



Melbourne Water 2021 Waterways and Drainage Investment Plan: Submission Form

We are in the process of developing our new Waterways and Drainage Investment Plan (WDIP). The WDIP is part of the Melbourne Water Price Submission produced every five years. The WDIP guides the work we do to maintain and improve our waterways, manage stormwater across greater Melbourne, and provide flood prevention, as well as flood response and recovery initiatives in partnership with local councils (and other organisations).

The funding for the programs in the WDIP is drawn from the Waterways and Drainage Charge. This charge is collected from 2.1 million homeowners and businesses across the Port Phillip and Westernport region.

We want to understand local council priorities, and the outcomes that are important to you and your community with regards to waterways, flood and stormwater management as well as urban development and renewals.

The information we gain through engagement with local councils will enable us to better plan and identify opportunities to improve services for the local community.

We encourage you to collaborate internally to provide responses that are representative of the views and insights of council and your community.

For further information and to support your submission please refer to the background document.

Outcomes for Managing Flooding

Flooding can affect our community both directly and indirectly. Over 200,000 properties in the Port Phillip and Westernport region are currently estimated to be at risk of flooding with at least a 1% chance each year. The annual average damage caused by flooding is estimated to be \$399 million. This includes damage to residential and commercial buildings and properties, damage to roads, and some of the broader economic consequences of floods.

Indirectly, flooding can cause disruption and damage the natural environment. Additionally, the personal and social costs of flooding, whilst difficult to quantify, can be significant. With the region's population expected to almost double by 2050, floods have the potential to affect an even greater number of people and assets.

Climate scientists project the intensity of heavy rainfall events to increase and sea level to continue to rise, increasing the severity and regularity of flood events. Climate change increases the challenges we face in managing flood risk in the region.

Floods are a natural occurrence. We can't stop them from happening, but we can plan for and manage the risk and reduce the consequences.

In the Port Phillip and Westernport region over 50 different organisations work together to manage the risks of flooding, including Melbourne Water, the 38 councils, water authorities, government departments and emergency services together with the community.

For more detailed information on reducing the impacts of flooding and preparing the community and stakeholders for flooding incidents, please see page 10 in your Background Document.

NB: Where prioritised outcomes are very close or competing for your council, please indicate this in Q2 below.

1. Prioritise the outcomes for **flood management** that are most important to your community and council area, where one (1) is most important and four (4) is least important.

	<p>Outcome: Risks to life, property and convenience as a consequence of flooding are reduced through the provision of early warnings and community education.</p> <p><i>Program of service:</i> Reduce the burden in the community of the consequences of flooding. This will be supported by a range of programs and measures including developing and managing flood warning systems with key stakeholders; delivering targeted flood resilience education programs in the community in partnership with councils and VICSES; as well as monitoring and providing river level warnings and closing river crossings to ensure the safety of the community.</p>
	<p>Outcome: Flood risks to life, property and convenience are reduced through the management, collection and conveyance of stormwater.</p> <p><i>Program of service:</i> Manage the catchment drainage network to ensure flood management infrastructure is regularly maintained and upgraded when necessary to ensure the safety and convenience of the community in the event of flooding caused by stormwater; work in partnership with others to deliver integrated approaches to stormwater management that reduce flood impacts.</p>
	<p>Outcome: Flood risks to life, property and convenience are reduced through the provision of mapping, modelling, and planning information.</p> <p><i>Program of Service:</i> Provide timely, accurate and accessible flood risk information using flood modelling and mapping; and undertake research, modelling and mapping to predict urban development areas that are predicted to be affected by flood as a result of a changing climate. Provide flood information to local and state government for incorporation into planning schemes.</p>
	<p>Outcome: Flood risks to life, property and convenience are reduced through the provision of strategy, inter-agency co-ordination, management plans and by trialing new approaches.</p>

Program of service:

Lead co-planning and collaborative implementation of the regional flood strategy and development of local flood management plans to build knowledge, capacity and critical response capability between agencies and government to ensure the safety of the community and the environment. Undertake pilot programs to trial new approaches to reducing flood risks.

2. It would be helpful to know why you have prioritised the outcomes for flood management in this order.
3. What are the most important areas where you would like to collaborate with Melbourne Water to reduce the effects of flooding on the community?
4. Are there any areas of our flood services where you think a greater level of service is required? Which areas and why?
5. Are there any areas of our flood services where you think a reduced level of service is required? Which areas and why?

Managing the health of our waterways

Healthy waterways contribute to economic prosperity, social wellbeing and a thriving environment. The condition of waterways is impacted by the activities of many organisations and individuals. These can degrade waterway condition and the benefits they provide to the community. These impacts are particularly severe in the Port Philip and Westernport region which is densely populated and highly developed with extensive and increasing urban areas. Catchment and waterways management can protect and enhance access, use and enjoyment of waterways.

Melbourne Water (MW) delivers a range of waterways condition improvements that contribute to achieving the outcomes from the Healthy Waterways Strategy (the regional collaborative strategy for improving waterway health). As well as us, a range of organisations, groups and individuals in partnership and independently of MW, also contribute to the management of waterways.

For more detailed information on managing healthy waterways please see page 18 in your Background Document.

NB: Where prioritised outcomes are very close or competing for your council, please indicate this in Q7 below.

6. Prioritise the outcomes for **waterways management** that are most important to your community and council area, where one (1) is most important and three (3) is least important.

	<p>Outcome: Rivers, creeks, wetlands and estuaries (waterways) are in a physical and ecological condition that support a variety of environmental values.</p> <p><i>Program of service:</i> This includes flora and fauna biodiversity management, protecting the habitat of threatened species, maintaining instream physical habitat and form (e.g. bank stabilisation works); improving connectivity as well as monitoring and managing water in the waterway.</p>
	<p>Outcome: Waterways are accessible places that offer amenity, and opportunity for recreation, connection and relaxation in the community.</p> <p><i>Program of service:</i> Accessibility and amenity are maintained by managing water quality, litter, and vegetation for amenity. In addition to this, we work with partners to create more liveable waterway corridors and green spaces with urban shading and cooling to encourage place-based community connection, recreation and relaxation.</p>
	<p>Outcome: Waterways are managed drawing on the collective efforts of organisations and individuals, underpinned by best practice planning, investigation, innovation, technology, research, monitoring and evaluation.</p> <p><i>Program of Service:</i> Systems and processes of collaboration, knowledge sharing, and capacity building are developed so waterway managers are equipped with the resources to utilise best practice in planning, investigation, innovation, technology, research, monitoring and evaluation to achieve best outcomes for waterway management and health.</p>

7. It would be helpful to know why you have prioritised the outcomes for waterways management in this order.
8. Tell us what is most important to your community and council with regards to achieving and maintaining healthy rivers, creeks, estuaries and wetlands in your council area (if they are in your area) from 2021 – 2026.
9. Are there any areas of our waterway health services where you think a greater level of service is required? Which areas and why?
10. Are there any areas of our waterway health services where you think a reduced level of service is required? Which areas and why?
11. What are the two (2) most important areas where you would like to collaborate with Melbourne Water to improve the social/ environmental values of your local waterways in your community?

Managing urban stormwater and pressures of urbanisation

Managing stormwater is an increasingly important challenge across our region. As the natural landscape is built over with hard, impervious surfaces such as roofs, roads and paved areas, less rain water infiltrates to the soil and groundwater system and more drains directly into waterways, carrying pollutants such as oils, dirt, nutrients, heavy metals, pesticides and litter with it.

Increased and rapid runoff to waterways during, and shortly after, rain events leads to scouring of aquatic habitats, and a heavier load of urban pollutants, including oils, dirt, nutrients, heavy metals, pesticides and litter. Changing flow regimes and water quality affect the habitats and health of platypus, fish, invertebrates and other aquatic animals, and naturally saline wetlands and waterways in the lower parts of catchments and the health of the Western Port and Port Phillip bays. They also affect how people can access and use waterways and bays for recreational activities.

These changes have major impacts on instream and riverside flora and fauna. When less rainfall can soak into the ground, there is less moisture in the soil, and subsequently less water available for vegetation and seepage into rivers during dry conditions. This lack of moisture in the environment also leads to increased ambient temperatures which in turn impacts on community health and wellbeing.

Excess stormwater which drains directly via pipes and channels to our waterways is the critical factor in maintaining good ecological health of our waterways. By harvesting and infiltrating excess run-off, we can replicate the natural conditions and support good ecological health of our waterways and the bays and reduce the transport of pollutants and litter.

For detailed information on stormwater management and reducing the effects of stormwater on the health of our waterways and bays, please see page 24 in your Background Document.

NB: Where prioritised outcomes are very close or competing for your council, please indicate this in Q13 below.

12. Prioritise the outcomes for **urban stormwater and pressures of urbanisation** that are most important to your community and council area, where one (1) is most important and three (3) is least important.

	<p>Outcome: The health of Port Phillip Bay is protected through nitrogen load reduction and the health of Western Port is protected through sediment load reduction.</p> <p>Program of service: Enhance and maintain the capacity of our region's stormwater quality treatment systems (SWQTS) through the construction of new lot scale, street scape and public realm stormwater assets as well as the rectification and renewal of existing wetlands. The operation and maintenance of sediment ponds as well as litter removal, investigations and mapping pollution from industrial sites to protect and enhance the health of the waterways in the region. Provision of opportunities for partnerships and education as well as incentivising and co-funding of our partners to also participate in building and maintaining SWQTS.</p>
	<p>Outcome: Preventing significant decline to the ecology of waterways by significantly increasing stormwater harvesting, and developing more fit-for-purpose stormwater reuse systems to deliver multiple benefits to the community and the environment</p> <p>Program of service: Provide opportunity for a viable alternative supply which can diversify the region's mix of available water resources to improve community wellbeing and amenity through access to cooler, greener urban spaces and recreational areas. Provide opportunities for partnerships and education as well incentivise and co-fund our partners to meet harvesting and infiltration objectives.</p>
	<p>Outcome: Increasing industry capacity to implement water sensitive design and develop stormwater management systems and advocating for policy change to support industry initiatives.</p> <p>Program of Service: Stormwater management is planned and implemented using best practice in planning investigations to inform the effective functionality of wetlands and improving wetlands operations. Developing guidance to include Healthy Waterways targets into the State Policy Planning Framework to influence change and best practice as well as funding research into stormwater impacts on waterway condition and the quantitative risk assessment of using stormwater as an alternative water source in fit-for-purpose uses.</p>

13. It would be helpful to know why you have prioritised the outcomes for stormwater management in this order?
14. What are the three (3) most important areas where you would like to collaborate with Melbourne Water to reduce the effects of stormwater on the community and infrastructure?
15. What the primary concerns for your council with regard to stormwater planning and management?

Urban development services

Melbourne Water provides services integral to a broad range of development-related customer groups. These services protect new and existing properties from flooding and maintain the health of local waterways and bays. We aim to ensure long-term, sustainable outcomes are delivered for all stakeholders. We do this for the benefit of the community we serve and to enhance life and liveability within the Port Phillip and Westernport catchments. We work with the Victorian Planning Authority and Local Government, as well as providing services to large-scale and small-scale developers and land development consultants, to achieve stormwater management outcomes that keep Melbourne one of the world's most liveable cities.

For more detailed information on urban development services please see page 30 in your Background Document.

NB: Where prioritised outcomes are very close or competing for your council, please indicate this in Q17 below.

16. Prioritise the outcomes for **urban development** that are most important to your community and council area, where one (1) is most important and three (3) is least important.

	<p>Outcome: Drainage infrastructure development in greenfield areas ensures flood resilience for the community, assets and properties as well as the protection of waterways from the impacts of flood and stormwater damage.</p> <p><i>Program of service:</i> Creation and management of catchment drainage strategies (infrastructure plan) and the provision of development requirements and conditions for asset construction sequencing and timing. Undertake asset construction surveillance to ensure functionality and quality, as well as the creation and management of Development Services Schemes (financial mechanism to provide equity).</p>
	<p>Outcome: Infill development requirements in urban renewal precincts ensures flood resilience for the community, properties and assets as well as protecting waterways from the impacts of flood, and stormwater.</p> <p><i>Program of service:</i> Provision of development requirements and conditions for asset construction sequencing and timing. Undertake asset construction surveillance to ensure functionality and quality as well as creation and management of Development Services Schemes (financial mechanism to provide equity).</p>
	<p>Outcome: Melbourne Water provides timely and accurate advice to local councils under the planning permit application process for small scale development.</p>

Program of Service:

Respond to council-referred planning applications so that development in existing urban areas meets drainage, flood protection, stormwater quality, waterway condition and other relevant requirements. Provide planning guidelines and flood mapping advice and information for developing development overlays, providing pre-development advice, support council SBO/LSIO planning scheme amendments, maintain flood information/models/maps, provide planning guidelines and statutory requirements.

17. It would be helpful to know why you have prioritised the outcomes for urban development in this order?

18. What are the primary concerns for your council with regards to urban development?

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19. Thinking about the scope of services that will be included in the Waterways and Drainage Investment Plan 2021-2026, are there services or programs that you believe should be considered for inclusion that would support the greater outcomes of the 2021 WDIP and provide benefit to the community?
20. What Melbourne Water services are most valued by your council and provide benefit to the community?
21. Ten years from now, what outcomes for the health, safety and amenity of the community will be most valued in your council area?
22. We would appreciate you sharing your name and contact details so we can continue to collaborate with you on this work:

Name

Council

Job title

City/Town

Email Address

Phone Number

23. Please provide the name and contact details of any other staff who have assisted in completing this survey and the five and ten year scenario.

This will assist Melbourne Water in building a database of council contacts to continue collaborating on this work in the future.

Name

Job title

Email Address

Phone Number

24. Is there anything else that you'd like to tell us?

25. I agree that the responses that are captured in this submission as far as possible reflect the views of the council and not just the views of the people that completed the submission.

Yes