

# MUSIA Closing the Loop Report

Progress on clarifying roles and responsibilities for  
public urban stormwater assets and services



## Acknowledgements

The Department of Environment, Land, Water and Planning, the Municipal Association of Victoria and Melbourne Water gratefully acknowledge the contributions of Councils and Melbourne Water staff involved in the Joint Reference Group.

## Authors

The MAV, MW and DELWP collectively contributed to this closing the loop report.

### Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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## Executive summary

The Melbourne Urban Stormwater Institutional Arrangements (MUSIA) review is a collaboration between the Department of Environment, Land, Water and Planning (DELWP), Melbourne Water (MW) and the Municipal Association of Victoria (MAV) on behalf of the 38 councils in the Port Phillip and Westernport region. MUSIA aims to better delineate roles and responsibilities for public urban stormwater assets and services. This will achieve a clear, flexible, adaptable and holistic catchment-based approach where stormwater is managed as part of the complete water cycle, to achieve greatest community value.

A discussion paper was released in late June 2021, which presented three shortlisted options for institutional arrangements: Option 1 – delineation by catchment (improved 60-hectare); Option 2 – delineation by asset size and class; and Option 3 – delineation based on outcomes. These shortlisted options were developed following an iterative, collaborative process to develop a shared vision and guiding principles for MUSIA, and through several workshops to develop a long list of possible institutional arrangements.

A range of information sessions and workshops were held alongside the discussion paper's release to allow stakeholders to give their feedback, in addition to an online survey linked to the discussion paper. In parallel to stakeholder consultation, a multi-criteria analysis (MCA) was conducted on options 1 and 2 to compare their performance against the evaluation criteria. Option 3 was not defined clearly enough to include in the MCA. This report summarises stakeholders' feedback on the options and the results of the MCA and outlines the next steps for the project.

Following consideration of the MCA results and stakeholder feedback, the Project Steering Committee comprising DELWP, MAV and Melbourne Water has agreed in principle that 'Option 1: delineation by catchment – improved 60-hectare' is the best way forward. The agreed option includes exceptions to the strict 60-hectare interpretation. In broad terms, the exceptions will relate to complex integrated water management opportunities involving multi-purpose assets designed to function as a single interlinked network; requiring complex infrastructure to satisfy regulations for beneficial use.

Councils also need the opportunity to understand and assess the financial impact in greater detail, which will be provided for in the next phase of MUSIA, before the agreed option is confirmed.

The project implementation phase will include setting up a new governance framework, more clearly define the IWM exception to the 60-hectare rule, the delineation method and levels of service to be achieved across the region. The MAV and Melbourne Water will draft an implementation plan and will consult stakeholders on the draft. The plan will cover implementation actions over the short-term (2022-23), medium-term (5 years) and long-term (10 years).

# MUSIA work to date

## Background and scope

Stormwater management in the Port Phillip and Westernport region is currently split between MW and councils according to a convention set in 1927 known as the 60-hectare rule. Melbourne has changed significantly since 1927, and so has the range of urban stormwater management assets and services undertaken by councils and MW. This has led to inconsistent application of the rule and inefficient case-by-case decision-making.

MUSIA will clarify roles and responsibilities for stormwater services and publicly owned assets. There are a range of assets and services identified in the scope of the project, including flood mapping, land use planning, underground drains and constructed waterways such as wetlands. Clarifying roles and responsibilities for urban stormwater management will allow agencies to focus on what is the right asset for the right objective (or multiple objectives), rather than thinking about who is going to manage the asset. Clarifying institutional arrangements to enhance collaboration between the agencies will help to ensure stormwater is managed more holistically across the Port Phillip and Westernport region.

## Project governance

DELWP, MW and the MAV (on behalf of councils) have collaborated on the MUSIA project, with DELWP leading project management of the review and acting as Chair for the Project Steering Committee (PSC).

All key steps of the MUSIA project have included consultation with a range of stakeholders. The Project Working Group (PWG) comprised officers from DELWP, MAV and MW, has coordinated the project, with technical advice from a Joint Reference Group (JRG) that included representatives from MW and councils in the Port Phillip and Westernport region. These groups were overseen by the PSC, made up of senior representatives from MAV, MW and DELWP.

## Options development process

The MUSIA shared vision is: “A clear, flexible, adaptable and holistic catchment-based approach where stormwater is managed as part of the complete water cycle to achieve greatest community value.” This vision is underpinned by four guiding principles: holistic, clear and transparent, consistent and effective, and responsive and adaptable.

The options for institutional arrangements were developed through an iterative, collaborative process. To start, over 50 stakeholders attended a workshop in March 2020, where they came up with a range of ideas for options which were grouped into categories (Appendix A). Marsden Jacob Associates worked with the PWG and JRG to refine the ideas in the categories into six clear options for how stormwater asset and service responsibility could be delineated (Appendix B).

The JRG evaluated these six options using an evaluation framework described in Appendix C to reach a shortlist. The evaluation revealed Option 1, Option 2 and Option 3 perform best against the criteria. Option 4, Option 5 and Option 6 were assessed by the JRG to be least in alignment with the criteria.

This process narrowed the list to three options:

- Option 1 - delineation by catchment: improved 60-hectare: delineation based on a formalised and clearly defined 60-hectare delineation.
- Option 2 - delineation by asset size and class: would categorise and allocate responsibilities for assets based on size (e.g. pipe diameter) or classification (e.g. retarding basins and wetlands).
- Option 3 - delineation based on outcomes: would allocate responsibilities based on which organisation is best placed to manage the outcomes delivered by an asset or service.

## Stakeholder engagement

In June 2021 the three shortlisted options were presented in the *MUSIA Discussion Paper - Options for roles and responsibilities for public urban stormwater assets and services in the Port Phillip and Westernport region*. The discussion paper was linked to an online survey and sent to over 80 stakeholders including MW, councils, water retailers, Department of Transport, Victorian Planning Authority, DELWP, DJPR, interested consultants, peak bodies and community representatives. The survey asked respondents:

- to score each option against the MUSIA guiding principles
- which aspects of each option needed clarification (if selected as the preferred option)
- to rank the options in their order of preference, and
- what governance arrangements would be needed to make future arrangements work effectively.

There were 31 respondents to the online survey from 26 organisations and there were some organisations that chose to make submissions rather than fill in the survey. There were a range of engagement activities run alongside the discussion paper's release, including MAV-led council information sessions and workshops, workshops with IWM working group members<sup>1</sup> and internal MW workshops. This report summarises the feedback from all workshops, submissions and survey responses.

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<sup>1</sup> There are five IWM Forum areas in the region based on the five major waterway catchment boundaries: Werribee, Maribyrnong, Yarra, Dandenong and Western Port. The Forums bring together all organisations with an interest in water cycle, under each Forum there is a working group comprised of practitioners from the member organisations.

# Stakeholder feedback and MCA results

## Quantitative survey results

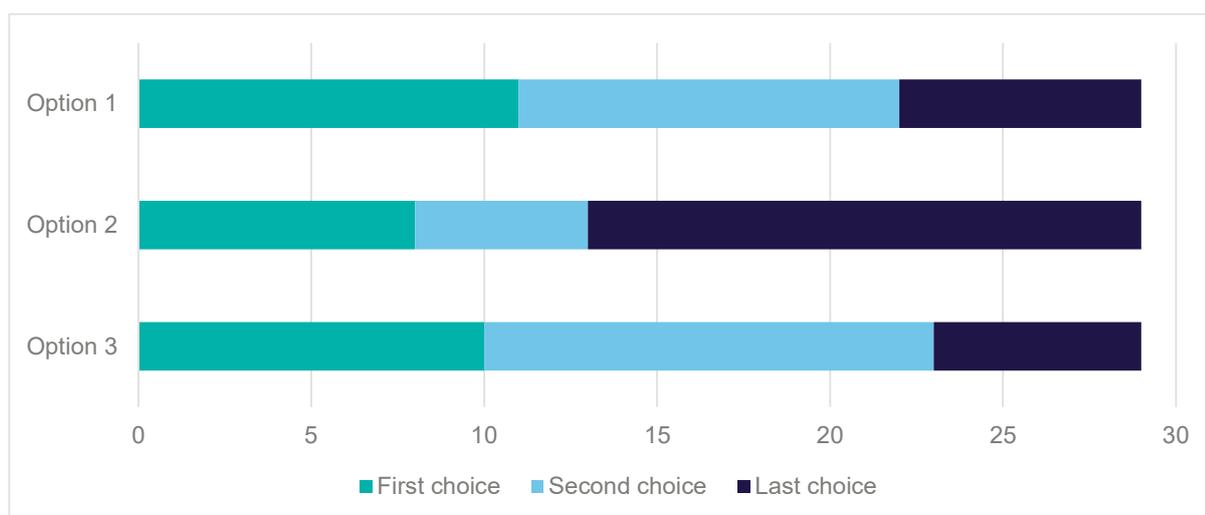
Part of the online survey asked individual respondents to rate how well they thought each option performed against the MUSIA guiding principles, using a five-point scale from 'very poor' to 'very well', and then asked them to rank the options in order of their preferences. For the analysis, a rating of 'very poor' was translated to a score of 1 and 'very well' a score of 5 (and each rating in between was translated respectively).

The preferential rankings (shown in Figure 1) show that Option 1 was slightly more favoured than Option 3 by survey respondents, with Option 2 the least favoured. Option 1 was scored higher against the guiding principles than both options 2 and 3, as shown in Table 1.

**Table 1: Rating of the shortlisted options against the MUSIA guiding principles and total average**

	Holistic	Clear and transparent	Consistent and effective	Responsive and adaptable	Average
<b>Option 1</b>	3.4	3.9	3.5	3.2	<b>3.5</b>
<b>Option 2</b>	2.5	2.9	2.7	2.1	<b>2.5</b>
<b>Option 3</b>	3.4	2.5	2.6	2.6	<b>2.8</b>

**Figure 1: Preferential ranking of each option by survey respondents**



## Option 1 - delineation by catchment - improved 60-hectare

Stakeholders generally agreed that Option 1 was the most straightforward and would be the easiest to implement.

Some felt that the nature of the 60-hectare rule aligned with the geographic scope of organisations, with councils being responsible for local, municipal drainage and MW being responsible for region-wide assets and services. They noted that the catchment delineation would ensure consistency and transparency across the Port Phillip and Westernport region.

However, there was concern expressed that the bluntness of a strict 60-hectare rule may lead to perverse outcomes in complex situations. Those that were concerned felt that a strict 60-hectare rule would be too rigid to allow flexibility where needed. In general, councils were concerned that this option could lead to cost-shifting to councils due to the number of small-scale IWM assets being built in new development areas. Some councils perceived that the existing and increased pressure on council budgets may then disincentivise local water sensitive urban design or lead to significant differences in the level of service delivered across the region.

Overall, Option 1 was the most preferred by a range of stakeholders, with many recognising that the issues with the current arrangements arise from unclear roles and responsibilities and not the catchment delineation itself.

## Option 2 – delineation by asset size and class

A small number of stakeholders identified that this option could allow responsible authorities to develop clear capabilities and specialist skills for certain assets. However, this clearly was the least preferred option by all stakeholder groups. Overall, stakeholders felt that delineation based on size was not an integrated, place-based or customer-centric way of allocating responsibility. In particular, asset design is often influenced by a range of factors other than catchment considerations, including land availability and location of other services.

The option was not considered to be flexible or adaptable, as urbanisation and climate change are likely to change the sizes and types of commonly built assets. The delineation threshold would either need to be regularly re-visited and redefined or there would be a semi-constant transfer of assets between organisations.

Stakeholders expressed concern that this option would either lead to fragmented ownership or would require possibly confusing exceptions, where asset sizes change multiple times along one alignment due to complex design requirements. For example, storage is sometimes built into pipe networks by alternating large and small pipes multiple times. This would either lead to multiple changes in ownership or exceptions to the asset size rule. Similar concerns were raised about wetland inlet and outlet pipes and the potential for ownership of the pipes and wetlands to be split between organisations.

## Option 3 - delineation based on outcomes

This option received mixed reviews from stakeholders. Some feedback said that the outcomes-based approach was the best way to deliver IWM and community outcomes while being flexible to adapt to changes. Others felt the lack of clarity would add significantly to implementation timelines and lead to more confusion in the long-term. All stakeholders acknowledged that determining the outcomes-based triggers would require more detailed work, and that this would take time, with concern this would stall progress on IWM initiatives, responding to climate change and building resilience into the system.

The outcomes-based approach was generally the most favoured by councils, although some inner suburban councils were concerned that their municipalities may receive less support under this option, as they are largely outside the Healthy Waterways Strategy priority areas for stormwater interventions. Councils and other stakeholders who supported this option felt it would allow flexibility to deal with local issues and increasingly complex stormwater management assets and services.

The main concern raised for this option was that the outcomes, beneficiaries and triggers would be difficult and time-consuming to define, and there was a high risk that this would entrench the current lack of clarity and case-by-case approach to responsibility allocation. There were also concerns about the difficulty of delineating by outcomes in areas where there are multiple values and benefits being sought, and that it may not be clear which organisation would be best placed to manage all outcomes.

## General comments

Many respondents to the discussion paper survey made comments relevant to all options about elements that needed clarification or further work.

They highlighted any option would require good governance to oversee the institutional arrangements, including providing clear communication and dispute resolution. Some considered that an independent arbiter to assist in resolving disputes would aid implementation. It was made clear that a governance model should also enable innovative approaches to stormwater and flood management, and to achieve water security, waterway health and liveability outcomes.

Some respondents were concerned or unsure about how ownership of existing assets would be transferred between organisations, and some were particularly concerned about the impact of transferring ownership of stormwater harvesting assets. Several respondents also highlighted that current asset ownership information needs improving before the full impact of any option could be assessed.

Many councils were concerned about not having dedicated funding available for stormwater management and the disparity between councils with differing priorities and levels of service for stormwater management.

### Multi-criteria analysis results

Only Options 1 and 2 were sufficiently developed to compare through a multicriteria analysis (MCA), which was conducted in parallel to stakeholder consultation. The results showed that Option 1 performed better than Option 2 against all criteria, as shown in Figure 2 below.



Figure 2: Spider chart showing MCA rating of options 1 and 2 against the nine evaluation criteria

The MCA highlighted that Option 1 allows councils to interact with the community at a local level, and that the design of stormwater assets is in part based on catchment size, which aligns well with this option.

As it had been developed later in the process by the JRG, Option 3 was not clearly defined enough to complete a robust analysis in the MCA. Information was sought through the discussion paper to determine the relative merits of investigating the option further. Based on the feedback received, the PSC agreed Option 3 did not warrant additional work due to the complexity of this option and the challenges with implementation.

# Project outcomes and next steps

## Agreed option

The feedback showed that a majority of stakeholders agreed that the 60-hectare catchment delineation (Option 1) was generally appropriate as the basis for determining stormwater roles and responsibilities. The main concern with this option was the bluntness of the rule and the potential unintended consequences if there was no flexibility and dedicated funding sources for councils.

After considering the stakeholder feedback and MCA results, the PSC agreed in principle that 'Option 1: delineation by catchment – improved 60-hectare' is the preferred way forward. The agreed option will include an exception to the strict 60-hectare application allowing for opportunities involving multi-purpose assets designed to function as a single interlinked network. This type of network would require complex infrastructure to satisfy health regulations for beneficial use. This exception will be clearly defined through the implementation phase.

Councils will also be provided with the opportunity to consider the financial impacts in more detail in order for MAV to confirm this option on their behalf.

Efficiencies would be expected to derive from increased consistency about which agency will be responsible for urban stormwater assets and services across the region and enhancing existing processes and capabilities, rather than the need to create new ones. Building on current roles and responsibilities will help reduce duplication and unlock funding efficiencies through aggregation and rationalisation of effort. With the right institutional arrangements in place, agencies will be able to move more quickly to determine the right asset for the right objective (or multiple objectives), rather than negotiating who is going to manage the asset.

The agreed option is anticipated to provide the basis for clear and transparent roles and responsibilities. With the appropriate supporting level of institutional arrangements in place, MW and councils will be able to deliver their responsibilities and provide the greatest consistency of application, enabling residents moving from one council area to another to receive consistent information.

The PSC agreed that further work on Option 3 was not required based on the discussion paper feedback.

## Next steps

The MAV and Melbourne Water are currently developing an implementation plan based on the Improved 60 hectare option. The purpose of this implementation plan will be to facilitate conversations between MW, the MAV and councils to finalise and confirm agreement on the improved 60-hectare option and the elements which are necessary to support its implementation. The plan will cover processes in two phases; the first phase is to confirm the details of the agreed option, and the second phase will be the implementation. The rate of progress on finalising the option and implementation of the project is subject to co-investment to fund a project manager.

The actions are summarised in the table below.

Action	2022	Short term (2023)	Medium term (5 years)	Long term (up to 10 years)
<b>Phase 1: finalising the option</b>				
Understanding the financial impact for councils and MW				
Confirming the agreed option and implementation steps with councils				
<b>Phase 2: implementation</b>				
Agree on a new governance arrangement for implementation				
Ensure ongoing communications and engagement				
Clarifying roles and responsibilities, including transfer of assets and levels of service				
Embed institutional arrangements, including establishment of relevant frameworks				

#### *Understanding the financial impact*

To better understand asset information and financial impacts under the improved 60-hectare option, MW has engaged RAIN Consulting to gather asset information and to consult on a method for catchment delineation. This will involve individual meetings with officers within MW and each of the 38 councils (GIS officer, drainage engineer and/or asset coordinator) to validate asset data, including waterbodies. RAIN Consulting will explain the proposed catchment boundary delineation method and the likely changes (if any) in asset ownership.

This work will be carried out between January and March 2022. Each council will be provided with an ESRI map to show catchment boundaries and asset ownership based on the new catchment boundaries. This will provide the information which will assist councils and MW understand the financial impacts of the agreed option.

Councils will have the opportunity to comment on the proposed exceptions to the 60-hectare rule. MW is developing the exceptions, which is expected to be available to councils early in 2022. In broad terms, the exceptions will relate to complex integrated water management opportunities involving multi-purpose assets designed to function as a single interlinked network; requiring complex infrastructure to satisfy regulations for beneficial use.

During the next phases of MUSIA, decisions regarding ownership of stormwater assets by MW and councils will continue as per current arrangements.

#### *Confirming the agreed option and implementation steps*

Short term implementation actions are likely to be staged over the next two years (2022-2023), with a longer transition time of up to 10 years for actions such as transferring ownership of significant assets. Relevant governance arrangements will also be established to ensure a more holistic approach to urban stormwater management across the region.

#### *Implementation governance*

A governance framework for implementation will include MW, MAV, DELWP and council representatives to oversee and advise on the technical work to agree on a delineation method and service levels across the

region. Based on feedback to the consultation paper, a new governance structure will be needed to ensure that the new institutional arrangements are robust. This will ensure that stormwater management continues to be managed effectively to meet the future and growing needs of the Port Phillip and Westernport region. DELWP will explore legislative options once MW and councils have agreed and tested asset allocation procedure and relationship governance.

### Further information

DELWP website - [www.water.vic.gov.au/liveable/stormwater-review](http://www.water.vic.gov.au/liveable/stormwater-review)

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## Appendix A

Participants who attended a workshop in March 2020 were asked to identify options for stormwater and flood management roles. Below are the 10 categories that were used to group the ideas in the workshop.

1. Status quo e.g. 60ha catchment delineation
2. Minimising stormwater going into the system (using the Land Use Planning system, or Victorian Planning Provisions, or building regulations)
3. Asset size and classification (hierarchy of assets)
4. Review catchment size and consider a smaller or larger delineation
5. Include Department of Transport as part of stormwater management
6. Third party authority (catchment based/collaborative plans across councils/incorporating capacity share arrangements)
7. New entity with overall responsibility
8. Water retailer arrangement included in essential service funding model which is separate to rates
9. Separation of capital/planning/design and operations
10. Stormwater is managed according to use.

The participants in the workshop were from the following organisations:

- Department of Environment, Land, Water and Planning
- Department of Transport
- Banyule City Council
- Bayside City Council
- Casey City Council
- Improving Urban Stormwater MAC
- Glen Eira City Council
- Greater Dandenong City Council
- Infrastructure Victoria
- Kingston Council
- Knox City Council
- Maribyrnong Council
- Melbourne Water
- Melton City Council
- Monash City Council
- Mornington Peninsula Council
- Municipal Association of Victoria
- Port Phillip City Council
- Victorian Planning Authority
- Whitehorse City Council
- Whittlesea City Council
- Wyndham City Council
- Yarra City Council

## Appendix B

Consultants Marsden Jacobs and Associates (MJA) worked with the PWG and JRG to refine the ideas from the workshop in March 2020 into six clear options for how stormwater asset and service responsibility could be delineated. The table below has the six options.

Table: Options for further evaluation

OPTION	PLAIN ENGLISH DEFINITION:
<p><b>OPTION 1: IMPROVED 60 HECTARE</b></p>	<p>Asset ownership and maintenance is delineated based on a catchment size of 60.7 hectares. Assets and services for catchments larger than 60.7 hectares are owned, managed, and delivered by Melbourne Water, and assets and services for catchments smaller than 60.7 hectares owned, managed and delivered by Councils.</p> <p>For Option 1a, this means formalising the existing convention with respect to services and assets for Melbourne Water and Councils.</p>
<p><b>OPTION 2: ASSET SIZE AND CLASS</b></p>	<p>Assets will be broken into groups based on the size of the asset (e.g. pipe diameter) or the class (e.g. retarding basins), and there will be a clearly defined owner for each of these groups of assets.</p> <p>Councils would be responsible for smaller assets with Melbourne Water responsible for larger asset sizes, reflective of the relative importance of their function. If an asset was upgraded, it would move from one responsible agency to another.</p> <p>The allocation of service responsibilities between Councils and MWC remains the same as Option 1a under this option, except for 'flood risk management' and 'water quality protection and improvement' services which will be based on asset size and class.</p>
<p><b>OPTION 3: RISK BASED ALLOCATION OF SERVICES AND ASSETS</b></p>	<p>Services and asset ownership, delivery, operations, and maintenance are delineated based on a formal risk evaluation undertaken at the appropriate scale. Service and asset responsibility would reflect who is best placed to manage the asset or service based on an understanding and evaluation of the risk associated with that asset or service in delivering the level of service.</p> <p>Higher risk elements of the stormwater system would be allocated to Melbourne Water and the lower risk elements to council. Although the initial allocation may be time consuming, a system could be developed that was largely stable for established areas and managed through a transition in growth and renewal areas. The asset and service responsibility allocation would be reviewed on a medium-term basis (10-15 year time-frames), to enable adjustments if there were significant environmental (climatic and/or urban development) changes which drove a need for revised allocations. Changes would be expected to be minimal between review periods.</p> <p>Risk could relate to risk of flooding or any of the other elements impacted by stormwater management, including water quality, erosion or resource management.</p> <p>Management Plans for stormwater assets and services for both MW and councils would be required, with these being medium term in duration, with reviews say every 10 years.</p> <p>The initial risk-based analysis and allocation would require leadership and direction from central agencies (which could be Melbourne Water and/or DELWP), accompanied by a governance structure which enabled top-down considerations to have regard for local insights about the areas of highest risk. Formalised arrangements would establish the authority of the central agency and the roles of councils. Codes of practice would guide the assets and services to be maintained and provided by councils.</p>

<p><b>OPTION 4A: NEW ENTITY WITH OVERALL RESPONSIBILITY FOR SERVICES AND OWNERSHIP OF ASSETS</b></p>	<p>All services and asset responsibilities within the Melbourne Water catchment boundary are transferred from Melbourne Water and Councils to a newly established entity.</p>
<p><b>OPTION 4B: NEW ENTITY WITH OVERALL RESPONSIBILITY FOR PLANNING, INFORMATION AND REGULATORY REQUIREMENTS AND NO ASSET OWNERSHIP</b></p>	<p>‘Strategic flood planning’, relevant ‘land use planning’ and ‘generation of flood information’ services within the Melbourne Water catchment boundary are transferred from Melbourne Water and Councils to a new entity.</p> <p>Flood risk management services (controlling or providing plant/vehicle access points, root management, revegetation work) and water quality protection and improvement (debris and litter clearing and pest and animal control measures to prevent waste entering stormwater systems) will remain with asset owners.</p> <p>Asset ownership and maintenance would continue to be delineated based on a catchment size of 60.7 hectares (unless otherwise agreed).</p>
<p><b>OPTION 5: MELBOURNE WATER RESPONSIBLE FOR SERVICES AND ASSET OWNERSHIP, COUNCIL RESPONSIBLE FOR MAINTENANCE TO STANDARDS DETERMINED BY MELBOURNE WATER</b></p>	<p>Melbourne Water is responsible for asset ownership, construction, flood modelling, risk assessment and planning and delivery of upgrades. Councils are responsible for all operation and maintenance of assets. This arrangement may in practice resemble a service contract where Melbourne Water as the asset owners contract the operation and maintenance of the assets to the relevant Councils. All drainage and critical stormwater infrastructure (e.g. retarding basins, wetlands established primarily for stormwater retention) assets within the Melbourne Water catchment boundary are transferred to Melbourne Water. Maintenance of these assets including ‘flood risk management’ services (controlling or providing plant/vehicle access points, root management, revegetation work) and water quality protection and improvement (debris and litter clearing and pest and animal control, root management and revegetation) would be the responsibility of councils.</p>
<p><b>OPTION 6: EFFICIENT 150 HECTARE</b></p>	<p>Asset ownership and maintenance is delineated based on a catchment size of 150 hectares. Assets and services for catchments larger than 150 hectares are owned, managed, and delivered by Melbourne Water, and assets and services for catchments smaller than 150 hectares owned, managed and delivered by Councils.</p> <p>This option will also include formalising the 150 hectare as the delineating measure with respect to services and assets for Melbourne Water and Councils.</p>

The members of the JRG included representatives from:

- City of Kingston
- City of Manningham
- City of Port Phillip
- Wyndham City Council
- City of Greater Dandenong
- Melbourne Water

## Appendix C

### Shortlisting evaluation framework

The evaluation framework developed by MJA described the criteria used for the MUSIA shortlisting assessment. The evaluation framework is shown in the table below.

Table: MUSIA institutional and governance principle-based evaluation criteria

Criteria	Description
Citizen-customer centric	Option supports asset and service delivery based on citizen-customer preferences around cost and service levels. Option means citizen-customers are confident in the government's stormwater and floodplain management ability
Holistic and collaborative	Supports an integrated, catchment-based approach to stormwater and floodplain management assets and services across management boundaries
Clear and transparent objectives, authority and decision making	<p>Option is underpinned by clear objectives, authority and decision making.</p> <p>Roles, responsibilities, and funding arrangements for responsible partners are clear and agreed, and stakeholders are confident in them (Councils, MW, MAV, DELWP others).</p> <p>Strategic and policy decision making is sufficiently structurally separated from operations and maintenance decision making (i.e. decisions about what to do are separated from decisions around how to operate and maintain assets and services).</p> <p>Decision making is skills based and supports subsidiarity.</p> <p>There is an agreed process for effectively and efficiently resolving disputes / uncertainties around objectives, authority and decision making</p>
Effectiveness	<p>Option is backed by transparent framework and service levels for planning and managing stormwater and flooding is in place, including investment prioritisation</p> <p>Option will deliver effective local and system-wide performance against agreed levels of service</p> <p>Delivery is assigned to those best placed to manage it.</p>
Efficiency	Option achieves stormwater and floodplain objectives at the lowest economic cost (highest social, economic, environmental benefit) in Greater Melbourne
Durability	<p>Option ensures there are sufficient resources (people, skills, operating resources) to sustain efficient investment to meet objectives</p> <p>The option is durable, such that the option will not collapse at the first (internal or external) challenge (e.g. developers through VCAT)</p>
Flexibility Responsiveness and adaptation	<p>The option supports a commitment to evidence-based strategies for improvement.</p> <p>The option has a responsive and adaptable approach that can respond to emerging issues and innovation and supports diverse solutions and circumstances at a local and catchment wide scale.</p> <p>The option works within existing institutional arrangements, and can also be modified in response to any major shifts in stormwater, flooding, land, and / or waterway policy and regulation</p>

	<p>The option allows for the delivery of special projects (those of a scale, complexity or sensitivity beyond standard projects)</p> <p>Works at different levels (local, catchment, council, regional etc)</p>
Funding and financing	<p>The option can efficiently source a long-term sustainable funding stream</p> <p>Funding for asset and service delivery is backed by clear evidence of citizen-customer preferences, e.g. willingness to pay</p> <p>The option and funding is consistent with Victorian <u>cost recovery</u> principles</p> <p>The option supports equitable outcomes, specifically horizontal and vertical equity. Horizontal equity refers to treating people in similar situations in similar ways. Vertical equity refers to those with greater means contributing proportionately more than those with lesser means. For example, this could be achieved by charging different prices to different people for the same service.</p> <p>The funding option addresses legacy issues, and impacts created upstream (consistent with an impactor pays approach).</p>
Implementation and acceptability	<p>Are there options that are off the table?</p> <p>How easy the option is to implement?</p> <p>How acceptable the option is to key stakeholders?</p> <p>What are the possible unintended consequences?</p> <p>Are there transition pathways available</p>