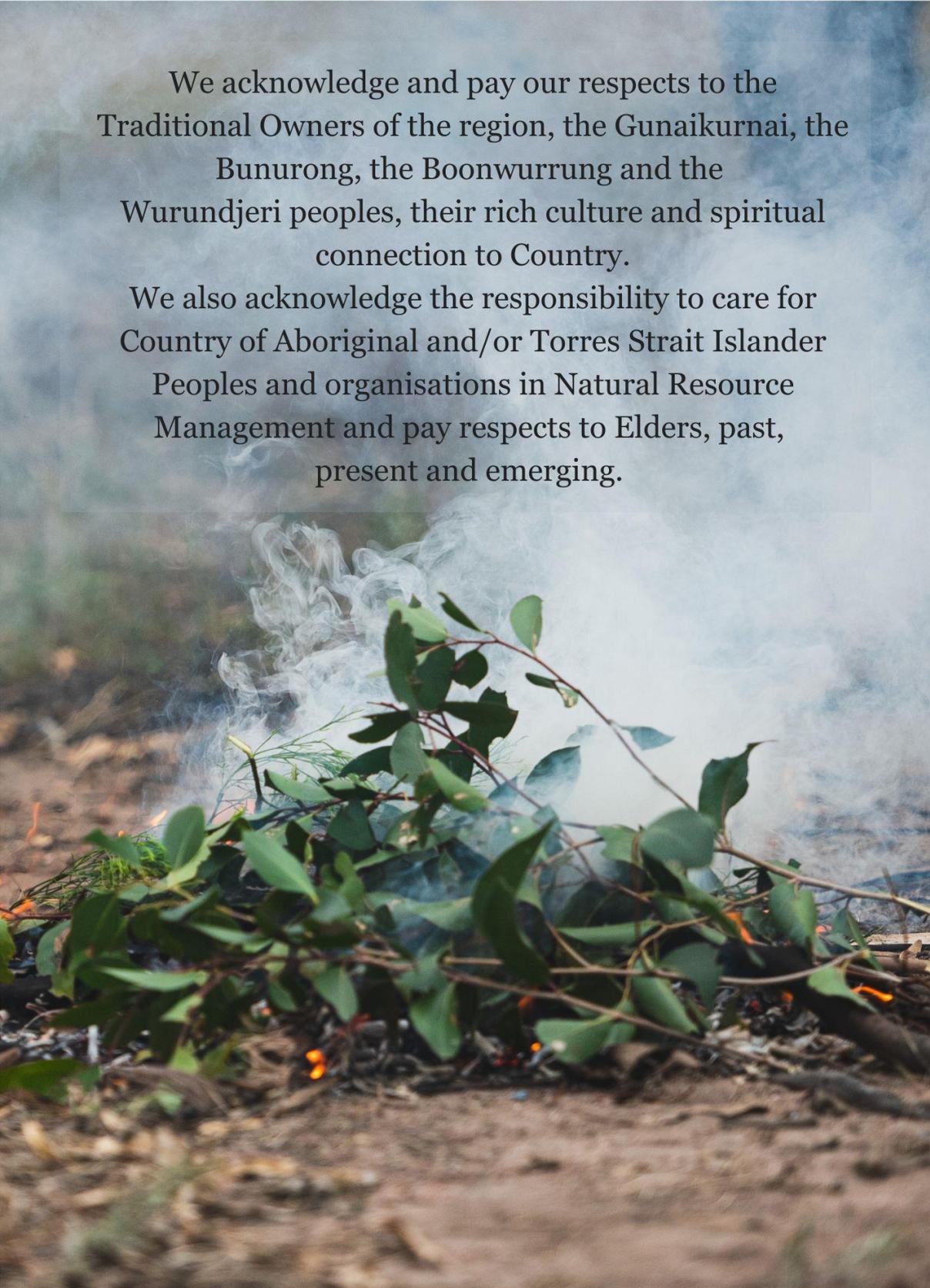




West Gippsland Floodplain Management Strategy
2018 - 2027
Mid Term Review
June 2023





We acknowledge and pay our respects to the Traditional Owners of the region, the Gunaikurnai, the Bunurong, the Boonwurrung and the Wurundjeri peoples, their rich culture and spiritual connection to Country.

We also acknowledge the responsibility to care for Country of Aboriginal and/or Torres Strait Islander Peoples and organisations in Natural Resource Management and pay respects to Elders, past, present and emerging.

Cover: Traralgon, June 2021 (Source: Latrobe Valley Express)

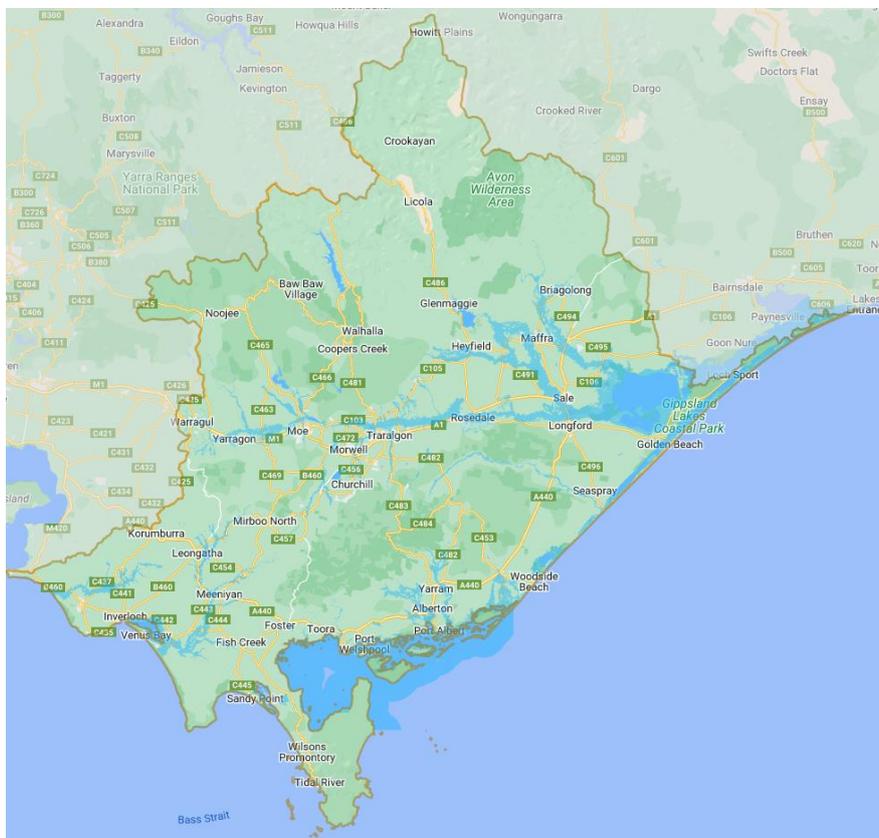


Regional overview

Flooding is a natural hazard in West Gippsland, caused by high rainfall or coastal storm surges, or a combination of these factors. Relative to other parts of the state, our catchments are short and this results in a quick rise and fall of floodwaters. Floods severely impact communities by causing injury, loss of life, property damage, personal and mental hardship, and disruptions to regional economies.

The region is subject to regular flooding, with most of the flood impacts occurring in rural areas or on the fringes of regional towns. A number of small townships such as Tinamba, Newry, Seaspray and Rosedale are impacted by flooding, with the most significant urban riverine flooding occurring in Traralgon.

Figure 1 – Regional 1% AEP flood extent



Given the frequency of flooding across the region, community knowledge and resilience is generally high. The relatively short duration of flood events (generally less than 7 days) allows communities and individuals to move quickly into the recovery phase.

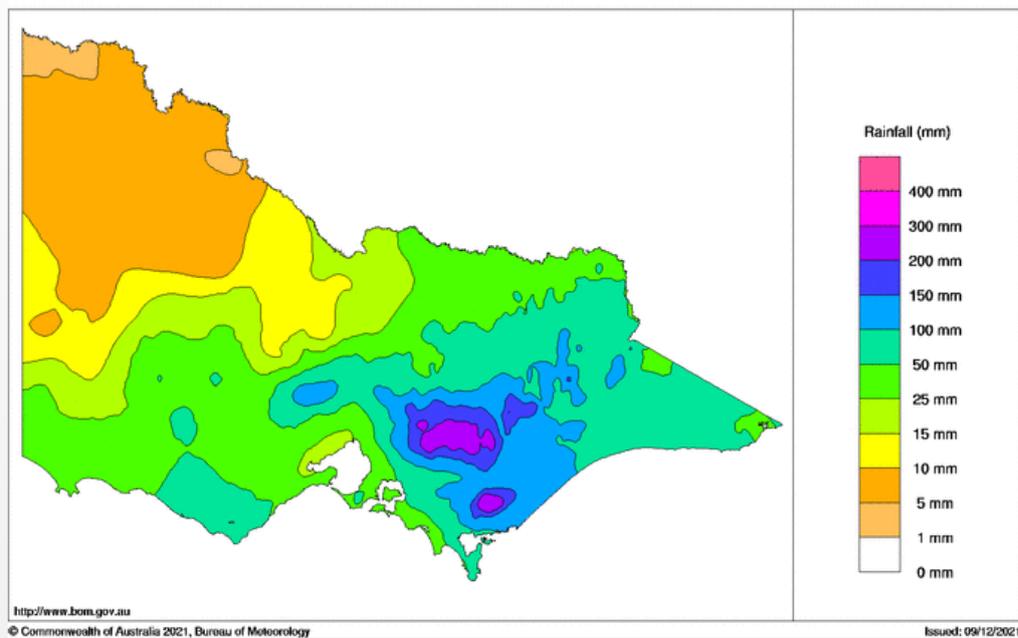
Future changes to the climate in West Gippsland are predicted to create hotter and drier conditions and an increase in severe weather events, including bushfires, storms, droughts and floods. A number of steep and forested catchments in the region are likely to experience more severe flooding following bushfire and high intensity rainfall events as the climate changes. Coastal inundation as a result of increased sea level and higher intensity storm surges is also expected.



9 – 13 June 2021 flood and storm event

In June 2021, there was widespread storm damage across Gippsland and flooding in several catchments. Major flooding was experienced in the Avon, Macalister, Thomson, Tanjil and Traralgon Creek catchments, with moderate flooding in the Morwell and Latrobe Rivers.

Figure 2 – Weekly rainfall totals for Victoria 7 June 2021 – 13 June 2021



Flooding in the Morwell River resulted in cracking of the Morwell River Diversion through the Yallourn Coal Mine, leading to the declaration of a State Energy Emergency to enable emergency repairs to the Morwell River Diversion.

The village of Walhalla recorded more than 200mm of rainfall in less than 24 hours, causing significant flooding and damage to Stringers Creek and nearby infrastructure. WGCMA has worked with key stakeholders including Baw Baw Shire Council to repair damage to Stringers Creek, remove flood debris and address community priorities such as repairs to campgrounds.



Figure 3 – Stringers Creek at Walhalla (Source: Latrobe Valley Express)



Significant urban flooding occurred in Traralgon, with numerous homes suffering over-floor flooding. 380mm of rain was recorded at Mount Tassie during the 24 hours from 10am on 9 June 2021 to 10am on 10 June 2021. The resultant flooding is estimated to have been a 75 year ARI event. The Traralgon Creek rose from a gauge height of 1.55m (below the minor flood level) at 5am to a peak of 5.77m at 9am. The timing of the rainfall (overnight) and the fast rate of rise meant many residents did not have time to respond, resulting in significant damages to buildings and contents.

Figure 4 – Traralgon Creek @ Traralgon gauge height data

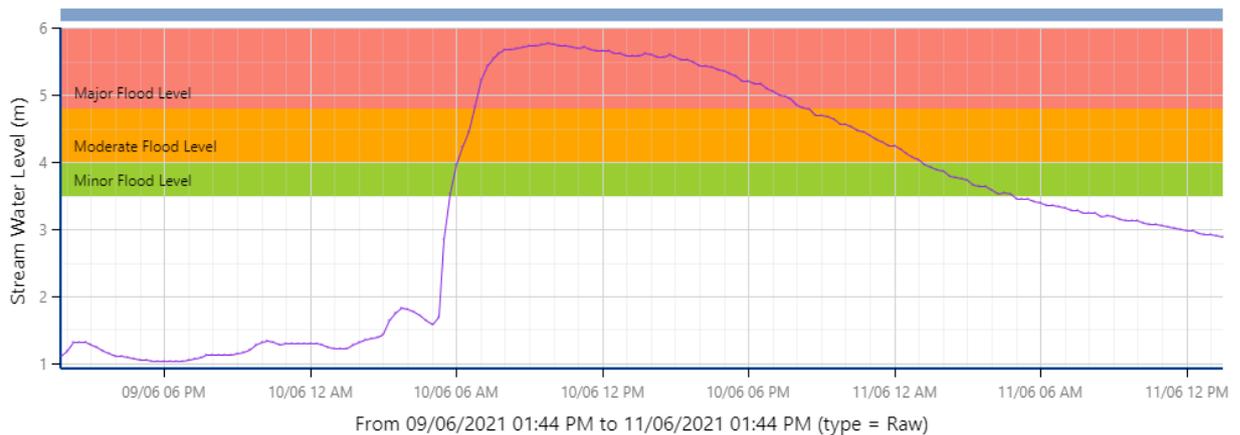




Figure 5 – Traralgon Creek at Traralgon 10 June 2021 (Source: VicSES)



Strategy Implementation

Implementation of the West Gippsland Floodplain Management Strategy is driven by an Implementation Committee comprising of staff from Baw Baw Shire Council, Latrobe City Council, Bass Coast Shire Council, South Gippsland Shire Council, Wellington Shire Council, VicSES, Regional Roads Victoria and West Gippsland CMA. The group meet twice a year where discussion ranges from project updates to regional knowledge sharing and coordination of implementation actions.

The Committee members have varying roles within their organisations, including asset management, infrastructure engineers and emergency coordination. All Committee members are expected to liaise with other parts of their organisations to ensure relevant information is shared. Following each Committee meeting WGCMA formally write to the CEO of each partner organisation to advise that the meeting has occurred, highlight any key issues or concerns, and advise of any available funding to support each organisation to implement their key actions.

The WGCMA Board is briefed annually on the progress of implementation of the WGFMS.

The West Gippsland Floodplain Management Strategy is a sub-strategy of the West Gippsland Regional Catchment Strategy. Further information can be found at [Water | West Gippsland Regional Catchment Strategy \(rcs.vic.gov.au\)](http://Water | West Gippsland Regional Catchment Strategy (rcs.vic.gov.au))

Achievements so far

At its inception in 2018 there were 45 priority actions identified across the region. As a result of changing priorities there are now 47 actions within the Implementation Plan.

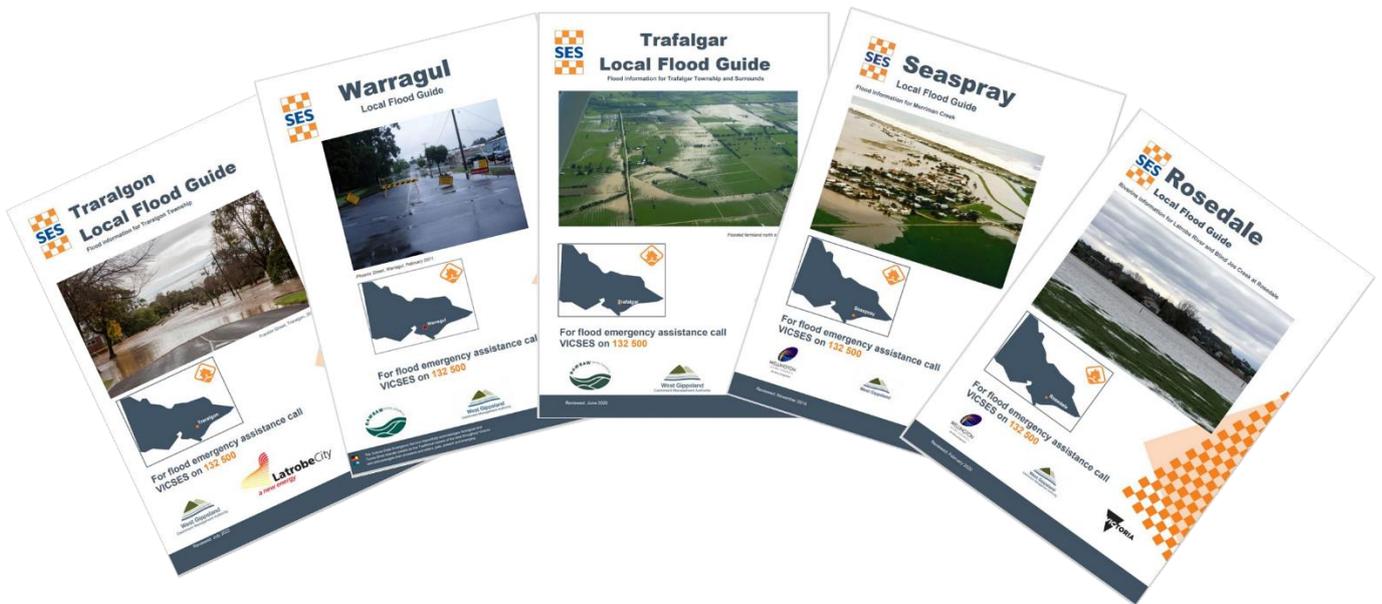
To date, 13 actions have been completed, 19 actions are in progress and 15 have not started. 68% of the identified priority actions are either complete or in progress. The remaining 32% of actions are either not yet scheduled, have been deferred due to lack of resources or are awaiting a funding opportunity.





The ongoing program of work to develop, review and maintain flood guides for priority areas is a key action to improve community resilience through sharing of flood information. The VicSES Flood Guide program has updated 5 Local Flood Guides – Traralgon, Warragul, Trafalgar, Seaspray and Rosedale.

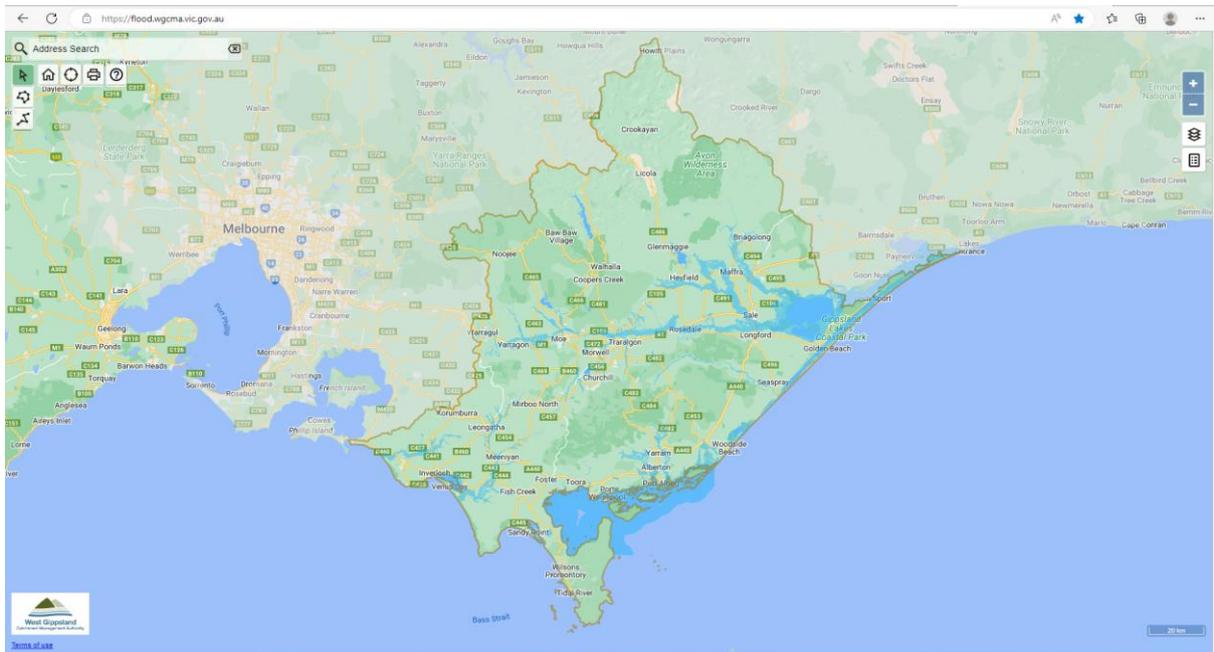
Figure 6 – Updated Local Flood Guides



The Flood Guide Program is supported by the [WGCMA Community Flood Portal](#), a publicly available online mapping tool where community members can review flood mapping for a range of scenarios at their property.



Figure 7 – Community Flood Portal



Flood studies for the towns of Maffra and Briagolong have been completed, and a flood study for Waterhole Creek is currently underway. The outcomes of these studies provide critical information to guide land use planning decisions ensuring that future flood risks can be avoided.

It has proved challenging to have the results of flood studies incorporated into local government planning schemes. Despite a significant and targeted engagement campaign, Baw Baw Shire Councillors determined to abandon amendment C144bawb prior to establishment of a Planning Panel to consider the submissions made through the exhibition period. Councillors cited a lack of confidence in the outcomes of older flood studies and community concern as the key reasons to abandon the amendment.

Latrobe City Council amendment C131latr has been through the exhibition process and attracted a number of submissions relating to impacts on private property. The amendment is on hold while Council completes a review of the amendment process, including the suitability of the flood data used to develop the planning scheme maps. The results of this review will guide the next steps for Council, which may be to re-exhibit the amendment, proceed to a Panel, or abandon the amendment.



Wellington Shire Council successfully received funding through the Federal Government's Black Summer Bushfire Recovery Program to upgrade the levee network in the town of Seaspray. The works include an increase in the wall height to maintain a level above the estimated 1% AEP flood level for Merrimans Creek, providing protection to homes in Seaspray. The application for funding through a bushfire recovery program was opportunistic and demonstrates that it is worth investigating alternative funding sources for implementation of actions.

Figure 8 and 9 – Seaspray levee upgrade works



The proposed action to investigate the feasibility of the Traralgon Bypass Retarding Basin was removed from the Strategy by agreement with Latrobe City Council due to concerns regarding the ongoing ownership and responsibility for this asset. The June 2021 flood event in Traralgon resulted in significant flood damages to residential areas in Traralgon, with little or no warning given to residents prior to the flood peak. In light of this event, Latrobe City Council are reconsidering an investigation into the feasibility of a retarding basin upstream of Traralgon.

Following receipt of funding from the Risk Resilience Grants Program in 2022, Baw Baw Shire Council is progressing key action BB8, to mitigate existing flood risk in the western part of the town of Trafalgar through construction of a Retarding Basin. The project complements a significant urban expansion of the town, which will include developer-funded stormwater treatment via a series of sediment ponds and wetlands. The provision of Risk Resilience Grants funding has increased developer confidence of project success and will result in a significant decrease in flood risk to parts of Trafalgar.



Changes to priority actions

The WGFMS Implementation Committee review all actions twice a year. Through this iterative review process the Committee has identified four actions that have been removed from the Action Plan since 2018. Two of the Actions originally identified by Baw Baw Shire Council (Actions BB6 and BB9) have been removed as they relate to ongoing maintenance issues, which is a Council responsibility. Other items have been removed pending the outcome of other work such as the Waterhole Creek Flood Study (Action L4), or due to key partner agencies not committing to the project (Action BB4).

A total of six new actions have been added to the Implementation Plan since 2018. New actions have resulted from completion of initial investigations, such as flood mitigation works identified for Foster (Action SG3a) and South Dudley (Action BC6) or the need for adaptation plans identified in the South Gippsland Sea Wall Assessment (Action SG5a). Other actions have been added in response to increased development demand and the need to better understand or mitigate flood impacts in Toora (SG8) and Neerim South (Action BB13), and in the Waterhole Creek catchment (Action L6).

The current Action Plan is included in Appendix 1.

Next steps

The vision for floodplain management in West Gippsland is that West Gippsland communities are aware of flooding and are actively taking measures to manage their flood risks to minimise the consequences to life, property, community wellbeing, the economy and the environment.

Continued implementation of the Action Plan will work towards achieving this vision through building community flood resilience, reducing existing flood risks, avoiding future flood risks and managing the residual flood risks.

West Gippsland CMA will continue to work with our partners to implement the key priority actions identified in the Action Plan in Appendix 1. The WGFMS Implementation Committee will meet biannually for the remaining life of the Strategy (until 2027) to review progress towards the Action Plan, and to nominate additional priority actions as required.

Appendices

APPENDIX 1: Updated work plan and implementation tables

No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
R1	Regional	All	Scope the development of a community flood portal to disseminate information about flooding, with a focus on areas without a flood warning system.	WGCMA	VICSES LGAs					Completed ✓
R2	Regional	As relevant	Support a project to investigate the development of historical flood mapping.	WGCMA					✓	Not yet started ✗
R3	Regional	All	Make current flood mapping available to Traditional Owner groups to assist them in identifying their Cultural Heritage sites at risk of flooding.	WGCMA					✓	Not yet started ✗
R4	Regional	All	Ensure flood mapping, intelligence and local knowledge in MFEPs is regularly reviewed and updated, with MEMPCs to consider integrating flood and storm plans into a single plan.	VICSES		Bass Coast		Latrobe, Wellington, Baw Baw	Bass Coast	In progress »»

Appendices

No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
R5	Regional	As relevant	Investigate the installation of warning systems for VicRoads roads that are subject to significant inundation as identified by LGAs and VICSES.	VicRoads	WGCMA	✓				In progress »»
BC1	Bass Coast Shire	Bass Coast	Develop individual flood guides for high priority areas, specifically Inverloch, Wonthaggi and Lower Powlett River.	VICSES			Wonthaggi, Lower Powlett River			Not yet started ✕
BC2	Wreck Creek, Inverloch	Bass Coast	Investigate flooding along Wreck Creek including the status of the creek mouth.	BCSC	WGCMA		✓			In progress »»
BC3	Wonthaggi	Bass Coast	Schedule a future update of the Planning Scheme to include flood mapping for the Wonthaggi North East Development Area.	BCSC	WGCMA					In progress »»
BC4	Powlett River and Screw Creek	Bass Coast	Investigate connecting the existing stream gauges in West Gippsland to telemetry and making data available to the community in near real time.	BCSC	DELWP	✓				Completed ✓

Appendices

No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
BC5	Powlett River floodplain	Bass Coast	Improve the understanding of flood risk by developing detailed flood maps for the Powlett River and integrate them with flood education products and programs.	WGCMCA			✓			In progress 
BC6	South Dudley	Bass Coast	Flood mitigation actions identified by modelling in South Dudley.	BCSC						Completed  ✓
BB1	Baw Baw Shire	Baw Baw	Develop individual flood guides for high priority areas, specifically Warragul, Yarragon and Trafalgar.	VICSES		Warragul	Yarragon			In progress 
BB2	Baw Baw Shire	Baw Baw	Update the Planning Scheme to include updated flood mapping across the Shire.	BBSC	WGCMCA	✓				Completed ✓
BB3	Moe River	Baw Baw	Investigate structural works along the Moe River to protect North Canal Road and adjacent farm land (between Cummings Road and Telephone Road).	BBSC	DELWP WGCMCA	✓				Not yet started 

Appendices

No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
BB4	Between Yarragon and Trafalgar East	Baw Baw	Liaise with VicRoads and VicTrack to investigate the capacity of culverts under the Princes Highway and Gippsland railway line between Yarragon and Trafalgar East.	BBSC	VicRoads VicTrack					Not a priority now 
BB5	Warragul	Baw Baw	ANCOLD assessment and upgrade of the Landsborough Road retarding basin in Warragul.	BBSC					✓	Not yet started 
BB6	Warragul	Baw Baw	Ensure ongoing management of Hazel Creek to retain its current flow capacity.	BBSC						Not a priority now 
BB7	Warragul	Baw Baw	Investigate options to increase the capacity of Hazel Creek at critical locations.	BBSC	WGCMA	✓				In progress 
BB8	Trafalgar	Baw Baw	Construct the proposed Princes Highway retarding basin on the west side of Trafalgar.	BBSC		✓				In progress 

Appendices

No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
BB9	Trafalgar	Baw Baw	Ensure ongoing management of the Contour Drain and Loch Creek at Trafalgar.							Not a priority now 
BB10	Yarragon	Baw Baw	Construct the proposed Hazeldean Road retarding basin in Yarragon.	BBSC					✓	Not yet started 
BB11	Moe River at Darnum	Baw Baw	Install Event Reporting Radio Telemetry System (ERRTS) at gauge site 226209B on the Moe River at Darnum through a partnership between Baw Baw Shire and DELWP to enhance the real time transmission of data.	BBSC DELWP	GRWMP					Completed 
BB12	Various	Baw Baw	Improve the understanding of flood risk by developing detailed flood maps for the Tanjil River downstream of Blue Rock Dam, Latrobe River between Trafalgar-Willow Grove Rd and Westbury, Moe River upstream of the Darnum gauge, Shady Creek and Narracan Creek.	WGCMCA					Narracan Creek, Tanjil River, Latrobe River	Not yet started 

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No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
BB13	Neerim South	Baw Baw	Install flood mitigation works along Neerim East Road.	BBSC					✓	In progress  
L1	Latrobe City	Latrobe	Develop individual flood guides for high priority areas, specifically Morwell, Moe, Glengarry, Toongabbie and Traralgon.	VICSES		Morwell, Moe	Glengarry, Toongabbie			In progress 
L2	Latrobe City	Latrobe	Update the Planning Scheme to include updated flood mapping across the Shire.	LCC	WGCMA	✓				In progress 
L3	Traralgon	Latrobe	Investigate the feasibility of the Traralgon Bypass Retarding Basin as part of VicRoads' planning process.	WGCMA						Completed 
L4	Morwell	Latrobe	Replace the Beattie Crescent footbridge in Morwell.							Not a priority now 

Appendices

No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
L5	Various	Latrobe	Improve the understanding of flood risk by developing detailed flood maps for the Tyers River downstream of Moondarra, Rintoul Creek, Morwell River and Middle Creek, Eaglehawk Creek, Flynns Creek and Traralgon Creek upstream of Traralgon, and integrate them with flood education products and programs.	WGCMA		Middle Creek	Morwell River		Flynns Creek	In progress »»»
L6	Waterhole Creek	Latrobe	Waterhole Creek flood study.	LCC				✓		In progress 🔄 »»»
SG1	South Gippsland Shire	South Gippsland	Develop individual flood guides for high priority areas, specifically Fish Creek and Foster.	VICSES					✓	Not yet started ✗
SG2	Fish Creek	South Gippsland	Investigate undertaking a flood study for Fish Creek.	SGSC	WGCMA			✓		Not yet started ✗

Appendices

No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
SG3	Stockyard Creek, Foster	South Gippsland	Continue with the Stockyard Creek Foster flood study.	SGSC	WGCMA					Completed ✓
SG3a	Stockyard Creek, Foster	South Gippsland	Undertake culvert works recommended in Stockyard Creek flood study.	SGSC						Completed 🔄 ✓
SG4	South Gippsland Shire	South Gippsland	Investigate connecting the existing stream gauges to telemetry and making data available to the community in near real time.	SGSC	DELWP	✓				Completed ✓
SG5	Coastal South Gippsland & Wellington Shire	South Gippsland	Proceed with South Gippsland Shire Council and Wellington Shire Council's investigation into the impacts of climate change on sea walls.	SGSC WSC	WGCMA					Completed ✓
SG5a	Sandy Point and Venus Bay	South Gippsland	Investigate option to mitigate climate change on sea walls within the South Gippsland region.	SGSC						Not yet started 🔄 ✗

Appendices

No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
SG6	Middle Tarwin	South Gippsland	Investigate the installation of a warning system for flooding over Buffalo - Tarwin Lower Road.	RRV	SGSC			✓		In progress »»»
SG7	Various	South Gippsland	Improve the understanding of flood risk by developing detailed flood maps for the Tarwin River, Fish Creek, Franklin River, Agnes River, Nine Mile Creek and Tidal River, and integrate them with flood education products and programs.	WGCMA				Nine mile Creek	Franklin River, Agnes River, Tidal River	In progress »»»
SG8	Toora	South Gippsland	Investigate undertaking a flood study for Toora.	SGSC	WGCMA				✓	Not yet started 🔄 ✕
W1	Wellington Shire	Wellington	Develop individual flood guides for high priority areas, specifically Tinamba, Newry, Rosedale, Port Albert and Seaspray.	VICSES			Tinamba, Newry, Port Albert			In progress »»»

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No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
W2	Wellington Shire	Wellington	Undertake a municipality-wide Planning Scheme Amendment to incorporate sea level rise mapping and updated flood mapping from the Latrobe, Rosedale, Seaspray, Briagolong and Avon flood studies and for locations including Bruthen Creek and Wurruk.	WSC	WGCMA					Not yet started ✘
W3	Loch Sport	Wellington	Investigate the feasibility of upgrading the road access to eastern Loch Sport.	WSC						Not yet started ✘
W4	Seaspray	Wellington	Advance the design and construction of the upgrade to the existing Seaspray levee, monitoring of the sand berm at the mouth of Merriman's Creek and develop a formal management arrangement for the system .	WSC	WGCMA			✓		In progress »»»
W5	Nooramunga Coast	Wellington	Investigate the economic feasibility of providing flood mitigation infrastructure for townships along the Nooramunga Coast.	WSC						Not yet started ✘

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				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
W6	Briagolong	Wellington	Undertake a flood study for Briagolong.	WSC	WGCMA					Completed ✓
W7	Maffra	Wellington	Undertake a flood study for Maffra.	WSC	WGCMA					Completed ✓
W8	Downstream of Lake Glenmaggie	Wellington	Review flood class levels for the Macalister River downstream of Lake Glenmaggie.	WGCMA	WSC, SES, SRW					Completed ✓
W9	Sale Canal	Wellington	Develop a strategy to reduce risk to private and commercial vessels in Sale Canal during flood events.	Gippsland Ports	WSC DELWP				✓	Not yet started ✗

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No.	LOCATION	LGA	ACTION	RESPONSIBILITY		YEAR				STATUS
				LEAD	PARTNER(S)	2021-22	2022-23	2023-24	2023-24 +	
W10	Various	Wellington	Improve the understanding of flood risk by developing detailed flood maps for the Albert and Jack Rivers, Tarra River, Bruthen Creek, Merrimans Creek, Perry River and the Macalister River upstream of Glenmaggie, and integrate them with flood education products and programs.	WGCMA			Tarra		Perry River, Macalister River	In progress »»»
EG1	Gippsland Lakes	East Gippsland	Undertake a Planning Scheme Amendment to apply flood controls across the Gippsland Lakes.	EGSC	WGCMA	✓				In progress »»»