

Elster Creek Action Plan	Deliverable	Timeframe	Outcome OR current status	Status	Responsibility
Catchment view of flood risk	1. An Elster Creek catchment wide flood map and flood risk map that includes: <ul style="list-style-type: none"> 1% Average Reoccurrence Interval (ARI) flood extent and a range of other more frequent flood extents. 	Jan 2018	Partially complete. Flood mapping for a range of flood extents has been provided to project partners. Actual floor level data and heat maps are in development.	Complete	Melbourne Water
	<ul style="list-style-type: none"> Floor level data for all flood affected properties. 		1b) Floor level data maps for ECC	Started	Melbourne Water
	<ul style="list-style-type: none"> Heat map of flood risk. 		1c) Risk (heat) map detailing areas of greatest risk ie: flood depths or flood frequency.	Started	Melbourne Water
Catchment view of infrastructure projects	2. A single asset investment view across the catchment: <ul style="list-style-type: none"> Sharing existing and future planning of IWM and drainage investment options Identification of opportunities to influence projects based on the inclusion of flood risk reduction Collate previous investment across the catchment 	May 2018	Development of a single asset investment view across the catchment has been completed including the development of a catchment wide asset register. This register will be used to inform future asset and mitigation requirements including renewal and upgrades.	Complete	Bayside City Council
Review all options to reduce flood risks	3. A review of the 2011 GHD Flood Mitigation study to: (a) Identify whether any of the mitigation options previously identified might be beneficial for mitigating higher Average Exceedance Probability (AEP) floods.	March 2018	3a) Initial options assessments (as per mitigation options outlined in the 2011 GHD Report) are complete. Most options require use of open space in some form to provide flood storage.	Complete	Melbourne Water
	(b) Consider whether there are other opportunities, not previously identified that might be appropriate for mitigating higher Average Exceedance Probability (AEP) floods.	March 2018	3b) Discussion paper, setting out a range of principles for use of open space, is in draft with Melbourne Water. Community engagement plan to be drafted <ul style="list-style-type: none"> The principles will be applied to two flood mitigation studies currently being undertaken in Elster Creek: <ul style="list-style-type: none"> Elsternwick Park Golf Course redevelopment. The options analysis for this study is expected to be complete in late December 2018 Ormond Flood Mitigation Study. Options analysis has been completed for this study. MW are working with GECC to evaluate the cost/benefit of this project with a decision to proceed or not expected mid-late August 	Complete	Melbourne Water
			3c) Initiated a distributed storages study specifically for the Elster Creek catchment in two subcatchments – Caulfield South Main Drain and Moorabbin Main Drain	Started	Melbourne Water
	4. Investigate work and mitigation options prepared by Cooperative Research Centre (CRC).	April 2018	Underway, with Melbourne Water completing a high-level screening assessment for the local mitigation options study in Ormond and McKinnon and a further study to review the 2011 GHD report recommendations. Melbourne Water have developed a discussion paper looking at an alternative model for prioritisation for flood mitigation in the open space network. Melbourne water are also in discussion with Glen Eira City Council regarding the use of open space for flood mitigation.	Started	Melbourne Water

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Preparedness for flood events	5. Elster Creek Catchment Flood Management Plan developed which builds community understanding of flood risk, preparedness and response across the catchment by working with our partners.	April 2018	Commenced with Melbourne Water engaging the services of a consultant to develop a Flood Management Plan for the Elster Creek Catchment. The consultancy scope consists of two stages; the first to develop a flood management plan to meet the requirements of the Flood Strategy; the second to ensure that the catchment-based Flood Management Plan aligns with each Council-based Flood Management Plan.	Started	Melbourne Water
	6. Development of a pilot program that provides a tailored approach to flood awareness, education and response (with potential higher levels of services) based on sub catchment flood risk profiles.	July 2018	Not yet commenced as it is dependent on deliverable 5 outcomes.	Not Started	Melbourne Water
Post Flood actions	7. Work with EMV and VicSES to improve coordination of emergency response, including scenario planning and communications after flood events.	June 2018	Underway. Melbourne Water have commenced coordinating increased communication in flood preparedness, response and recovery. This included the development of a standard flood response template to proactively communicate with partners.	Started	Melbourne Water
Planning for the catchment	8. Complete a collective review (scan) of the Catchment's planning schemes to inform future 'catchment level' planning policy focussing on the reduction in flood risk and adaptability provisions.	Feb 2018	Complete with Hansen Consultants being engaged to undertake a review of planning policies and frameworks at a catchment level	Complete	Glen Eira Council
	9. Define future planning policy opportunities from a catchment wide perspective (IWM, RAINWATER tanks, Impervious %, incentives and offset program) leveraging available research programs and partnership opportunities.	May 2018	Nearing completion with workshops held in April 2018 to define the future planning policy opportunities with suitable representatives from partner organisations and other relevant participants. Development of a Planning Policy and Provision discussion paper with detailed recommendations is underway with a DRAFT discussion paper distributed to working group members in early June 2018.	Started	Glen Eira Council
	10. Review outcomes of the Distributed Storages and Melbourne Urbanisation Mapping Projects to ascertain opportunities for further scenario development in the Elster Creek.	March 2018	10a) Melbourne Water have completed the distributed storages study review. the review identified that distributed storages should be considered as flood mitigation options when undertaking urban flood studies. Distributed storages are more likely to be effective in catchments that are highly urbanised and have existing flooding problems, but that specific catchment modelling is required to quantify the estimated benefits. This has resulted in the commencement of two further distributed storages studies specifically for the Caulfield South Main Drain and the Moorabbin Main Drain. 10b) Study for Elster Creek for Distributed Storages – see Action 3 for outcomes	Complete Started	Melbourne Water
Collaborating with our partners	11. Develop a plan to engage with community when commencing modelling and mapping projects.	April 2018	11a) Community engagement plan to be developed	Started	Melbourne Water
			11b) Discussions commenced with Kingston on how to collaboratively engage with community for proposed 18/19 planning scheme amendment	Started	Melbourne Water
			11c) Work with Glen Eira on collaborative engagement for proposed planning scheme amendment. Awaiting input from GECC	Started	Melbourne Water

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Innovation	12. Develop a plan to share existing technology advancements across the catchment and progress these tools for early community benefits: Flood warning app, smart gauges.	May 2018	Underway with a flood app proof of concept developed and a post implementation of the project complete. Next step is to integrate with FIDS and other systems. Work to develop project documentation including governance between MW, emergency management agencies and councils will be considered in this phase.	Started	Melbourne Water
We communicate with our communities about flooding across the Elster Creek Catchment	13a. Communications approach and plan developed.	January 2018	Complete with a Communication and Engagement Plan endorsed by the Working Group at the May 2018 meeting.	Complete	City of Port Phillip
	13b. Development of a community 'lexicon' in relation to flooding. Conversations and communications about flood risk are clearly articulated and shared across the Elster Creek Catchment, simplifying flood terminology and concepts.		Complete with a Lexicon available on the City of Port Phillip website with relevant terminology and definitions included. The Working Group will update this lexicon, if required, with input from the Community Reference Group once established.	Complete	City of Port Phillip
Building our understanding, validating what we know	14. Develop a mechanism for impacted communities to update flood impacts during and post flood events using the latest NextGen technologies (livestreaming, photos, drones).	April 2018	Not yet started. A detailed scope of work needs to be developed. Post flood data recovery opportunities have been incorporated into the flood application developed as part of deliverable 12.	Developed	Melbourne Water
Our engagement is focused	15. Map key stakeholders groups across the Elster Creek catchment to understand influencers and advocacy groups.	Jan 2018	Completed with a consolidated stakeholder database established with input from the project partners. This stakeholder database will be a living document which can be amended as the working group is advised of changes to the relevant stakeholder group.	Complete	City of Port Phillip
	16. Create a Community Reference Group to provide community feedback to the Working Group.	Feb 2018	Community Reference Group membership nomination process concluded. Members appointed. Deliverable 16 is complete with the formation of a Community Reference Group. The Group consists of two representatives from each local government area of Bayside, Glen Eira and Port Phillip as well as partner organisation representatives. The first Reference Group Meeting was held in July 2018.	Started	City of Port Phillip
Building our understanding	17. Develop a specific education program for Councillors, MPs, Senior council executive and stakeholder advocacy groups to: <ul style="list-style-type: none"> • Build understanding of the characteristics of the Elster Creek Catchment in relation to flooding. • Understand mitigation options. 	March 2018	Not yet started in so far as a specific program has not been developed. Inputs from deliverable 3 and 4 will inform this outcome.	Not started	City of Port Phillip