

22.03 STORMWATER MANAGEMENT (WATER SENSITIVE URBAN DESIGN)13/03/2014
C108

This policy applies to applications for:

- New buildings and works
- Extensions which are 50 square metres in floor area or greater to existing buildings.

- A subdivision in a commercial zone

This policy does not apply to an application for:

- A subdivision of an existing building.
- A rainwater tank.
- A fence.
- A domestic swimming pool or spa.
- A pergola or verandah, including an open-sided pergola or verandah to a dwelling with a finished floor level not more than 800mm above ground level and a maximum building height of 3 metres above ground level.
- A deck, including a deck to a dwelling with a finished floor level not more than 800mm above ground level.
- Non-domestic disabled access.
- Externally altering a building by structural work, rendering, sandblasting or in any other way that does not result in an increase in floor area.
- Constructing or displaying a sign.
- Externally painting a building.
- Externally painting an unpainted surface.
- Internally altering a building.
- Carrying out repairs or routine maintenance which change the appearance of a heritage place.
- The construction or extension of an outbuilding normal to a dwelling.
- Removal, destruction or lopping of vegetation

22.03-1 Policy Basis13/03/2014
C108

Increased development can result in greater hard surface area and changes to the volume, velocity and quality of stormwater drainage into natural waterways.

Achieving improved stormwater quality is a key objective in reducing the environmental impact of urban development on waterways and receiving water bodies in the Moonee Valley catchment, this policy implements the best practice performance objective outlined in the *Urban Stormwater Best Practice Environmental Management Guidelines, Victorian Stormwater Committee 1999* (as amended) to achieve the objectives of the State Environment Protection Policy (Water of Victoria).

Waterways are an important environmental asset and measures that protect, or improve, water quality will be of significant benefit environmentally, socially and economically.

Incorporating stormwater treatment measure into the design of development, including wetlands, raingarden systems and porous pavements to filter pollutants, will help to protect and improve the condition of the natural waterways and passively irrigate urban vegetation.

Water sensitive urban design (WSUD) is the design of buildings, subdivisions and works to minimise the hydrological impact of urban development on the surrounding environment. WSUD provides the means for treating stormwater run-off in a variety of ways so that the flow is reduced, and the quality of run-off is improved. Stormwater management can take various forms in the urban environment including infrastructure upgrades, streetscape layout changes, piping reconfigurations, storage tanks, and the use of different paving.

22.03-2**Objectives**13/03/2014
C108

- To achieve the best practice water quality performance objectives as set out in the *Urban Stormwater Best Practice Environmental Management Guidelines, Victoria Stormwater Committee 1999* (as amended). Currently, these water quality performance objectives are:
 - Suspended Solids - 80% retention of typical urban annual load
 - Total Nitrogen - 45% retention of typical urban annual load
 - Total Phosphorus - 45% retention of typical urban annual load
 - Litter - 70% reduction of typical urban annual load
- To promote the use of water sensitive urban design, including stormwater re-use.
- To mitigate the detrimental effect of development on downstream waterways, by the application of best practice stormwater management through water sensitive urban design for new development.
- To minimise peak stormwater flows and stormwater pollutants to improve the health of water bodies, including creeks, rivers and bays.
- To reintegrate urban water into the landscape to facilitate a range of benefits including
- microclimate cooling, local habitat and provision of attractive spaces for community use and well being.

22.03-3**Policy**13/03/2014
C108

It is policy to:

- Require development applications to demonstrate that the best practice performance objectives for suspended solids, total phosphorus and total nitrogen, as set out in the *Urban Stormwater Best Practice Environmental Management Guidelines, Victoria Stormwater Committee 1999* (as amended) will be achieved by the development.
- Require, as appropriate, the use of stormwater treatment measures that improve the quality and reduce the flow of water discharged to waterways, including, but not limited to:
 - collection and reuse of rainwater and stormwater on site
 - vegetated swales and buffer strips
 - rain gardens
 - installation of water recycling systems
 - multiple uses of water within a single manufacturing site
 - direction of flow from impervious ground surfaces to landscaped areas.
- Encourage the use of measures to prevent litter being carried off-site in stormwater flows, including:
 - appropriately designed waste enclosures and storage bins, and

- the use of litter traps for developments with the potential to generate significant amounts of litter.
- Promote or incorporate vegetation on buildings where practicable (to be irrigated with rainwater/stormwater) to promote the role of vegetation on buildings in managing the quality and quantity of stormwater.

22.03-413/03/2014
C108**Application Requirements and Permit Conditions**

An application must be accompanied by a Water Sensitive Urban Design Response including, as appropriate:

No	Requirement	When Applicable	Detail Required
1.	A site layout plan showing the location of proposed stormwater treatment measures.	All applications	Show location, area draining to a treatment measure, and the connection points, of any: <ol style="list-style-type: none"> 1. Harvesting and Reuse Measures: such as rainwater tanks (must identify what the tank is connected to; toilets, garden, etc). 2. Water Quality Treatment Measures: such as raingardens, wetlands, buffers and swales. 3. Infiltration Measures: such as porous paving and infiltration trenches/sumps. 4. Passive Irrigation Measures: such as directing runoff into gardens.
2.	A report outlining compliance with the best practice performance objective set out in the <i>Urban Stormwater Best Practice Environmental Management Guidelines, Victoria Stormwater Committee 1999</i> (as amended), such as a report from an industry accepted performance measurement tool.	All applications	Submit a STORM rating assessment (or equivalent) demonstrating how the proposed systems will help improve stormwater quality. A MUSIC assessment is appropriate for more complex treatment proposals. http://storm.melbournewater.com.au/ www.ewater.com.au/music If the water quality performance objectives set out in the <i>Urban Stormwater Best Practice Environmental Management Guidelines, Victoria Stormwater Committee 1999</i> , as amended, are not met, an application must include justification for how the development meets the objectives of this policy. Applications for extensions need to comply with the <i>Urban Stormwater Best Practice Environmental Management Guidelines</i> for the extension area only, however the measures taken to comply may be taken in areas both inside and outside of the extension area in order to achieve compliance.

Permits should include conditions that require the following:

No	Requirement	When Applicable	Detail Required
1.	Design details , such as cross sections, to assess the technical effectiveness of the proposed	As appropriate to the proposed stormwater treatment	Design details as appropriate to the stormwater treatment measure proposed.

No	Requirement	When Applicable	Detail Required
	stormwater treatment measures.	measure (e.g. may be required for raingarden systems but not required for above ground stand alone rainwater tanks)	
2.	A site management plan which details how the site will be managed through construction.	All applications.	A statement is required outlining: - construction measures to prevent litter, sediments and pollution entering stormwater systems.
3.	A maintenance program which sets out future operational and maintenance arrangements.	All applications.	A statement is required outlining: - operational and maintenance measures to check the effective operation of all systems.

22.03-513/03/2014
C108**Design Guidelines**

Before deciding on an application, the responsible authority will consider, as appropriate:

- The extent to which the development meets the objectives and requirements of this policy
- The Water Sensitive Urban Design Response
- Whether the application meets the best practice performance objective and treatment measures.
- Whether the proposal is designed and incorporates works to maintain, or improve, the quality of stormwater within or exiting the site.
- Whether the proposal will significantly add to the stormwater discharge or adversely affect water quality entering the drainage system.
- Opportunities for water conservation and reuse that influence the use of water sensitive urban design.
- The level of ongoing management required to achieve and maintain the desired stormwater quality measures that will be used during the construction phase to prevent a loss of stormwater quality as a result of building activities, such as silt traps.

22.03-613/03/2014
C108**Reference documents**

Moonee Valley Water Strategy 2011.

Moonee Valley WSUD Guidelines, 2011.

State Environment Protection Policy (Waters of Victoria), Environment Protection Authority, 2003 (as amended from time to time).

Urban Stormwater Best Practice Environmental Management Guidelines, Victoria Stormwater Committee, CSIRO Publishing 1999 (as amended from time to time).

Water Sensitive Urban Design – Engineering Procedures: Stormwater, Melbourne Water, CSIRO Publishing 2005 (as amended from time to time).

STORM calculator (as amended from time to time)

<http://storm.melbournewater.com.au/>

MUSIC – model for urban stormwater improvement conceptualisation tool (as amended from time to time)

www.ewater.com.au/music

22.03-7 Expiry

13/03/2014
C108

This policy will expire when superseded (as determined by the Minister for Planning) by Water Sensitive Urban Design provisions in the Victoria Planning Provisions or the Building Code of Australia Regulations, whichever happens first.