to respond as per request by request

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
<p>38mm in 30 mins; 47mm in 1 hour; 56mm in 2 hours; 63mm in 3 hours; or 77mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>		<p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> • 6, 8 & 10 Bleazby Avenue, Brighton • 1, 3B, 2/5, 3/5 & 4/5 Bryson Avenue, Brighton • 51, 53 & 58 Carpenter Street, Brighton • 1/127, 1/129, 2/129, 3/129, 1/136, 2/136 & 144 Dendy Street, Brighton East • 4 Garden Avenue, Brighton East • 740, 740S, 742, 744, 746, 748, 750, 752, 754, 756, 756A & Units 4-6/781 Hampton Street, Brighton • 16, 1/20 & 2/20 Laburnum Street, Brighton • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 & 13 Lawrence Street, Brighton • 11 & 23 Lindsay Street, Brighton • 2, 4, 6, 8, 10, 12 & 14 Loller Street, Brighton • 27, 31, 33, 35, 37, 41, 44, 46A, 48 & 50 Lucas Street, Brighton East • 24, 26, 28, 30, 32, 33, 34, 35, 35A, 37, 39, 41 & 43 Male Street, Brighton • 230B New Street, Brighton • 1/29, 2/29, 3/29, 4/29, 5/29, 30, 32 & 34 Pine Street, Brighton East • 21, 23 & 1/33 Plantation Avenue, Brighton East • 15 & 17 St Andrews Street, Brighton • 2, 2A, 7, 9, 13 & 15 Walstab Street, Brighton East <p>Meek Street Drain</p> <ul style="list-style-type: none"> • 3 Anne Crescent, Brighton • 71-73, 156-158, 168, 174, 184, 184, 196, 198, 200, 202-204 & 212 Bay Street, Brighton • 2 & 4 Bent Street, Brighton • 2, 7, 8, 10, 14 & 24 Berwick Street, Brighton • 41 Bright Street, Brighton East • 111 & 115 Carpenter Street, Brighton • 25 Centre Road, Brighton East • 6 & 42 Charming Street, Hampton East • 1, 1/1, 2/1, 3/1, 4/1, 6 & 9 Chatsworth Avenue, Brighton • 1 & 5 Cochrane Street, Brighton • 20 Dumaresq Street, Brighton East • 9, 11, 15, 19, 22, 24, 29, 35, 41A, 41, 43, 63, 69, 73, 75 & 79 Durrant Street, Brighton • 2 & 2A Edgar Street, Brighton • 80, 84, 86, 88, 90, 93, 94, 96 & 101 Glencairn Avenue, Brighton East • 1, 8, 11, 13 & 15 Grant Street, Brighton East • 842, 1/844, 2/844, 3/844 & 4/844 Hampton Street, Brighton • 3, 5 & 9 Katoomba Street, Hampton East • 4, 6, 8, 14 & 16 King Street, Hampton East • 9 Lewis Street, Brighton • 96 & 115 Male Street, Brighton • 2 Marion Street, Brighton 	<p>basis.</p> <p>Retirement community to implement emergency evacuation plan if requires</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • 25, 39 & 40 Meek Street, Brighton • 361, 369 & 379 New Street, Brighton • Units 1-15/32 & 40 Outer Crescent, Brighton • 2 Pearson Street, Brighton • 5 Raymond Court, Brighton East • 52 Shasta Avenue, Brighton East • 318, 320, 324, 1/324, 2/324, 4/324, 5/324 & 326 South Road, Hampton East • 82 St Andrews Street, Brighton • 355, 360, 362, 365, 380, 1/380, 2/380, 3/380 & 4/380 St Kilda Street, Brighton • 2, 8, 10A, 10, 12, 14 & 16 Talofa Avenue, Brighton East • 6, 7, 9 & 10 Tovell Street, Brighton • 6 Vaucluse Street, Brighton • 1, 3 & 4 Wagstaff Court, Brighton • 17 & 19 Wright Street, Brighton Park Street Main Drain • 1A Farleigh Grove, Brighton • 3 & 19 Park Street, Brighton • 2 & 6 Webb Street, Brighton Well Street Main Drain • 34, 36F, 36R, 38 & 40 Burrows Street, Brighton • 10 Carpenter Street, Brighton • 34, 36, 38, 39, 41 & 43 Champion Street, Brighton • 55, 56A, 57, 58 & 59 Dendy Street, Brighton • 3 Gatehouse Place, Brighton • 4, 6, 7, 8 & 8A Halifax Street, Brighton • 650 & 654 Hampton Street, Brighton • 32, 34, 36, 37 & 38 Hanby Street, Brighton • 4 & 6 Heathfield Road, Brighton East • 10 Killeen Avenue, Brighton East • 19, 21, 23 & 28A Munro Street, Brighton • 38, 42A, 42, 44, 51, 1/53 & 2/53 Roslyn Street, Brighton • 163 South Road, Brighton East • 4, 1/6, 2/6 & 3/6 Tracey Crescent, Brighton • 24A, 24B, 28A, 28B, 28C, 34, Units 1-10/40, 44A, 2/54 & 68C Well Street, Brighton • 169 Were Street, Brighton • 53 Whyte Street, Brighton Community Infrastructure Likely Flooded Brighton Central Main Drain • Brighton Grammar School, 90 Outer Crescent, Brighton with flooding to grounds. Meek Street Drain • Mayflower Retirement Community at 7 Centre Road, Brighton East 	<p>Council to provide road closure signage if required.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • Halcyon Senior Citizens Retirement Village at 15 Centre Road, Brighton East • Well Street Main Drain • St Leonard’s College Brighton Campus at 163 South Road, Brighton East with flooding to grounds • Essential Infrastructure Likely Impacted • Meek Street Drain • Bus Routes 626, 703; 811; 812; & 922 along Male Street, Brighton • Bus Route 703 along Centre Road, Brighton East • Bus Route 823 along Durrant Street, Brighton • Water Over Road (above 300mm depth) • Brighton Central Main Drain • Bourneille Avenue Brighton East • Canberra Avenue Brighton East • Dendy Street Brighton East • Glencairn Avenue Brighton East • Garden Avenue Brighton East • Hampton Street Brighton East • Laburnum Street Brighton East • Lawrence Street Brighton • Loller Street Brighton • Lucas Street Brighton East • Male Street Brighton • Outer Crescent Brighton • Pine Street Brighton East • Plantation Avenue Brighton East • Walstab Street Brighton East • Weatherly Grove Brighton • Meek Street Drain • Anne Crescent Brighton • Berwick Street Brighton • Centre Road Brighton East • Chatsworth Avenue Brighton • Dumaresq Street Brighton East • Durrant Street Brighton • Edgar street Brighton • Grant St Brighton East • King Street Hampton East • Male Street Brighton • Maskell Street Brighton • Meek Street Brighton • Nooks Court Brighton 	

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • North Road Brighton • Outer Crescent Brighton • Pearson Street Brighton • Raymond Court Brighton East • Sheridan Court Brighton • Studley Road Brighton East • Tattong Rd Brighton East • Tovell Street Brighton • Wagstaff Court Brighton • Willansby Avenue Brighton • Well Street Main Drain • Champion Street Brighton • Dendy Street Brighton • Halifax Street Brighton • Hampton Street Brighton • Hanby street Brighton • Killeen Avenue Brighton East • Munro Street Brighton • Park Street Brighton • Roslyn Street Brighton • South Road Brighton East (near St Leonard's College and Haileybury College) • Tracey Crescent Brighton • Were Street Brighton East 	

Table C2.9 – Breakdown of possible consequences at various rainfall intensities around Brighton and Brighton East with operational considerations

FLOOD INTELLIGENCE CARD – HAMPTON, HAMPTON EAST, HIGHETT & SANDRINGHAM STORMWATER DRAINS (UNGAUGED)

Version 3 – May 2019



Note: flood intelligence records are approximations. This is because no two floods at a location, even if they peak at the same height, will have identical impacts. Flood intelligence cards detail the relationship between flood magnitude and flood consequences. More details about flood intelligence and its use can be found in the Australian Emergency Management Manuals flood series.

This Flood Intelligence Card publication is presented by the Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information have not been independently verified by the Victoria State Emergency Service. No liability is accepted for any damage, loss or injury caused by errors or omissions in this information or for any action taken by any person in reliance upon it.

CLOSEST RAIN GAUGE	Hampton
LOCATION	Hampton Bowling Club, Fewster Street, Hampton
MELWAY REF:	76 J6

GAUGE NUMBER	586036
GAUGE TYPE	Rain
TELEMETRIC/MANUAL	Telemetric

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
11mm in 10 mins; 19mm in 30 mins; 24mm in 1 hour; 30mm in 2 hours; 34mm in 3 hours; or 43mm in 6 hours Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungauged nature of the catchment. This should be used as a guide only.	20% AEP (5 year ARI)	<p>Properties at Flood Risk (over ground floor)</p> <p>13 Properties in Total</p> <p>Banks Avenue Main Drain</p> <ul style="list-style-type: none"> 16 & 17 Moira Avenue, Highett <p>Gilarth Street Main Drain</p> <ul style="list-style-type: none"> 2/450, 456B, 456A, 1/458 & 2/458 Bluff Road, Hampton <p>Grenville Street Main Drain</p> <ul style="list-style-type: none"> 17 Beach Road, Hampton 1/36 Raynes Park Road, Hampton 166A, 168 & 170A Thomas Street, Hampton 9A Thorburn Street, Hampton <p>Community Infrastructure Likely Flooded</p> <p>Highett Main Drain</p> <ul style="list-style-type: none"> Berendale School at 2 Berend Street, Hampton East <p>Grenville Main Drain</p> <ul style="list-style-type: none"> Sandringham Athletics Centre at 219 Thomast Street, Hampton Hampton Scout Group at 219 Thomast Street, Hampton <p>Water Over Road (above 300mm depth)</p> <p>Banks Ave Main Drain</p> <ul style="list-style-type: none"> Lansell Street Highett Moira Avenue Highett Regworth Court Highett 	<p>VicSES will provide warnings using OSOM and SMSER as required based on the predications provided by BoM regarding flood levels and the risk of Flash Flooding. The Central Duty officer in conjunction with the Regional Agency Controller will maintain operational awareness and form an appropriate response arrangement to suit the level of incident</p> <p>VicSES to respond as per request by request basis.</p> <p>Council to provide road closure signage if required.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<p>Gilarth Street Main Drain</p> <ul style="list-style-type: none"> • Bluff Road Hampton • Frederico Street Highett • June Street Highett <p>Highett Main Drain</p> <ul style="list-style-type: none"> • Dane Street Hampton East • Kelsall Court Hampton East • Little Avenue Hampton East • Muir Street Highett <p>Grenville Street Main Drain</p> <ul style="list-style-type: none"> • Poole Avenue Hampton • Porter Street Hampton • Thomas Street Hampton • Thorburn Street Hampton 	
<p>14mm in 10 mins; 23mm in 30 mins; 29mm in 1 hour; 36mm in 2 hours; 40mm in 3 hours; or 50mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>	<p>10% AEP (10 year ARI)</p>	<p>Properties at Flood Risk (over ground floor)</p> <p>39 Properties in Total</p> <p>Banks Avenue Main Drain</p> <ul style="list-style-type: none"> • 26 Lawson Parade, Highett • 14, 16, 17, 18 & 19 Moira Avenue, Highett • 8, 2/10 & 12 Regworth Court, Highett <p>Gilarth Street Main Drain</p> <ul style="list-style-type: none"> • 2/450, 456B, 456A, 1/458 & 2/458 Bluff Road, Hampton <p>Grenville Street Main Drain</p> <ul style="list-style-type: none"> • 17 Beach Road, Hampton • 17 & 19 Grenville Street, Hampton • 8/24 Holyrood Street, Hampton • 15, 19, 26, 34 & 1/36 Raynes Park Road, Hampton • 166A, 168, 170 & 170A Thomas Street, Hampton • 7, 9A, 1/13 & 2/13 Thorburn Street, Hampton • 9 Willis Street, Hampton <p>Highett Main Drain</p> <ul style="list-style-type: none"> • 2A Little Avenue, Hampton East • 1/8, 2/8, 3/8, 4/8 & 5/8 Muir Street, Highett <p>Hoyt Street Drain</p> <ul style="list-style-type: none"> • 10 Gordon Street, Hampton <p>Community Infrastructure Likely Flooded</p> <p>Banks Ave Main Drain</p> <ul style="list-style-type: none"> • Sandringham College Highett Campus at 356 Bluff Road, Highett <p>Highett Main Drain</p> <ul style="list-style-type: none"> • Berendale School at 2 Berend Street, Hampton East 	<p>VicSES to respond as per request by request basis.</p> <p>Community infrastructure to implement emergency evacuation plan if required</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • Basterfield Park at 2 Dane Road, Hampton East Grenville Main Drain • Sandringham Athletics Centre at 219 Thomast Street, Hampton • Hampton Scout Group at 219 Thomast Street, Hampton Water Over Road (above 300mm depth) Banks Ave Main Drain • Bay Road Sandringham • Lansell Street Highett • Moira Avenue Highett • Noyes St Highett • Regworth Court Highett Gilarth Street Main Drain • Bluff Road Hampton • Frederico Street Highett • June Street Highett • Morley Crescent Highett • Reserve Road Cheltenham Highett Main Drain • Dane Street Hampton East • Graham Road Highett • Herbert Street Highett • Kelsall Court Hampton East • Little Avenue Hampton East • Maroona Road Highett • Muir Street Highett • Spring Road Hampton East • Widdop Crescent Hampton East Grenville Street Main Drain • Earlsfield Road Hampton • Glamis Avenue Hampton • Grenville Street Hampton • Ludstone Street Hampton • May Street Hampton • Poole Avenue Hampton • Porter Street Hampton • Raynespark Road Hampton • Thomas Street Hampton • Thorburn Street Hampton 	<p>Council to provide road closure signage if required.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
<p>16mm in 10 mins; 27mm in 30 mins; 34mm in 1 hour; 41mm in 2 hours; 46mm in 3 hours; or 57mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>	<p>5% AEP (20 year ARI)</p>	<p>Properties at Flood Risk (over ground floor) 92 Properties in Total</p> <p>Abbott Street Main Drain</p> <ul style="list-style-type: none"> • 4, 5 & 6 Harston Street, Sandringham <p>Banks Avenue Main Drain</p> <ul style="list-style-type: none"> • 5 & 7 Ashwood Avenue, Highett • 1/171 & 181 Bay Road, Sandringham • 19 Kerferd Street, Hampton • 26 Lawson Parade, Highett • 14, 16, 17, 18 & 19 Moira Avenue, Highett • 8, 2/10 & 12 Regworth Court, Highett • 77 Service Street, Hampton • 99 Willis Street, Hampton <p>Brighton Central Main Drain</p> <ul style="list-style-type: none"> • 6 Bleazby Avenue, Brighton • 2/5, 3/5 & 4/5 Bryson Avenue, Brighton • 51 & 58 Carpenter Street, Brighton • 1/127 & 2/136 Dendy Street, Brighton East • 750, 752, 754, 756A & 756 Hampton Street, Brighton • 1, 3, 5, 7, 9, 11 & 13 Lawrence Street, Brighton • 6, 8, 10 & 12 Loller Street, Brighton • 33 & 46A Lucas Street, Brighton East • 28, 33, 35, 37 & 39 Male Street, Brighton • 230B New Street, Brighton • 15 & 17 St Andrews Street, Brighton • 9 Walstab Street, Brighton East <p>Gilarth Street Main Drain</p> <ul style="list-style-type: none"> • 1/450, 2/450, 456B, 456A, 1/458 & 2/458 Bluff Road, Hampton • 2/1 Haynes Street, Highett • 1/140, 2/140, 3/140 & 4/140 Highett Road, Highett • 25 June Street, Highett <p>Grenville Street Main Drain</p> <ul style="list-style-type: none"> • 17 Beach Road, Hampton • 1 & 3 Glamis Avenue, Hampton • 11, 17 & 19 Grenville Street, Hampton • 8/24 & 9/24 Holyrood Street, Hampton • 47 Kingston Street, Hampton • 80 Ludstone Street, Hampton • 11, 15, 17, 19, 23, 26, 34 & 1/36 Raynes Park Road, Hampton • 12 & 14 Teddington Road, Hampton 	<p>VicSES to respond as per request by request basis.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • 166A, 168, 170, 170A, 172 & 178 Thomas Street, Hampton • 7, 9, 9A, 11, 1/13 & 2/13 Thorburn Street, Hampton • 9 Willis Street, Hampton • Highett Main Drain • 32-34 Graham Road, Highett • 3A Howitt Avenue, Hampton East • 1, 1/3, 2/3, 5, 9, 11, 13, 15, 1/17 & 2/17 Keith Street, Hampton East • 1 & 2A Little Avenue, Hampton East • 2 & 3 Livingston Street, Highett • 1/8, 2/8, 3/8, 4/8 & 5/8 Muir Street, Highett • Hoyt Street Drain • 10 Gordon Street, Hampton • Meek Street Drain • 71-73, 168, 174, 184, 184, 196, 198, 200, 202-204 & 212 Bay Street, Brighton • 4 Bent Street, Brighton • 7 & 8 Berwick Street, Brighton • 111 Carpenter Street, Brighton • 25 Centre Road, Brighton East • 42 Charming Street, Hampton East • 11, 15, 19, 41, 43, 69 & 79 Durrant Street, Brighton • 2 Edgar Street, Brighton • 8, 11 & 13 Grant Street, Brighton East • 3 Katoomba Street, Hampton East • 4, 8 & 14 King Street, Hampton East • 96 Male Street, Brighton • 2 Marion Street, Brighton • 39 & 40 Meek Street, Brighton • 324, 1/324, 2/324, 4/324, 5/324 & 326 South Road, Hampton East • 362 St Kilda Street, Brighton • 8, 10A & 10 Talofa Avenue, Brighton East • 9 Tovell Street, Brighton • 6 Vaucluse Street, Brighton • 3 & 4 Wagstaff Court, Brighton • Park Street Main Drain • 1A Farleigh Grove, Brighton • 19 Park Street, Brighton • 6 Webb Street, Brighton • Royal Avenue Drain • 1 Norwood Street, Sandringham • 12, 15, 18, 20 & 24 Royal Avenue, Sandringham 	<p>College to implement emergency evacuation plan if requires</p> <p>Council to provide road closure signage if required.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<p>Community Infrastructure Likely Flooded</p> <p>Banks Ave Main Drain</p> <ul style="list-style-type: none"> • Sandringham College Highett Campus at 356 Bluff Road, Highett <p>Highett Main Drain</p> <ul style="list-style-type: none"> • Berendale School at 2 Berend Street, Hampton East • Basterfield Park at 2 Dane Road, Hampton East • Widdop Crescent Reserve at 41-45 Widdop Crescent, Hampton East <p>Grenville Main Drain</p> <ul style="list-style-type: none"> • Sandringham Athletics Centre at 219 Thomast Street, Hampton • Hampton Scout Group at 219 Thomast Street, Hampton <p>Water Over Road (above 300mm depth)</p> <p>Banks Ave Main Drain</p> <ul style="list-style-type: none"> • Austin Road Hampton • Bay Road Sandringham • Clements Street Highett • Duncan Street Sandringham • Lansell Street Highett • Marchant Street Highett • Moira Avenue Highett • Noyes St Highett • Regworth Court Highett <p>Gilarth Street Main Drain</p> <ul style="list-style-type: none"> • Advantage Road Highett • Arnold Street Cheltenham • Bluff Road Hampton • Dalmont Street Highett • Frederico Street Highett • June Street Highett • Marchant Road Highett • Miller Street Highett • Morley Crescent Highett • Nicol Street Highett • Reserve Road Cheltenham <p>Highett Main Drain</p> <ul style="list-style-type: none"> • Cooke Avenue Hampton East • Dane Street Hampton East • Graham Road Highett • Herbert Street Highett • Howitt Avenue Hampton East 	

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • Keith Street Hampton East • Kelsall Court Hampton East • Little Avenue Hampton East • Muir Street Highett • Maroona Road Highett • Overend Close Hampton East • Spring Road Hampton East • Terrens Close Hampton East • Widdop Crescent Hampton East • Wickham Road Hampton East • Worthing Road Highett Grenville Street Main Drain • Earlsfield Road Hampton • Fewster Road Hampton • Glamis Avenue Hampton • Grenville Street Hampton • Kingston Street Hampton • May Street Hampton • Ludstone Street Hampton • Poole Avenue Hampton • Porter Street Hampton • Raynespark Road Hampton • Teddington Road Hampton • Thomas Street Hampton • Thorburn Street Hampton • Willis Street Hampton Hoyts Street Drain Hampton • Holyrood Street Hampton 	
<p>20mm in 10 mins; 33mm in 30 mins; 41mm in 1 hour; 49mm in 2 hours; 49mm in 3 hours; or 68mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating</p>	<p>2% AEP (50 year ARI)</p>	<p>Properties at Flood Risk (over ground floor) 154 Properties in Total</p> <p>Abbott Street Main Drain</p> <ul style="list-style-type: none"> • 1, 4, 5 & 6 Harston Street, Sandringham <p>Banks Avenue Main Drain</p> <ul style="list-style-type: none"> • 5 & 7 Ashwood Avenue, Highett • 1/171 & 181 Bay Road, Sandringham • 366 Bluff Road, Sandringham • 12 Clements Street, Highett • 19 Kerferd Street, Hampton • 34 & 36 Lansell Avenue, Highett 	<p>VicSES to respond as per request by request basis.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
<p>flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>		<ul style="list-style-type: none"> • 9 & 26 Lawson Parade, Highett • 1/2, 2/2, 3/2, 4/2, 14, 15, 16, 17, 18 & 19 Moira Avenue, Highett • 9 Noyes Street, Highett • 4, 6, 8, 1/10, 2/10, 12, 14 & 16 Regworth Court, Highett • 77 & 79 Service Street, Hampton • 97 & 99 Willis Street, Hampton Gilarth Street Main Drain • 301, 303, 1/305 & 2/305 Bay Road, Cheltenham • 1/450, 2/450, 452, 454, 456B, 456A, 1/458 & 2/458 Bluff Road, Hampton • 48 Dalmont Street, Highett • 20 Gilarth Street, Highett • 2/1 Haynes Street, Highett • 132, 134, 2/136, 1/138, 2/138, 3/138, 1/140, 2/140, 3/140 & 4/140 Highett Road, Highett • 25 June Street, Highett • 8A Miller Street, Highett • 49 Wilson Street, Highett Grenville Street Main Drain • 17 Beach Road, Hampton • 51 Fewster Road, Hampton • 1 & 3 Glamis Avenue, Hampton • 9, 11, 13, 17 & 19 Grenville Street, Hampton • 8/24 & 9/24 Holyrood Street, Hampton • 3/97 Orlando Street, Hampton • 7 Ozone Street, Hampton • 11, 15, 17, 19, 23, 26, 34 & 1/36 Raynes Park Road, Hampton • 12 & 14 Teddington Road, Hampton • 166A, 168, 170, 170A, 172, 174, 176, 178, 180, 219 & 221 Thomas Street, Hampton • 1, 3, 6, 7, 8, 9, 9A, 11, 1/13, 2/13, 15 & 17 Thorburn Street, Hampton • 7 & 9 Willis Street, Hampton Highett Main Drain • 32-34 Graham Road, Highett • 3A Howitt Avenue, Hampton East • 1, 1/3, 2/3, 5, 7, 9, 11, 13, 15, 1/17 & 2/17 Keith Street, Hampton East • 1 & 2A Little Avenue, Hampton East • 2 & 3 Livingston Street, Highett • 1/8, 2/8, 3/8, 4/8 & 5/8 Muir Street, Highett • 15 Muir Street, Hampton East • 1 Widdop Crescent, Hampton East Hoyt Street Drain • 1 & 3 Bolton Avenue, Hampton 	

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • 6A, 6 & 10 Gordon Street, Hampton • 14 New Street, Hampton • May Street Main Drain • 43 & 47 Kingston Street, Hampton • 80 Ludstone Street, Hampton • Royal Avenue Drain • 1 Norwood Street, Sandringham • 10, 12, 15, 18, 20 & 24 Royal Avenue, Sandringham • Community Infrastructure Likely Flooded • Banks Ave Main Drain • Sandringham College Highett Campus at 356 Bluff Road, Highett • Highett Main Drain • Berendale School at 2 Berend Street, Hampton East • Basterfield Park at 2 Dane Road, Hampton East • Widdop Crescent Reserve at 41-45 Widdop Crescent, Hampton East • Grenville Main Drain • Sandringham Athletics Centre at 219 Thomast Street, Hampton • Hampton Scout Group at 219 Thomast Street, Hampton • May Street Main Drain • Castlefield Reserve at 69-71 Ludstone Street, Hampton • Water Over Road (above 300mm depth) • Banks Ave Main Drain • Austin Road Hampton • Bay Road Sandringham • Clements Street Highett • Duncan Street Sandringham • Garden Street Hampton • George Street Sandringham • Kerferd Street Hampton • Lansell Street Highett • Marchant Street Highett • Moira Avenue Highett • Noyes St Highett • Regworth Court Highett • Wales Street Hampton • Wangara Road Sandringham • Gilarth Street Main Drain • Advantage Road Highett • Arnold Street Cheltenham • Bluff Road Hampton 	<p>Community infrastructure to implement emergency evacuation plan if required</p> <p>Council to provide road closure signage if required.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • Dalmont Street Highett • Frederico Street Highett • Gillarth Street Highett • Highett Road Highett • June Street Highett • Marchant Road Highett • Miller Street Highett • Morley Crescent Highett • Nicol Street Highett • Reserve Road Cheltenham • Wilson Street Highett • Grenville Street Main Drain • Earlsfield Road Hampton • Fewster Road Hampton • Glamis Avenue Hampton • Grenville Street Hampton • Kingston Street Hampton • Ludstone Street Hampton • May Street Hampton • Poole Avenue Hampton • Porter Street Hampton • Raynespark Road Hampton • Thomas Street Hampton • Thorburn Street Hampton • Teddington Road Hampton • Willis Street Hampton • Highett Main Drain • Cooke Avenue Hampton East • Crest Avenue Hampton East • Dane Street Hampton East • Graham Road Highett • Herbert Street Highett • Holyrood Street Highett • Howitt Avenue Hampton East • Keith Street Hampton East • Kelsall Court Hampton East • Livingston St Highett • Little Avenue Hampton East • Maroona Road Highett 	

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • Muir Street Highett • Overend Close Hampton East • Parkview Crescent Hampton East • Seaton Road Hampton East • Spring Road Hampton East • Summit Avenue Hampton East • Terrens Close Hampton East • Wickham Road Hampton East • Widdop Crescent Hampton East • Worthing Road Highett <p>Hoyts Street Drain Hampton</p> <ul style="list-style-type: none"> • Holyrood Road Hampton 	
<p>21.8mm in 10 mins; 35.6mm in 30 mins; 45.7mm in 1 hour; 57.7mm in 2 hours; 82mm in 6 hours; or 102.5mm in 12 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>	<p>1% AEP (100 year ARI)</p>	<p>Properties at Flood Risk (over ground floor) 353 Properties in Total</p> <p>Abbott Street Main Drain</p> <ul style="list-style-type: none"> • 1, 3, 4, 5 & 6 Harston Street, Sandringham <p>Banks Avenue Main Drain</p> <ul style="list-style-type: none"> • 5 & 7 Ashwood Avenue, Highett • 14 Austin Road, Hampton • 1/171 & 181 Bay Road, Sandringham • 366 Bluff Road, Sandringham • 10, 12, 15 & 19 Clements Street, Highett • 42 Duncan Street, Sandringham • 83 Grange Road, Sandringham • 19 Kerferd Street, Hampton • 32, 34 & 36 Lansell Avenue, Highett • 9 & 26 Lawson Parade, Highett • 1/2, 2/2, 3/2, 4/2, 14, 15, 16, 17, 18 & 19 Moira Avenue, Highett • 9 Noyes Street, Highett • 4, 6, 8, 9, 1/10, 2/10, 11, 12, 14, 16 & 18 Regworth Court, Highett • 77 & 79 Service Street, Hampton • 73 & 75 Thomas Street, Hampton • 96, 97, 98 & 99 Willis Street, Hampton <p>Gilarth Street Main Drain</p> <ul style="list-style-type: none"> • 301, 303, 1/305 & 2/305 Bay Road, Cheltenham • 1/450, 2/450, 452, 454A, 454, 456B, 456A, 1/458 & 2/458 Bluff Road, Hampton • 48 Dalmont Street, Highett • 16, 18, 20 & 24 Gilarth Street, Highett • 2/1 Haynes Street, Highett • 132, 134, Units 1-3/136, Units 1-3/138 & Units 1-4/140 Highett Road, Highett 	<p>VicSES to respond as per request by request basis.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • 23, 25 & 27 June Street, Highett • 8A Miller Street, Highett • 37 & 39 Nicol Street, Highett • 47 & 49 Wilson Street, Highett • Grenville Street Main Drain • 17 & 33 Beach Road, Hampton • 1/49 & 51 Fewster Road, Hampton • 1 & 3 Glamis Avenue, Hampton • 9, 11, 13, 17 & 19 Grenville Street, Hampton • 8/24 & 9/24 Holyrood Street, Hampton • 68, 72, 74 & 3/97 Orlando Street, Hampton • 7 Ozone Street, Hampton • 1 Poole Avenue, Hampton • 1 Porter Street, Hampton • 11, 15, 17, 19, 21, 23, 24, 26, 34 & 1/36 Raynes Park Road, Hampton • 8, 12 & 14 Teddington Road, Hampton • 166A, 168, 170, 170A, 172, 174, 176, 178, 180, 219 & 221 Thomas Street, Hampton • 1, 2, 3, 6, 7, 8, 9, 9A, 11, 1/13, 2/13, 15 & 17 Thorburn Street, Hampton • 7 & 9 Willis Street, Hampton • Highett Main Drain • Units 1-8/462, Units 1-12/464, Units 1-4/466A, Units 1-4/468A & Units 1-4/470A Bluff Road, Hampton East • Units 1-8/1, Units 1-12/3 & Units 1-8/5 Cooke Avenue, Hampton East • 32-34 Graham Road, Highett • 2/469 & 2/471 Highett Road, Highett • 1/1, 2, 3A, 4 & 6 Howitt Avenue, Hampton East • 1, 1/3, 2/3, 5, 7, 9, 11, 13, 15, 1/17 & 2/17 Keith Street, Hampton East • 1, 2A & 2 Little Avenue, Hampton East • 2 & 3 Livingston Street, Highett • 1/8, 2/8, 3/8, 4/8, 5/8 & 2/12 Muir Street, Highett • 15 Muir Street, Hampton East • Units 1-4/1, 2/1, 3/1, Units 1-8/2, Units 1-4/3 & Units 1-4/4 Overend Close, Hampton East • Units 1-3/1, Units 1-4/2, Units 1-4/3, Units 1-8/4 & Units 1-3/5 Scarborough Drive, Hampton East • Units 1-4/1, Units 1-4/3, 2/3, 3/3, 4/3, Units 1-4/5, Units 1-4/7 & Units 1-4/9 Wickham Road, Hampton East • 1, Units 1-4/2, Units 1-12/4, Units 1-4/6, Units 1-4/8 & 41-45 Widdop Crescent, Hampton East • 3 Worthing Road, Highett • Hoyt Street Drain • 1, 3 & 5 Bolton Avenue, Hampton • 6A, 6, 10 & 17 Gordon Street, Hampton • 14 New Street, Hampton 	<p>Metro Rail to implement their emergency flood</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<p>May Street Main Drain</p> <ul style="list-style-type: none"> • 43 & 47 Kingston Street, Hampton • 76, 78 & 80 Ludstone Street, Hampton • 2 May Street, Hampton <p>Royal Avenue Drain</p> <ul style="list-style-type: none"> • 1 Norwood Street, Sandringham • 10, 12, 15, 18, 20 & 24 Royal Avenue, Sandringham <p>Community Infrastructure Likely Flooded</p> <p>Banks Ave Main Drain</p> <ul style="list-style-type: none"> • Sandringham College Highett Campus at 356 Bluff Road, Highett <p>Highett Main Drain</p> <ul style="list-style-type: none"> • Berendale School at 2 Berend Street, Hampton East • Basterfield Park at 2 Dane Road, Hampton East • Widdop Crescent Reserve at 41-45 Widdop Crescent, Hampton East <p>Grenville Main Drain</p> <ul style="list-style-type: none"> • Sandringham Athletics Centre at 219 Thomast Street, Hampton • Hampton Scout Group at 219 Thomast Street, Hampton <p>May Street Main Drain</p> <ul style="list-style-type: none"> • Castlefield Reserve at 69-71 Ludstone Street, Hampton <p>Essential Infrastructure Likely Impacted</p> <ul style="list-style-type: none"> • Potential for inundation of the Sandringham Railway line between Hampton Station and Brighton Beach Station • Potential for inundation of the Sandringham Railway line north of Middle Brighton Station • Bus Route 708 along Ludstone Street, and along Bluff Road, Hampton and Wicham Road in Highett • Bus Route 822 along Bay Road, Cheltenham • Bus Route 828 along Willis Street, Hampton and along Highett Road, Highett • Bus Route 922 along Hollyrood Street, Hampton <p>Water Over Road (above 300mm depth)</p> <p>Banks Ave Main Drain</p> <ul style="list-style-type: none"> • Austin Road Hampton • Bay Road Sandringham • Clements Street Highett • Duncan Street Sandringham • Garden street Hampton • George Street Sandringham • Grange Road Sandringham • Kenneth Street Sandringham • Kerferd Street Hampton • Lansell Street Highett • Lawson Street Highett 	<p>plan</p> <p>Community infrastructure to implement emergency evacuation plan if required</p> <p>Council to provide road closure signage if required.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • Marchant Street Highett • Moira Avenue Highett • Noyes St Highett • Regworth Court Highett • Wales Street Hampton • Wangara Road Sandringham • Gilarth Street Main Drain • Advantage Road Highett • Arnold Street Cheltenham • Bluff Road Hampton • Dalmont Street Highett • Frederico Street Highett • Gillarth Street Highett • Highett Road Highett • June Street Highett • Marchant Road Highett • Miller Street Highett • Morley Crescent Highett • Nicol Street Highett • Reserve Road Cheltenham • Wilson Street Highett • Grenville Street Main Drain • Earlsfield Road Hampton • Fewster Road Hampton • Glamis Avenue Hampton • Grenville Street Hampton • Kingston Street Hampton • Ludstone Street Hampton • May Street Hampton • Poole Avenue Hampton • Porter Street Hampton • Raynespark Road Hampton • Teddington Road Hampton • Thomas Street Hampton • Thorburn Street Hampton • Willis Street Hampton • Highett Main Drain • Cooke Avenue Hampton East • Crest Avenue Hampton East 	

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • Dane Street Hampton East • Graham Road Highett • Herbert Street Highett • Holyrood Street Highett • Howitt Avenue Hampton East • Keith Street Hampton East • Kelsall Court Hampton East • Little Avenue Hampton East • Livingston St Highett • Maroona Road Highett • Muir Street Highett • Overend Close Hampton East • Parkview Crescent Hampton East • Seaton Road Hampton East • Spring Road Hampton East • Summit Avenue Hampton East • Terrens Close Hampton East • Wickham Road Hampton East • Widdop Crescent Hampton East • Worthing Road Highett • Hoyts Street Drain Hampton • Beach Road Hampton • Holyrood Street Hampton 	

Table C2.10 – Breakdown of possible consequences at various rainfall intensities around Hampton, Hampton East, Highett and Sandringham with operational considerations

APPENDIX C3 – BEAUMARIS FLOOD EMERGENCY PLAN

Overview of Flooding Consequences

This Summary table is generated from Victorian Government data. The State of Victoria does not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for error, loss or damage which may arise from reliance upon it. All persons access this information should make appropriate enquiries to assess the currency of the data.

Summary of Consequences in a 1% AEP (100yr ARI) flash flood in Beaumaris					
Property					
Properties	46				
Residential	42				
Commercial	4	East and South Concourse Shops			
Industrial	0				
Public Land	0				
Rural	0				
Community Infrastructure					
Health Facilities	0		Child Care / Kindergartens	1	Beaumaris Three Year Old Kinder
Care Facilities	0		Community Venues	0	
Retirement Villages	0		Places of Worship	1	St Martins Beaumaris Uniting Church
Schools / Colleges	1	Beaumaris Secondary College Sports Grounds	Prisons	0	
Essential Infrastructure					
Major Roads	1	Balcombe Road	Police Stations	0	
Major Rail	0		Government Buildings	0	
Bus Routes	2	825; & 922	Sewerage Facilities	2	Pumping Stations
Power Facility	0		Levees	0	
Comms Services	0		Drainage Facilities	0	
Emergency Services	0		Airports / Airfields	0	
Tourism / Recreation					
Sports Facilities	2	Beaumaris Secondary College Sports Grounds; Royal Melbourne Golf Club (East)	Caravan Parks	0	
Recreation Facilities	1	Banksia Reserve	Camping Grounds	0	
Government Boundaries					
Local Gov't Areas	1	Bayside	CMA	1	Port Phillip & Westernport
Adjacent LGAs	0		CFA District	0	
SES Unit Area	1	Moorabbin	MFB District	1	Southern

Table C3.1 – Consequence Summary of 1% AEP flash flood in Beaumaris

Beaumaris and Black Rock are located approximately 20km south east of Melbourne in an established residential area. There are no major watercourses running through area, with all local drains flowing directly into Port Phillip Bay. High Intensity, short duration rainfall events can cause flash flooding in and around Beaumaris and Black Rock, while prolonged rainfall combined with an incoming tide may also contribute to flooding. The area sees moderate to slow water movement

depending on the terrain in the area which sees a mixture of rolling hills and flat ground. Flooding may last for a number of days on the flatter ground where ponding can occur. See mapping in **Appendix F** for more insight into flooding in the area.

Warning Times

Warning times for flooding are limited as there are no major watercourses flowing through the area, and no hydrographic/ telemetry stations (river gauges). Melbourne Water does not provide any flood warning service at this point.

Rain Gauges at Sandringham and Hampton may provide some indication of the likelihood of flooding. See the Melbourne Water website for more information on gauges:

Melbourne Water Hydrographic Monitoring Station	Station No.	Location	Stream Level & Flow Gauge	Rain Gauge	Melway Reference
Hampton	586036	Hampton Bowling Club, Fewster Street, Hampton		✓	76 J6
Sandringham	586184	South East Water's Service Reservoir within the Bayside Waste & Recycling Centre, Talinga Road, Cheltenham		✓	86 D1

Table C3.2 – Hydrographic Monitoring Stations near Beaumaris

See the Melbourne Water website for more information on these gauges: <http://www.melbournewater.com.au/waterdata/rainfallandriverleveldata/Pages/Rainfall-and-river-level-new.aspx>. It is advised that residents monitor the Bureau of Meteorology's website <http://www.bom.gov.au/> and the VicEmergency website <https://emergency.vic.gov.au/> for any thunderstorm, flood or severe weather warnings present for their area.

Areas of Flood Risk



Map Produced by VICSES May 2019

CITY OF BAYSIDE

Version 3. May 2019

C3. Areas of flood risk around Black Rock & Beaumaris

- | | | | | | |
|--|---|--|----------------------------------|--|------------------------|
| | Waterbody | | Melbourne Water Stormwater Drain | | Telephone Exchange |
| | 1% AEP Flash Flood Extent | | Bicycle / Walking Trail | | Police Station |
| | Reserve / Park | | Ambulance Station | | Municipal Depot |
| | Commercial Precinct | | Aged Care Facility | | Power Terminal Station |
| | Melbourne Water Retarding Basin | | Hospital | | Rain Gauge |
| | 1% AEP Storm Surge Extent (Depth Unavailable) | | School / College | | Place of Worship |
| | Boundary for this Appendix | | Sewer Pumping Station | | Municipal Offices |
| | Bus Route (PTV) | | Child Care / Kindergarten | | Community Centre |



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Figure C3 – Areas of flood risk around Beaumaris in the City of Bayside

Properties at Flood Risk

Properties listed in the table below are at risk from flash flooding over ground floor in Beaumaris. As more intelligence becomes available, this list may change. This table has been populated based on modelling work as part of the Pellatt St/Nautilus St Drains (GHD, June 2016) flood mapping and risk assessment program. Note that any multi-lot properties situated above ground floor likely impacted by isolation only with flooding on ground floor impacting access to common areas and/or carpark and storage facilities. Information on above ground-floor properties is not available in this list.

This Property Flood Risk Table is presented by the Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information have not been independently verified by the Victoria State Emergency Service. No liability is accepted for any damage, loss or injury caused by errors or omissions in this information or for any action taken by any person in reliance upon it.

Properties at risk from flash flooding over ground floor in Beaumaris						
Residential			Commercial	Industrial	Rural	Public Use
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
		✓	5 Agnes Street	Beaumaris	Nautilus Street Drain	Flash
		✓	7 Agnes Street	Beaumaris	Nautilus Street Drain	Flash
		✓	9 Agnes Street	Beaumaris	Nautilus Street Drain	Flash
		✓	14 Agnes Street	Beaumaris	Nautilus Street Drain	Flash
	✓	✓	393 Balcombe Road	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	395 Balcombe Road	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	397 Balcombe Road	Beaumaris	Pellatt Street Drain	Flash
		✓	402 Balcombe Road	Beaumaris	Pellatt Street Drain	Flash
		✓	18 Bayview Road	Beaumaris	Pellatt Street Drain	Flash
✓	✓	✓	36 Coreen Avenue	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	38 Coreen Avenue	Beaumaris	Pellatt Street Drain	Flash
		✓	2 East Concourse	Beaumaris	Nautilus Street Drain	Flash
		✓	12 East Concourse	Beaumaris	Nautilus Street Drain	Flash
		✓	30A Gramatan Avenue	Beaumaris	Nautilus Street Drain	Flash
		✓	4 Hardinge Street	Beaumaris	Nautilus Street Drain	Flash
	✓	✓	15 Hardy Grove	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	17 Hardy Grove	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	3/2 Morey Road	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	136 Oak Street	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	138 Oak Street	Beaumaris	Pellatt Street Drain	Flash
		✓	140 Oak Street	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	142 Oak Street	Beaumaris	Pellatt Street Drain	Flash
		✓	144 Oak Street	Beaumaris	Pellatt Street Drain	Flash
		✓	145 Oak Street	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	147 Oak Street	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	1/7 Ozone Avenue	Beaumaris	Pellatt Street Drain	Flash
✓	✓	✓	2/7 Ozone Avenue	Beaumaris	Pellatt Street Drain	Flash
		✓	70 Pellatt Street	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	145 Pellatt Street	Beaumaris	Pellatt Street Drain	Flash

Properties at risk from flash flooding over ground floor in Beaumaris						
Residential		Commercial	Industrial	Rural	Public Use	
Street No. at Risk in AEP Event			Address	Suburb	Along Melbourne Water Watercourse	Flood Risk Type
20% AEP	5% AEP	1% AEP				
	✓	✓	147 Pellatt Street	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	148 Pellatt Street	Beaumaris	Pellatt Street Drain	Flash
		✓	150 Pellatt Street	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	152 Pellatt Street	Beaumaris	Pellatt Street Drain	Flash
		✓	82 Reserve Road	Beaumaris	Nautilus Street Drain	Flash
		✓	95 Reserve Road	Beaumaris	Nautilus Street Drain	Flash
		✓	14 South Concourse	Beaumaris	Nautilus Street Drain	Flash
		✓	24 South Concourse	Beaumaris	Nautilus Street Drain	Flash
		✓	187 Tramway Parade	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	191 Tramway Parade	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	199 Tramway Parade	Beaumaris	Pellatt Street Drain	Flash
		✓	12 Vardon Avenue	Beaumaris	Pellatt Street Drain	Flash
	✓	✓	14 Vardon Avenue	Beaumaris	Pellatt Street Drain	Flash
		✓	16 Vardon Avenue	Beaumaris	Pellatt Street Drain	Flash
		✓	18 Vardon Avenue	Beaumaris	Pellatt Street Drain	Flash
		✓	4 Victor Street	Beaumaris	Nautilus Street Drain	Flash
		✓	12 Victor Street	Beaumaris	Nautilus Street Drain	Flash
Totals						
2	21	46				

Table C3.3 – Properties at risk of flooding in Beaumaris in the City of Bayside

Isolation

No major isolation risks exist for areas around Beaumaris. Some localised short-duration isolation may occur due to flash flooding.

Essential Infrastructure

During an event, see the Public Transport Victoria's Website for details on delays or alterations to services. <http://ptv.vic.gov.au/live-travel-updates/>. A map of Public Transport routes within the City of Bayside is available via the website at: https://www.ptv.vic.gov.au/assets/default-site/more/maps/Local-area-maps/Metropolitan/a6d71099a7/3_Bayside_LAM.pdf

Apart from the roads outlined below, all other essential infrastructure and services areas around Beaumaris are expected to remain predominantly dry during an intense rainfall event.

Road Closures

The following roads are subject to closure during flooding around Beaumaris. Check the VicRoads website for more details: <https://traffic.vicroads.vic.gov.au/>

VicRoads Roads likely flooded in a 1% AEP event
<ul style="list-style-type: none"> Balcombe Road, Beaumaris, between Rosemary Road and Coreen Ave

Table C3.4 – VicRoads Possible Road Closures during a flooding event

Bayside City Council Roads likely flooded in a 1% AEP event		
Beaumaris	<ul style="list-style-type: none"> Haldane Street 	<ul style="list-style-type: none"> Reserve Road
<ul style="list-style-type: none"> Agnes Street 	<ul style="list-style-type: none"> Hardinge Street 	<ul style="list-style-type: none"> Scott Street
<ul style="list-style-type: none"> Balcombe Park Lane 	<ul style="list-style-type: none"> Oak Street 	<ul style="list-style-type: none"> South Concourse
<ul style="list-style-type: none"> Coreen Avenue 	<ul style="list-style-type: none"> Pasadena Avenue 	<ul style="list-style-type: none"> Victor Street
<ul style="list-style-type: none"> Griffiths Street 	<ul style="list-style-type: none"> Pellatt Street 	<ul style="list-style-type: none"> White Street

Table C3.5 – Bayside City Council Possible Road Closures during a flooding event

Flood Mitigation

No formal Pumping Stations, Retarding Basins or Levees exist around Beaumaris.

Sewerage Infrastructure

Sewerage Infrastructure of note during a severe flood event located around Beaumaris is contained within the following two table. To view their locations, view mapping in **Appendix F**.

Sewer Pumping Stations

Sewerage Pumping Station	On Drain / Waterway	Bank / Side of Waterway	Operator	Location	Melway Reference
Beaumaris	Local Drainage		South East Water	2 Reserve Road, Beaumaris	86 C9
Black Rock	Local Drainage		South East Water	6 Fourth Street, Black Rock	85 K6

Table C3.6 – Sewer Pumping Stations around Beaumaris and Black Rock in the City of Bayside

Command, Control and Coordination

VICSES will assume overall control of the response to flood incidents. Other agencies will be requested to support operations as detailed in this Plan. Control and coordination of a flood incident shall be carried out at the lowest effective level and in accordance with the State Emergency Response Plan (EMMV Part 3). During significant events, VICSES will conduct incident management using multi-agency resources.

Flood Impacts & Operational Considerations (Intelligence Cards)

The table on the following pages provide a breakdown of the possible consequences of flooding in Beaumaris at various rain totals. This table is to be used only as a guide as no two floods at a location will have identical impacts.

Intelligence Cards have been included for the following locations:

- Beaumaris Stormwater Drains

FLOOD INTELLIGENCE CARD – BEAUMARIS STORMWATER DRAINS (UNGAUGED)

Version 3 – May 2019



Note: flood intelligence records are approximations. This is because no two floods at a location, even if they peak at the same height, will have identical impacts. Flood intelligence cards detail the relationship between flood magnitude and flood consequences. More details about flood intelligence and its use can be found in the Australian Emergency Management Manuals flood series.

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CLOSEST RAIN GAUGE	Sandringham RG
LOCATION	South East Water's Service Reservoir within the Bayside Waste & Recycling Centre, Talinga Road, Cheltenham
MELWAY REF:	77 D12

GAUGE NUMBER	586184
GAUGE TYPE	Rain
TELEMETRIC/MANUAL	Telemetric

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
12mm in 10 mins; 19mm in 30 mins; 25mm in 1 hour; 31mm in 2 hours; 35mm in 3 hours; or 43mm in 6 hours Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungaged nature of the catchment. This should be used as a guide only.	20% AEP (5 year ARI)	Properties at Flood Risk (over ground floor) 2 Properties in Total Pellatt Street Drain <ul style="list-style-type: none"> 36 Coreen Avenue, Beaumaris 2/7 Ozone Avenue, Beaumaris Water Over Road (above 300mm depth) Pellatt Street Main Drain <ul style="list-style-type: none"> Coreen Avenue, Beaumaris 	VicSES will provide warnings using OSOM and SMSER as required based on the predications provided by BoM regarding flood levels and the risk of Flash Flooding. The Central Duty officer in conjunction with the Regional Agency Controller will maintain operational awareness and form an appropriate response arrangement to suit the level of incident VicSES to respond as per request by request basis. Council to provide road closure signage if required.
14mm in 10 mins; 23mm in 30 mins; 29mm in 1 hour; 36mm in 2 hours; 40mm in 3 hours; or	10% AEP (10 year ARI)	Properties at Flood Risk (over ground floor) 11 Properties in Total Pellatt Street Drain <ul style="list-style-type: none"> 393, 395, 397 & 402 Balcombe Road, Beaumaris 36 & 38 Coreen Avenue, Beaumaris 3/2 Morey Road, Beaumaris 	VicSES will provide warnings using OSOM and SMSER as required based on the predications provided by BoM regarding flood levels and the risk of Flash Flooding. The Central Duty officer in conjunction with the Regional Agency Controller will maintain operational awareness and form an appropriate

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
<p>50mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>		<ul style="list-style-type: none"> • 1/7 & 2/7 Ozone Avenue, Beaumaris <p>Essential Infrastructure Likely Impacted</p> <ul style="list-style-type: none"> • Bus Route 922 along Reserve Road, Beaumaris at the Beaumaris Library <p>Tourism / Recreation Likely Flooded</p> <ul style="list-style-type: none"> • Pellatt Street Main Drain • Royal Melbourne Golf Club (East), Morey Road, Beaumaris <p>Water Over Road (above 300mm depth)</p> <p>Coral Avenue Drain</p> <ul style="list-style-type: none"> • Pasadena Avenue, Beaumaris <p>Nautilus Street Drain</p> <ul style="list-style-type: none"> • Hardinge Street, Beaumaris • Reserve Road, Beaumaris • Victor Street, Beaumaris • White Street, Beaumaris <p>Pellatt Street Main Drain</p> <ul style="list-style-type: none"> • Coreen Avenue, Beaumaris • Griffiths Street, Beaumaris • Pellatt Street, Beaumaris • Scott Street, Beaumaris 	<p>response arrangement to suit the level of incident</p> <p>VicSES to respond as per request by request basis.</p> <p>Council to provide road closure signage if required.</p>
<p>16mm in 10 mins; 27mm in 30 mins; 34mm in 1 hour; 41mm in 2 hours; 46mm in 3 hours; or 57mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>	<p>5% AEP (20 year ARI)</p>	<p>Properties at Flood Risk (over ground floor)</p> <p>21 Properties in Total</p> <p>Pellatt Street Drain</p> <ul style="list-style-type: none"> • 393, 395, 397 & 402 Balcombe Road, Beaumaris • 36 & 38 Coreen Avenue, Beaumaris • 15 & 17 Hardy Grove, Beaumaris • 3/2 Morey Road, Beaumaris • 136, 138, 140, 142, 144, 145 & 147 Oak Street, Beaumaris • 1/7 & 2/7 Ozone Avenue, Beaumaris <p>Essential Infrastructure Likely Impacted</p> <ul style="list-style-type: none"> • Bus Route 922 along Reserve Road, Beaumaris at the Beaumaris Library <p>Tourism / Recreation Likely Flooded</p> <ul style="list-style-type: none"> • Pellatt Street Main Drain • Royal Melbourne Golf Club (East), Morey Road, Beaumaris <p>Water Over Road (above 300mm depth)</p> <p>Coral Avenue Drain</p> <ul style="list-style-type: none"> • Pasadena Avenue, Beaumaris <p>Nautilus Street Drain</p> <ul style="list-style-type: none"> • Hardinge Street, Beaumaris • Reserve Road, Beaumaris 	<p>VicSES will provide warnings using OSOM and SMSER as required based on the predications provided by BoM regarding flood levels and the risk of Flash Flooding. The Central Duty officer in conjunction with the Regional Agency Controller will maintain operational awareness and form an appropriate response arrangement to suit the level of incident</p> <p>VicSES to respond as per request by request basis.</p> <p>Council to provide road closure signage if required.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> • Victor Street, Beaumaris • White Street, Beaumaris <p>Pellatt Street Main Drain</p> <ul style="list-style-type: none"> • Coreen Avenue, Beaumaris • Griffiths Street, Beaumaris • Pellatt Street, Beaumaris • Scott Street, Beaumaris 	
<p>20mm in 10 mins; 32mm in 30 mins; 40mm in 1 hour; 48mm in 2 hours; 54mm in 3 hours; or 67mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>	<p>2% AEP (50 year ARI)</p>	<p>Properties at Flood Risk (over ground floor) 21 Properties in Total</p> <p>Pellatt Street Drain</p> <ul style="list-style-type: none"> • 393, 395, 397 & 402 Balcombe Road, Beaumaris • 36 & 38 Coreen Avenue, Beaumaris • 15 & 17 Hardy Grove, Beaumaris • 3/2 Morey Road, Beaumaris • 136, 138, 140, 142, 144, 145 & 147 Oak Street, Beaumaris • 1/7 & 2/7 Ozone Avenue, Beaumaris <p>Community Infrastructure Likely Flooded</p> <ul style="list-style-type: none"> • Pellatt Street Main Drain • Beaumaris Three Year Old Kinder, 78-80 Dalgetty Road, Beaumaris • St Martins Beaumaris Uniting Church, 78-80 Dalgetty Road, Beaumaris <p>Essential Infrastructure Likely Impacted</p> <ul style="list-style-type: none"> • Bus Route 825 along Balcombe Road, Beaumaris at Coreen Avenue • Bus Route 922 along Reserve Road, Beaumaris at the Beaumaris Library <p>Tourism / Recreation Likely Flooded</p> <ul style="list-style-type: none"> • Pellatt Street Main Drain • Royal Melbourne Golf Club (East), Morey Road, Beaumaris <p>Water Over Road (above 300mm depth)</p> <p>Coral Avenue Drain</p> <ul style="list-style-type: none"> • Balcombe Park Lane, Beaumaris • Pasadena Avenue, Beaumaris <p>Nautilus Street Drain</p> <ul style="list-style-type: none"> • Agnes Street, Beaumaris • Hardinge Street, Beaumaris • Reserve Road, Beaumaris • Victor Street, Beaumaris • White Street, Beaumaris <p>Pellatt Street Main Drain</p> <ul style="list-style-type: none"> • Balcombe Road, Beaumaris • Coreen Avenue, Beaumaris 	<p>VicSES to respond as per request by request basis.</p> <p>College to implement emergency evacuation plan if required</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<ul style="list-style-type: none"> Griffiths Street, Beaumaris Haldane Street, Beaumaris Oak Street, Beaumaris Pellatt Street, Beaumaris Scott Street, Beaumaris 	
<p>22mm in 10 mins; 37mm in 30 mins; 45mm in 1 hour; 54mm in 2 hours; 60mm in 3 hours; or 75mm in 6 hours</p> <p>Note: rainfall depths are a very rough method of estimating flood events and have been used due to the ungagged nature of the catchment. This should be used as a guide only.</p>	1% AEP (100 year ARI)	<p>Properties at Flood Risk (over ground floor) 46Properties in Total</p> <p>Nautilus Street Drain</p> <ul style="list-style-type: none"> 5, 7, 9 & 14 Agnes Street, Beaumaris 2 & 12 East Concourse, Beaumaris 30A Gramatan Avenue, Beaumaris 4 Hardinge Street, Beaumaris 82 & 95 Reserve Road, Beaumaris 14 & 24 South Concourse, Beaumaris 4 & 12 Victor Street, Beaumaris <p>Pellatt Street Drain</p> <ul style="list-style-type: none"> 393, 395, 397 & 402 Balcombe Road, Beaumaris 18 Bayview Road, Beaumaris 36 & 38 Coreen Avenue, Beaumaris 15 & 17 Hardy Grove, Beaumaris 3/2 Morey Road, Beaumaris 136, 138, 140, 142, 144, 145 & 147 Oak Street, Beaumaris 1/7 & 2/7 Ozone Avenue, Beaumaris 70, 145, 147, 148, 150 & 152 Pellatt Street, Beaumaris 187, 191 & 199 Tramway Parade, Beaumaris 12, 14, 16 & 18 Vardon Avenue, Beaumaris <p>Community Infrastructure Likely Flooded</p> <p>Coral Avenue Drain</p> <ul style="list-style-type: none"> Beaumaris Secondary College sports grounds, 117-135 Reserve Road, Beaumaris <p>Pellatt Street Main Drain</p> <ul style="list-style-type: none"> Banksia Reserve, 68 Oak Street, Beaumaris Beaumaris Three Year Old Kinder, 78-80 Dalgetty Road, Beaumaris St Martins Beaumaris Uniting Church, 78-80 Dalgetty Road, Beaumaris <p>Essential Infrastructure Likely Impacted</p> <ul style="list-style-type: none"> Bus Route 825 along Balcombe Road, Beaumaris at Coreen Avenue Bus Route 922 along Reserve Road, Beaumaris at the Beaumaris Library <p>Tourism / Recreation Likely Flooded</p> <ul style="list-style-type: none"> Pellatt Street Main Drain Royal Melbourne Golf Club (East), Morey Road, Beaumaris <p>Water Over Road (above 300mm depth)</p>	<p>VicSES to respond as per request by request basis.</p> <p>College to implement emergency evacuation plan if required</p> <p>Council to provide road closure signage if required.</p>

Design Rainfall Depths (mm) – Indication of Possible Flooding	Annual Exceedance Probability (% AEP)	Consequence / Impact	Operational Considerations
		<p>Coral Avenue Drain</p> <ul style="list-style-type: none"> • Balcombe Park Lane, Beaumaris • Pasadena Avenue, Beaumaris <p>Nautilus Street Drain</p> <ul style="list-style-type: none"> • Agnes Street, Beaumaris • Hardinge Street, Beaumaris • Reserve Road, Beaumaris • South Concourse, Beaumaris • Victor Street, Beaumaris • White Street, Beaumaris <p>Pellatt Street Main Drain</p> <ul style="list-style-type: none"> • Balcombe Road, Beaumaris • Coreen Avenue, Beaumaris • Griffiths Street, Beaumaris • Haldane Street, Beaumaris • Oak Street, Beaumaris • Pellatt Street, Beaumaris • Scott Street, Beaumaris 	

Table C3.7 – Breakdown of possible consequences at various rainfall intensities around Beaumaris with operational considerations

APPENDIX D - FLOOD EVACUATION ARRANGEMENTS

Phase 1 - Decision to Evacuate

The IC may make the decision to evacuate an at-risk community under the following circumstances:

- Properties are likely to become inundated;
- Properties are likely to become isolated and occupants are not suitable for isolated conditions;
- Public health is at threat as a consequence of flooding and evacuation is considered the most effective risk treatment. This is the role of the Health Commander of the incident to assess and manage. Refer to the State Health Emergency Response Plan (SHERP) for details);
- Essential services have been damaged and are not available to a community and evacuation is considered the most effective risk treatment.

The following should be considered when planning for evacuation:

- Anticipated flood consequences and their timing and reliability of predictions;
- Size and location of the community to be evacuated;
- Likely duration of evacuation;
- Forecast weather;
- Flood Models;
- Predicted timing of flood consequences;
- Time required to conduct the evacuation;
- Time available to conduct the evacuation;
- Evacuation priorities and evacuation planning arrangements;
- Access and egress routes available and their potential flood liability;
- Current and likely future status of essential infrastructure;
- Resources required to conduct the evacuation;
- Resources available to conduct the evacuation;
- Shelter including Emergency Relief Centres, Assembly Areas etc.;
- Vulnerable people and facilities;
- Transportation;
- Registration
- People of CALD background and transient populations;
- Safety of emergency service personnel; and
- Different stages of an evacuation process.

The decision to evacuate is to be made in consultation with the MERO, MERC, DHS, Health Commander and other key agencies and expert advice (CMA's and Flood Intelligence specialists).

Phase 2 – Warning

Warnings may include a warning to prepare to evacuate and a warning to evacuate immediately. Once the decision to evacuate has been made, the at-risk community will be warned to evacuate. Evacuation warnings can be disseminated via methods listed in Part 3 of this Plan.

Evacuation warning messages will be developed and issued by VICSES in consultation with the MERO, MERC, DHS and other key agencies and expert advice (CMA's and Flood Intelligence specialists).

Phase 3 – Withdrawal

Withdrawal will be controlled by VICPOL. VICSES will provide advice regarding most appropriate evacuation routes and locations for at-risk communities to evacuate to.

VICSES, CFA, AV and Local Government will provide resources where available to support VICPOL/VICROADS with route control and may assist VICPOL in arranging evacuation transportation.

VICPOL will control security of evacuated areas.

Evacuees will be encouraged to move using their own transport where possible. Transport for those without vehicles or other means will be arranged via the MERO

Vulnerable People in Emergencies

Vulnerable people living in the community will be identified through funded agencies, community service organisations or other community networks. Such people will be assessed against the definition of a vulnerable person and may qualify for registration on the Vulnerable Persons Register (VPR). A list of facilities where vulnerable people may be located is also kept by Council. These may be funded facilities including, education, health and childcare, commonwealth regulated aged care facilities and other locally identified facilities. Further information on Vulnerable People in Emergencies can be obtained from Councils Emergency Management Co-ordinator.

Phase 4 – Shelter

Relief Centres and/or assembly areas which cater for people's basic needs for floods may be established to meet the immediate needs of people affected by flooding. The emergency relief centres and/or Assembly Areas are listed in the MEMPlan

VICPOL in consultation with VICSES will liaise with Local Government and DHS (where regional coordination is required) via the relevant control centre to plan for the opening and operation of relief centres. This can best be achieved through the EMT.

Animal Shelter

Animal shelter compounds can be established for domestic pets and companion animals of evacuees. These facilities may be located at locations detailed in the MEMPlan.

Caravans

There are no Caravan parks in the City of Bayside.

Phase 5 – Return

Return will be consistent with the Strategic Plan for the Return of Community

The IC in consultation with VICPOL will determine when it is safe for evacuees to return to their properties and will arrange for the notification of the community.

VICPOL will manage the return of evacuated people with the assistance of other agencies as required.

Considerations for deciding whether to evacuate include:

- Current flood situation;
- Status of flood mitigation systems;
- Size and location of the community;
- Access and egress routes available and their status;
- Resources required to coordinate the return;
- Special needs groups;
- Forecast weather; and
- Transportation particularly for people without access to transport

Disruption to Services

Disruption to a range of services can occur in the event of a flood. This may include road closures affecting school bus routes and water treatment plant affecting potable water supplies.

Essential Infrastructure and Property Protection

Essential Infrastructure and properties (e.g. residences, businesses, roads, power supply etc.) that require protection are to be listed in future plans

Bayside City Council will establish a sandbag collection point if required at a location to be determined by the IC and MERO.

Rescue

There are no resources identified that are available within Bayside City Council to assist with rescue operations.

There are no known high-risk areas and/or communities (i.e. low-lying islands) where rescues might be required.

APPENDIX E - FLOOD WARNING SYSTEMS

Flood Warning

Flood Warning products and Flood Class Levels can be found on the BoM website. Flood Warning Products include Severe Thunderstorm Warnings, Severe Weather Warnings, Flood Watches and Flood Warnings.

Flood Bulletins

VICSES distributes flood emergency information to the media through “Flood Bulletins”. Flood Bulletins provide BoM Flood Warning information as well as information regarding possible flood consequences and safety advice, not contained in BoM Flood Warning products. VICSES uses the title Flood bulletin to ensure emphasis is placed upon BoM Flood Warning product titles.

The relevant VICSES Region Headquarters or the established ICC will normally be responsible for drafting, authorizing and issuing issue Flood Bulletins, using the One Source, One Message system.

Flood Bulletins should refer to the warning title within the Bulletin header, for example Flood Bulletin for Major Flood Warning on Yarra River.

Flood Bulletins should follow the following structure

- What is the current flood situation;
- What is the predicted flood situation;
- What are the likely flood consequences;
- What should the community do in response to flood warnings;
- Where to seek further information; and
- Who to call if emergency assistance is required.

It is important that the description of the predicted flood situation is consistent with and reflects the relevant BoM Flood Warning.

Flood Bulletins should be focused on specific gauge (or in the absence of gauges, catchment) reference areas, that is the area in which flood consequences specifically relate to the relevant flood gauge.

Flood Bulletins should be prepared and issued after receipt of each Flood Watch and Flood Warning from the BoM, or after Severe Weather or Thunderstorm Warnings indicating potential for severe flash flooding.

To ensure flood bulletins are released in a timely manner, standardised flood bulletins may be drafted based on different scenarios, prior to events occurring. The standardised flood bulletins can then be adapted to the specifics of the event occurring or predicted to occur.

Local Flood Warning System Arrangements

Melbourne Water has a monitoring station along the Elster Creek/Elsternwick Main Drain near Head Street, Brighton. The purpose of this device is to provide flood level and flow rates for the purposes of flood warning within the area and to provide historical records.

APPENDIX F – MAPS

Overview

Maps considered useful to flood response are included in this Appendix. They include:

- A map outlining a series of flooding hot spot maps within the City of Bayside.
- A map showing the Municipal boundary together with the open waterways and underground stormwater drainage pipe network within the City of Bayside and the 1% AEP (100-year ARI) flood extents (sourced from Melbourne Water GIS).
- A set of 4 maps showing flooding hot spots within the City of Bayside together with the 1% AEP (100-year ARI) flood extents (sourced from the Melbourne Water GIS).

Note that:

- Maps showing the Special Building Overlay and Land Subject to Inundation Overlay are included in the Bayside Planning Scheme can be used as a guide to areas that may flood during an event. The maps can be found in hard copy form at the Council's main office or online at the Department of Planning and Community Development website <http://planningschemes.dpcd.vic.gov.au/>.
- Maps showing 1 in 100-year ARI (1% AEP) flood extents and floodways (together with volume, height and water quality data) are shown at DELWP's mapshare website <http://mapshare.maps.vic.gov.au/MapShareVic/index.html?viewer=MapShareVic.PublicSite&locale=en-AU>.



Flood Mapping Index

- 1 Elster Creek and Meek St Drain (Brighton)
- 2 Banks Ave, Gilart St and Highett Main Drains (Sandringham)
- 3 Well St and Meek St Drains (Hampton)
- 4 Nautilus St and Pellatt St Drains (Beaumaris)

CITY OF BAYSIDE
Version 3: May 2019
A - Flood Index Map

- | | | |
|---------------------------------|-------------------------|----------------------------------|
| 1% AEP Storm Surge Extent | Commercial Precinct | Waterway |
| 1% AEP Flash Flood Extent | Stream Level Gauge | Melbourne Water Stormwater Drain |
| Reserve / Area of Interest | Rain Gauge | Tramway |
| Waterbody | Municipal Building | Flood Mapping Border |
| Melbourne Water Retarding Basin | Municipal Depot | |
| | State Emergency Service | |

This map publication is presented by the Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information have not been independently verified by the Victoria State Emergency Service. No liability is accepted for any damage, loss or injury caused by errors or omissions in this information or for any action taken by any person in reliance upon it.

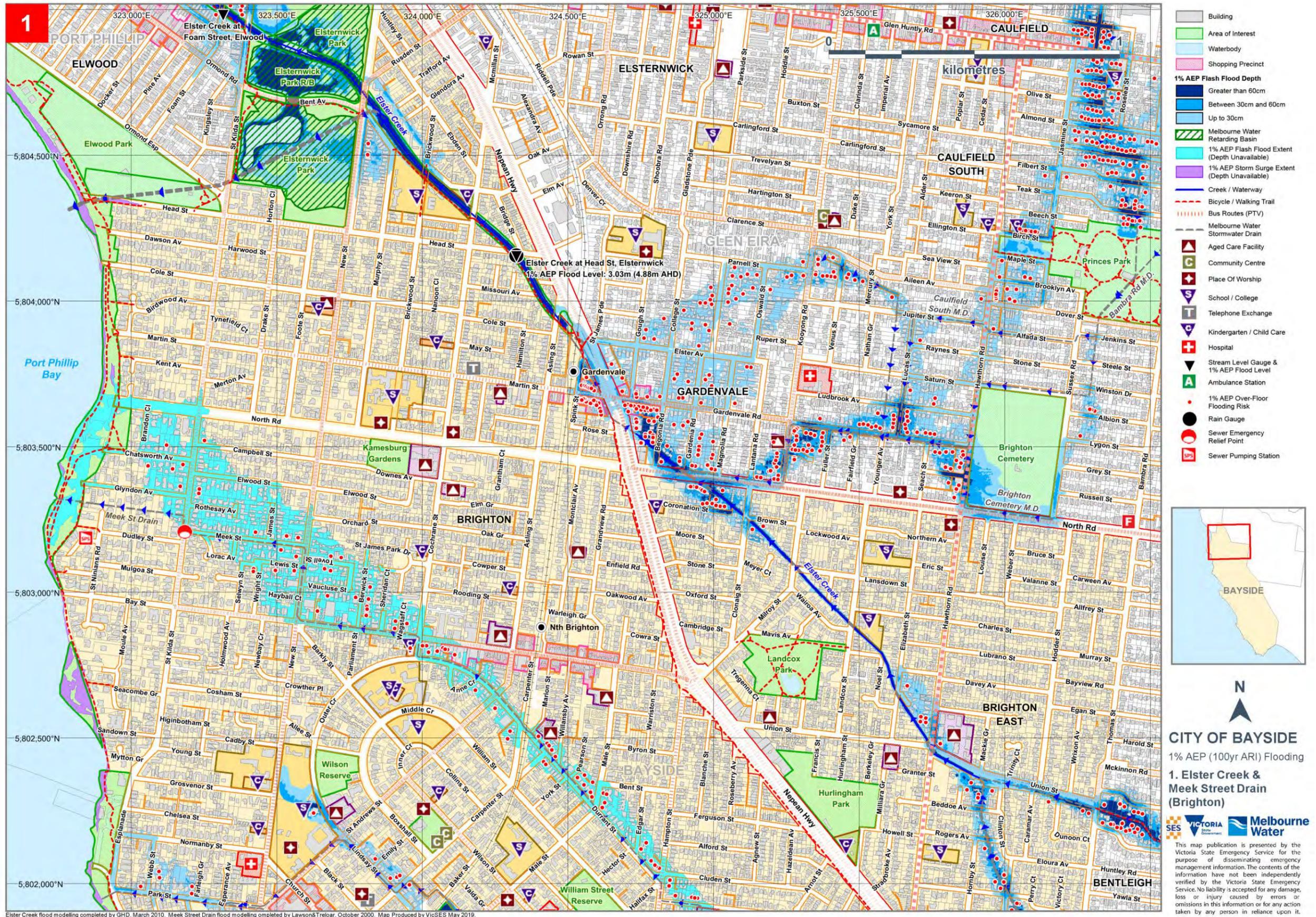


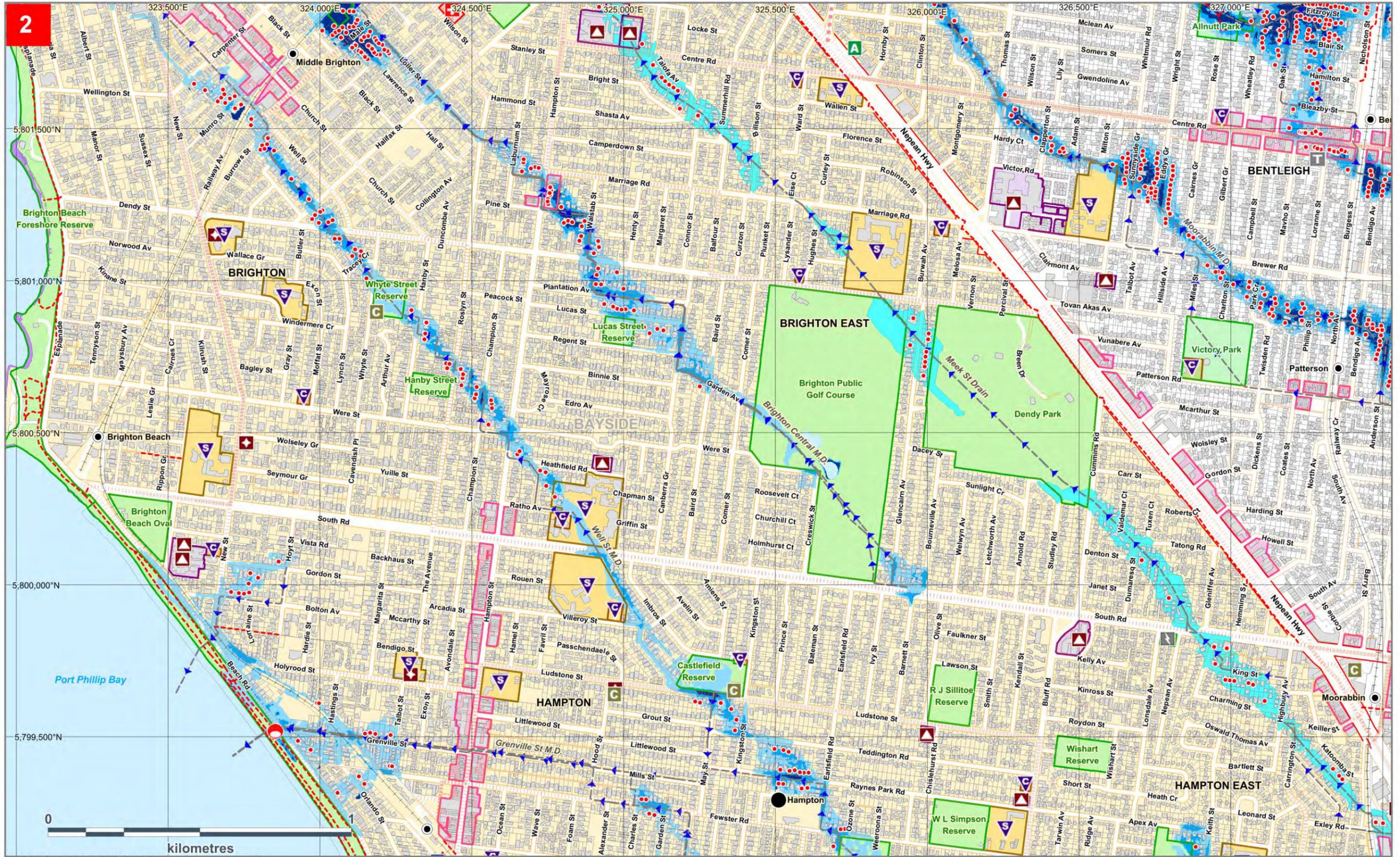
CITY OF BAYSIDE
Version 3: May 2019
B - 1% AEP (100yr ARI) Flood Extent

- 1% AEP Storm Surge Extent
- Commercial Precinct
- Waterway
- 1% AEP Flash Flood Extent
- Stream Level Gauge
- Melbourne Water Stormwater Drain
- Reserve / Area of Interest
- Rain Gauge
- Tramway
- Waterbody
- Municipal Building
- State Emergency Service
- Melbourne Water Retarding Basin
- Municipal Depot

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Flood Extent Maps (sourced Melbourne Water GIS)





Flood modelling completed by BMT WBM, March 2010. Map Produced by VICSES May 2019.

CITY OF BAYSIDE

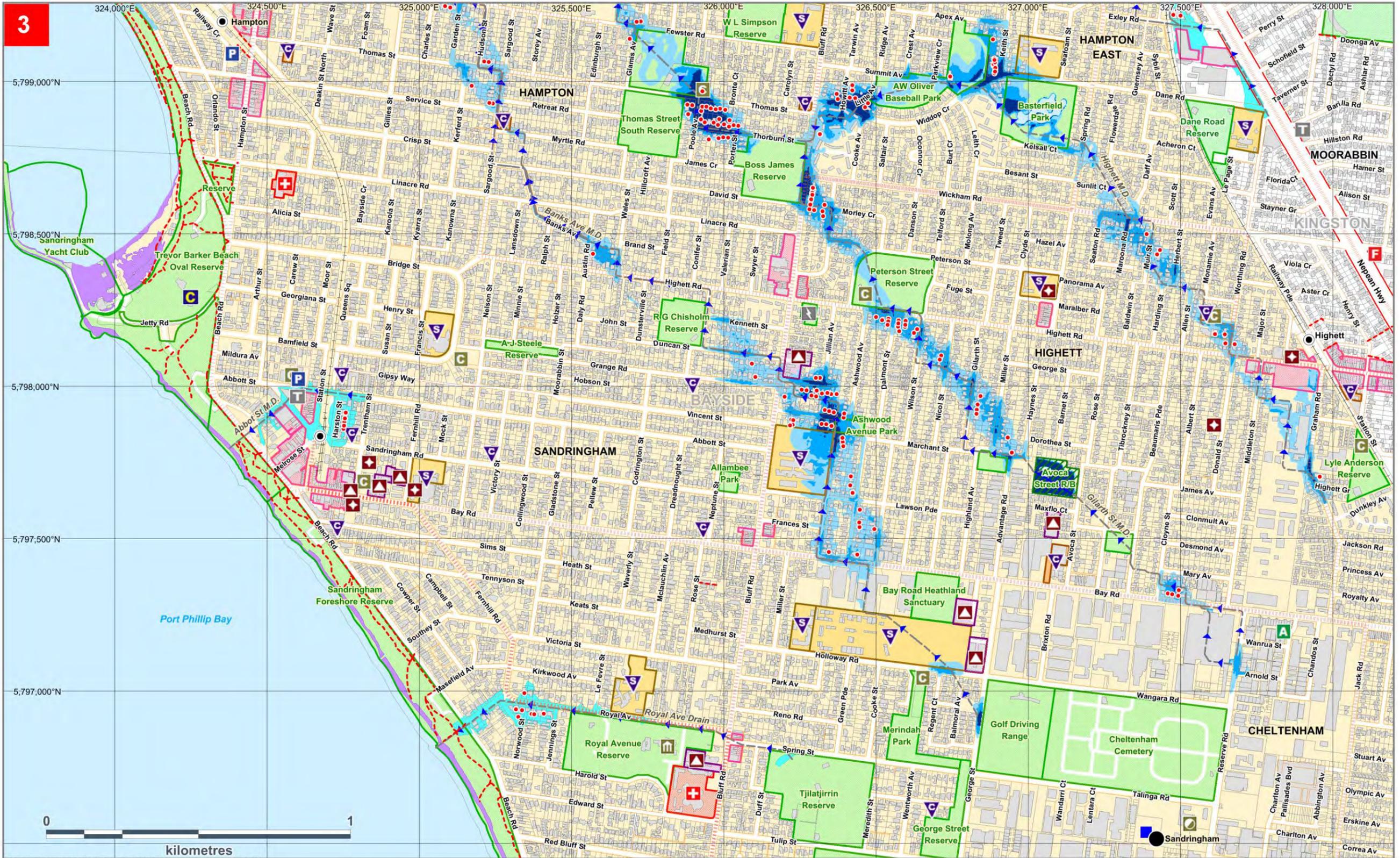
1% AEP (100yr ARI) Flooding

2. Wells Street, Brighton Central and Meek Street Drains (Hampton)

- | | | | |
|---|--|------------------------|---------------------------------|
| Building | Flash Flood Depth
Greater than 60cm | Aged Care Facility | Child Care / Kindergarten |
| Area of Interest | Between 30cm and 60cm | Place Of Worship | School / College |
| Waterbody | Up to 30cm | Community Centre | 1% AEP Over-Floor Flooding Risk |
| Shopping Precinct | Bus Route (PTV) | Hospital | Rain Gauge |
| 1% AEP Flash Flood Extent (Depth Unavailable) | Bicycle / Walking Trail | Telephone Exchange | Ambulance Station |
| 1% AEP Storm Surge Extent (Depth Unavailable) | Melbourne Water Stormwater Drain | Power Terminal Station | Sewer Emergency Relief Point |



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Flood modelling completed by BMT WBM, March 2010. Map Produced by VICSES May 2019.

CITY OF BAYSIDE

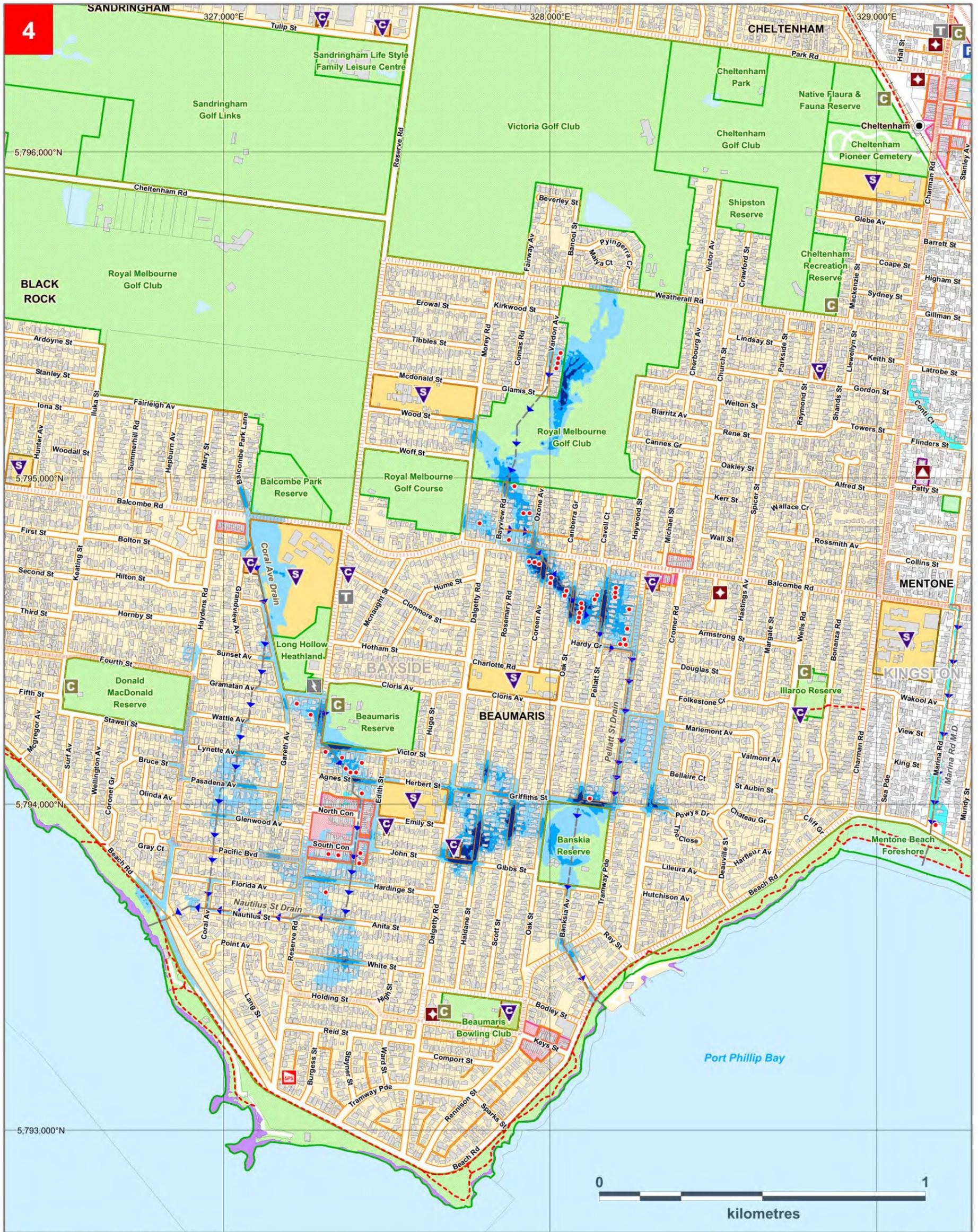
1% AEP (100yr ARI) Flooding

3. Banks Avenue, Gilarth Street and Highett Main Drains (Sandringham)

- | | | | | |
|---|---------------------------------|----------------------------------|---------------------------|---------------------------------|
| Building | Melbourne Water Retarding Basin | Melbourne Water Stormwater Drain | Child Care / Kindergarten | Power Terminal Station |
| Area of Interest | Flash Flood Depth | Aged Care Facility | School / College | 1% AEP Over-Floor Flooding Risk |
| Waterbody | Greater than 60cm | Place Of Worship | Police Station | Rain Gauge |
| Shopping Precinct | Between 30cm and 60cm | Coast Guard Flotilla | Hospital | |
| 1% AEP Flash Flood Extent (Depth Unavailable) | Up to 30cm | Community Centre | Municipal Offices | |
| 1% AEP Storm Surge Extent (Depth Unavailable) | Bus Route (PTV) | Fire Station | Telephone Exchange | |
| | Bicycle / Walking Trail | | | |



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Flood modelling completed by GHD, June 2016. Map Produced by VICSES May 2019.

CITY OF BAYSIDE

1% AEP (100yr ARI) Flooding

4. Nautilus Street and Pellatt Street Drains (Beaumaris)

- | | | | | | |
|--------------------------|---|--|----------------------------------|--|---------------------------------|
| | Building | | Reserve / Park | | School / College |
| | Waterbody | | Melbourne Water Stormwater Drain | | Kindergarten / Child Care |
| | 1% AEP Flash Flood Extent (Depth Unavailable) | | Bicycle / Walking Trail | | Power Terminal Station |
| Flash Flood Depth | | | Bus Route (PTV) | | Community Centre |
| | Greater than 60cm | | Aged Care Facility | | Police Station |
| | Between 30cm to 60cm | | Place Of Worship | | 1% AEP Over-Floor Flooding Risk |
| | Up to 30cm | | Telephone Exchange | | |
| | 1% AEP Storm Surge Extent (Depth Unavailable) | | Sewer Pumping Station | | |
| | Shopping Precinct | | | | |



N

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APPENDIX G – CATCHMENT SCHEMATICS

Schematics detailing the drainage catchments relevant for this Municipality have been included in this Appendix. Each Schematic outlines the drainage system comprising of rivers, creeks or storm-water drains contained within one of the major catchments in the Port Phillip and Westernport Region.

Within each Schematic, there are details useful to flood response such as those relating to gauges, towns, rivers, creeks, drains and reservoirs. Historical facts and figures may also be shown.

The schematics also detail the response boundaries for SES Units and local government, and provide a reference link to the corresponding MFEP.

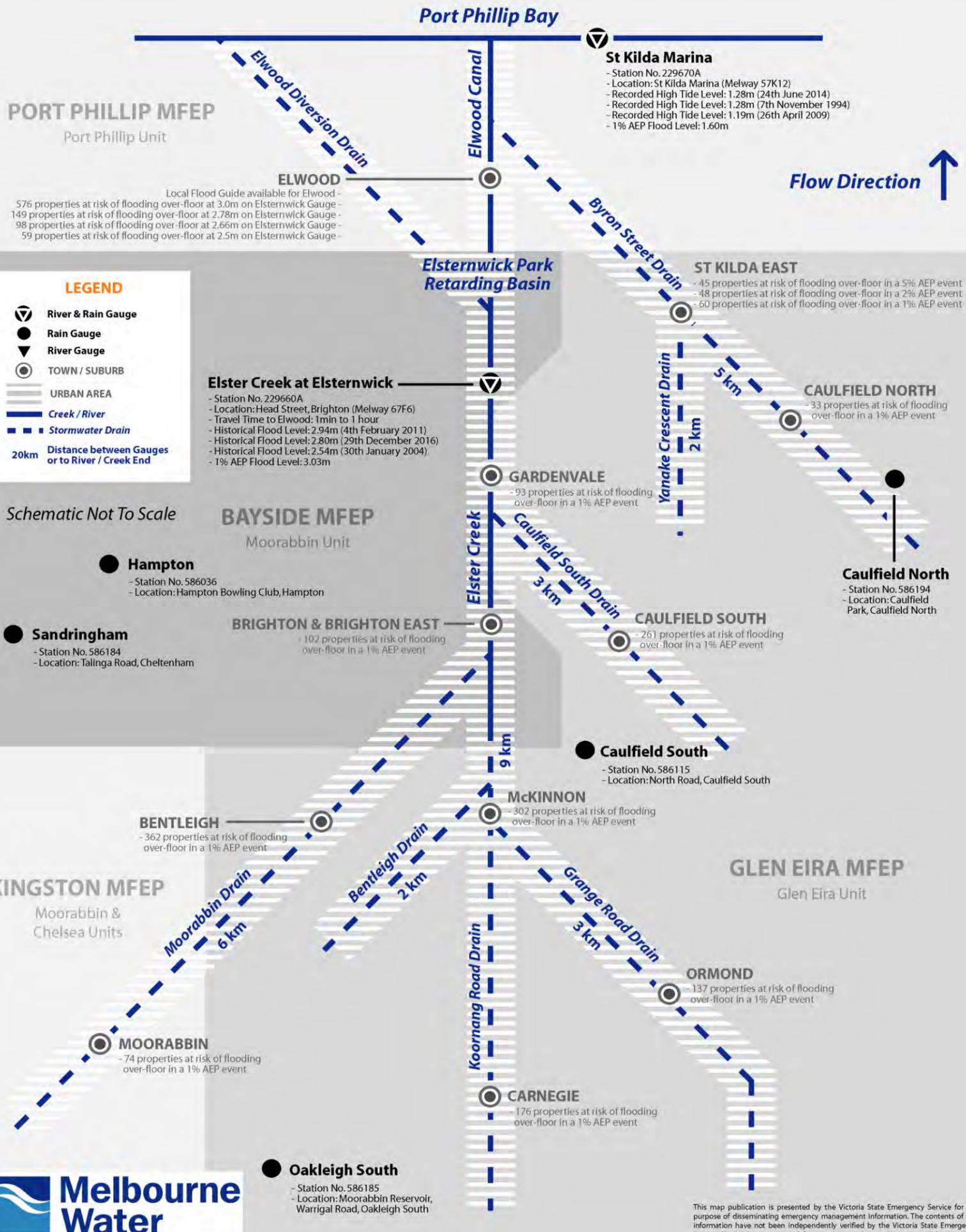
Details within these Catchment Schematics reflect those contained within either other sections of this MFEP or refer to other MFEPs. These details have been filtered to contain only key facts. For more information on a gauge, drainage system or town consult the corresponding Flood Emergency Plan

Note that not all waterways or drains are included in the schematics, only those that are likely to contribute to flooding further on along the drainage system. Note also the flow direction; the schematics either flow from the top of the page to the bottom, or vice versa.



Elster Creek & Elwood Canal Catchment Schematic

Version 3 - May 2019



Information Sources: Melbourne Water Flood Warning Manual; Municipal Flood Emergency Plans; Melbourne Water GIS; Melbourne Water HYDSTRA Database; ABS Census 2016

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APPENDIX H – SANDBAG ARRANGEMENTS

General

Appropriately placed sandbags can help reduce the impact of flooding to residences, businesses and infrastructure. While sandbags will not completely stop all floodwater, they may reduce the amount of water entering properties.

The IC will determine the priorities related to the use of sandbags, which will be consistent with the strategic priorities and the VICSES Sandbag policy.

If VICSES sandbags are becoming limited in supply, then priority will be given to protection of Essential Infrastructure. If time permits, requests for supplementary supply should be carried out in line with the Bayside City Council

Municipal Emergency Management Plan (MEMP)

The Incident Controller will ensure that owners of Essential Infrastructure are kept advised of the flood situation. Essential Infrastructure providers must keep the Incident Controller informed of their status and ongoing ability to provide services.

Bayside Council MERO will liaise with the VicSES Central Region RDO/ IC (as appropriate) to ensure effective coordination of listed resources.

Sandbags will be filled in accordance with the VicSES Sandbag Quick Reference Guide and the VICSES Statewide Guideline- Sandbags. A short video depicting the filling and use of sandbags is available at

<https://www.youtube.com/watch?v=-T--l3b-34&list=PL428FCA686837ADED>

(Sandbagging demonstration- vicesTV on YouTube).

Sand may be obtained from the suppliers/locations noted below and as stated in the VICSES MOU: Sand Supply.

Operational

Sandbag Storage Locations

Sandbags may be obtained from any of the locations as noted below.

Organisation	Location	Number of Sandbags	Estimated Response Time	Contact
Bayside City Council Depot	Depot address	0		
Moorabbin VicSES Unit	Unit LHQ	2000	1Hr	0418 252 103
Glen Eira VicSES Unit	Unit LHQ	8000	2Hr	9579 7041
VicSES Central Region		As Required	4Hr	CTDO
Other				

Table H1- Sandbag storage locations within the Bayside City Council and adjoining locations

Sand Suppliers

In large events, or when local supplies have been exhausted, supply will be in accordance with *VICSES- Supplier MOU: Sand Supply*. VICSES F.O.G document suggests washed river sand as the preferred material, with soil and clay also potential options for use.

A heavy bodied or sandy soil is most desirable for filling sandbags, but any usable material at or near the site has definite advantages. Gravelly or rocky soils are generally poor choices because of their permeability. Filled bags of earth material will deteriorate quickly. Sand/ fill material should be free of salt and contaminants where possible.

Organisation	Location	Delivery Capability	Restrictions	Contact
Bayside City Council Depot	Depot address	Up to 5m ³ only		
Broadbent's Sand Supply	612 South Road Moorabbin	30m ³		9557 1564 9571 5481
Boundary Garden Supplies	352 Lower Dandenong Rd	20m ³		9580 6694
Garden Trade	282-284 Boundary Rd Mordialloc	50m ³		9587 2001

Table H2 - Sand Suppliers and locations within the Bayside City Council and adjoining locations

Sandbag Collection Points

Sandbag collection points may be established at the IC's discretion and as conditions permit. Potential locations are noted below. Note that locations documented below are potential sites only and will not be appropriate for use in all events.

Location	Address	Sector	Operational Restrictions	blank
Bayside City Council Depot				

Table H3 - Bayside City Council potential Sandbag Collection Points

Residents may purchase sandbags or similar from hardware or garden supply stores for protection of residential property or businesses if a sandbag collection point is not available to the public. Some locations may include:

- Bunnings, Masters etc
- Specific local companies known to carry supply

Machinery Supply

Appliances documented below will be required when undertaking sandbagging operations

Organisation	Asset	Location	Estimated deployment time	Contact
Port Phillip City Council	Front End Loader Specification requirements :- Min lift height 2.5m Min Forward reach 60cm Max bucket width 2.5m	Council Depot		
	Small tipper (3 tonnes)			
	Vehicle/ trailer for sandbag transport			
VICSES Central Region	Sandbag Fill Machine	Pakenham	3Hr	CTDO

Table H4- Machinery/ Vehicles required for Sand Supply

Additional resources from Council that could be utilised to aid response include:

- Backhoe
- Rough Terrain Forklift
- Dozer D8

Post Operational

Clean up and Disposal

Residents, businesses and Essential Infrastructure owners will be encouraged to contact Council to determine the safest method for disposal of sandbags. Following a flood event within the Municipality, Bayside City Council will facilitate the disposal of sandbags. VICSES will work in conjunction with Bayside City Council to ensure the disposal of used sandbags is dealt with under the Community Recovery arrangements as outlined in the EMMV.

APPENDIX I – SEVERE WEATHER (STORM) EVENTS

Overview

Bayside municipality is susceptible to severe weather events due to the proximity of the Municipality to Port Phillip Bay and its flat terrain, tidal flows from Port Phillip Bay may reduce the capacity of the stormwater drains that connect to the Elster Creek or Elwood Canal to discharge stormwater runoff into the river. This appendix details areas of risk from severe weather events by requests for assistance to the Victoria State Emergency Service (VICSES).

VICSES Severe Weather Requests for Assistance

The Victoria State Emergency Service records requests for assistance made by the public during severe weather events. Table 1 below is a breakdown of requests by suburb and damage type during the period Jan 2009 and December 2018.

VICSES Request for Assistance (June 2010 – December 2018)					
Suburb	Building Damage	Flooding	Rescue Persons Trapped	Tree Down	Tree Down Traffic Hazard
BEAUMARIS	123	30	0	273	101
BLACK ROCK	74	19	0	95	46
BRIGHTON	206	91	4	209	96
BRIGHTON EAST	133	61	0	157	74
CHELtenham	28	10	0	64	29
HAMPTON	120	13	0	193	91
HAMPTON EAST	35	12	0	43	13
HIGHETT	58	3	0	47	22
SANDRINGHAM	53	18	0	90	56

Table 11 – Breakdown of severe weather requests for assistance received by VICSES Bayside Municipality by suburb

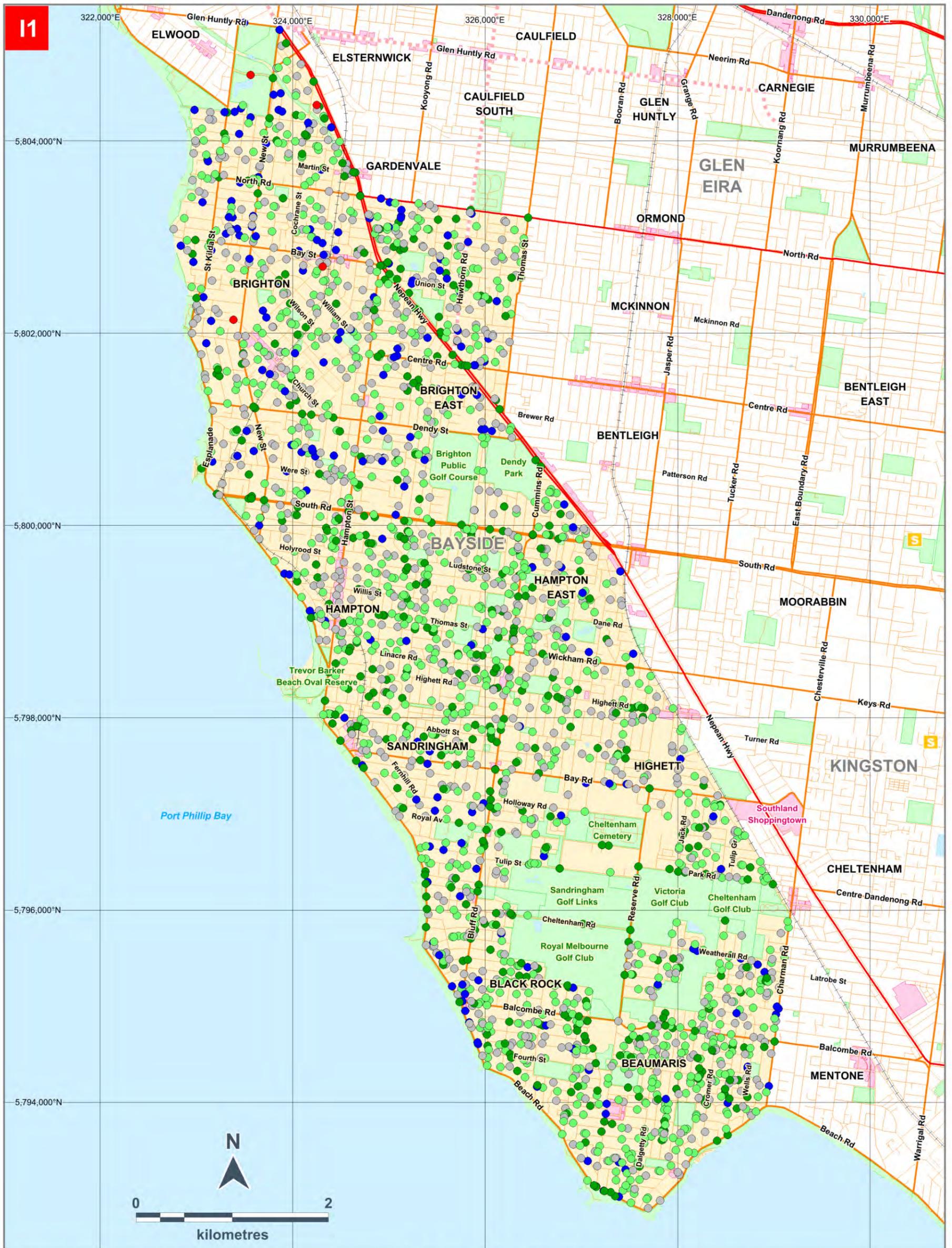
VICSES Request for Assistance (July 2009 – December 2018)

Date	Building Damage	Flooding	Rescue Persons Trapped	Tree Down	Tree Down Traffic Hazard
July 2009	1	0	0	0	0
August 2009	9	0	0	12	9
September 2009	5	1	0	2	2
October 2009	4	1	0	2	1
November 2009	7	2	0	7	1
December 2009	1	0	0	1	0
January 2010	6	0	0	8	3
February 2010	5	0	0	10	7
March 2010	11	1	0	2	5
April 2010	4	0	0	3	3
May 2010	0	0	0	0	0
June 2010	7	0	0	5	2
July 2010	1	0	0	3	2
August 2010	4	0	0	6	3
September 2010	15	1	0	25	11
October 2010	6	2	0	12	5
November 2010	13	0	0	11	5
December 2010	22	12	0	12	1
January 2011	10	7	0	7	3
February 2011	62	102	3	13	6
March 2011	2	0	0	8	1
April 2011	5	1	0	4	3
May 2011	2	0	0	1	2
June 2011	5	0	0	12	3
July 2011	3	0	0	5	1
August 2011	0	0	0	1	1
September 2011	3	0	0	5	3
October 2011	1	0	0	2	1
November 2011	19	19	0	11	2
December 2011	2	0	0	12	4
January 2012	8	0	0	22	8
February 2012	11	0	0	36	9
March 2012	7	0	0	15	8
April 2012	15	1	0	17	9
May 2012	5	1	0	3	2
June 2012	2	3	0	2	4
July 2012	1	0	0	0	2
August 2012	1	0	0	7	3
September 2012	18	0	0	22	2
October 2012	2	0	0	0	4
November 2012	4	1	0	2	4
December 2012	4	0	0	18	4
January 2013	2	0	0	2	4
February 2013	2	1	0	4	2
March 2013	15	0	0	48	15
April 2013	2	0	0	5	2
May 2013	1	0	0	1	2
June 2013	3	1	0	1	2
July 2013	4	0	0	11	7
August 2013	15	0	0	18	16
September 2013	12	1	0	10	7
October 2013	46	1	0	80	29
November 2013	5	0	0	4	3
December 2013	1	1	0	9	6
January 2014	13	0	0	35	6
February 2014	4	1	0	12	6
March 2014	8	5	0	4	1
April 2014	3	0	0	6	3
May 2014	1	0	0	1	2
June 2014	34	0	0	47	13
July 2014	8	0	0	8	4
August 2014	4	0	0	2	3

VICSES Request for Assistance (July 2009 – December 2018)					
Date	Building Damage	Flooding	Rescue Persons Trapped	Tree Down	Tree Down Traffic Hazard
September 2014	12	0	0	27	5
October 2014	7	0	0	4	1
November 2014	9	0	0	1	0
December 2014	8	0	0	23	6
January 2015	6	0	0	9	5
February 2015	5	0	0	10	28
March 2015	16	0	0	52	9
April 2015	0	0	0	2	1
May 2015	2	0	0	2	3
June 2015	0	0	0	3	0
July 2015	1	0	0	1	1
August 2015	1	1	0	3	1
September 2015	2	0	0	0	1
October 2015	2	0	0	3	2
November 2015	9	0	0	13	6
December 2015	2	0	0	8	7
January 2016	7	0	0	5	8
February 2016	2	0	0	4	1
March 2016	13	2	0	31	15
April 2016	1	0	0	2	3
May 2016	8	0	0	18	8
June 2016	5	0	0	1	0
July 2016	7	1	0	10	2
August 2016	1	0	0	1	0
September 2016	1	0	0	2	3
October 2016	47	0	0	81	19
November 2016	1	0	0	6	3
December 2016	20	42	1	6	4
January 2017	1	0	0	3	9
February 2017	13	5	0	7	8
March 2017	1	2	0	7	6
April 2017	7	1	0	1	2
May 2017	1	0	0	3	0
June 2017	0	0	0	1	0
July 2017	7	0	0	7	3
August 2017	1	0	0	2	1
September 2017	5	0	0	7	0
October 2017	3	0	0	2	2
November 2017	4	0	0	6	1
December 2017	21	14	0	15	6
January 2018	4	1	0	8	5
February 2018	12	0	0	45	21
March 2018	7	1	0	13	5
April 2018	8	0	0	11	3
May 2018	3	2	0	8	2
June 2018	3	3	0	3	6
July 2018	12	0	0	18	17
August 2018	7	0	0	3	4
September 2018	0	0	0	0	2
October 2018	0	0	0	3	1
November 2018	8	5	0	11	7
December 2018	11	8	0	4	5

Table I2 Breakdown of severe weather requests for assistance received by VICSES within the City of Bayside by request month.

VICSES Severe Weather Requests for Assistance Mapping



CITY OF BAYSIDE

Version 3: May 2019

I1 - Severe Weather Request for Assistance (RFA) Received by Job Type (Jul 2009 - Dec 2018)

- Commercial Precinct
- Reserve / Area of Interest
- Waterbody
- Tramway
- State Emergency Service

Severe Weather RFAs (Storm or Flood)

- Building Damage (830)
- Flooding (260)
- Rescue Persons Trapped (5)
- Tree Down (1173)
- Tree Down Traffic Hazard (530)



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CITY OF BAYSIDE

Version 3: May 2019

I2 - Severe Weather Request for Assistance (RFA) Received by Month (Jul 2009 - Dec 2018)

- Commercial Precinct
- Reserve / Area of Interest
- Waterbody
- Tramway
- State Emergency Service

Severe Weather RFAs (Storm or Flood)

(By Month > 70 Requests Received)

- | | |
|--|--|
| February 2011 (186) | December 2016 |
| March 2013 (78) | February 2018 |
| October 2013 (156) | |
| June 2014 (94) | |
| March 2015 (77) | |
| October 2016 (147) | |



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