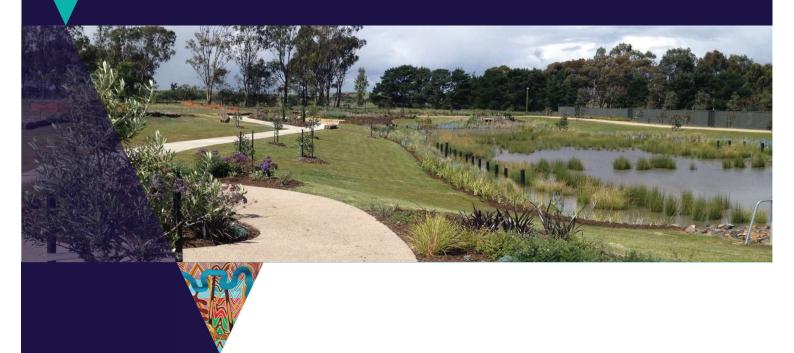
Assessment – what, why, how



Statutory Planning Framework

State Planning Policies

- Clause 14.02-01S (Catchment Management and Planning)
- . Clause 14.02-2S (Water Quality)
- Clause 19.03-3S (Integrated Water Management)

Local Planning Policies

Particular Provisions

- Clause 55.03-4 (Rescode) Standard B9
- Clause 55.07-5 (Rescode Apartment Buildings) -Standard B39
- Clause 56.07-4 (Residential Subdivision) Standard C24
- Clause 58.03-8 (Apartment Developments) Standard D13
- Clause 53.18 (Stormwater Management in Urban Development) Standards W1, W2, W3

State Planning Policies - summary

Clause 14.02-1S Catchment Management

- Undertake measures to minimise the quantity and retard the flow of stormwater from developed areas
- Require appropriate measures to filter sediment and wastes from stormwater prior to its discharge into waterways, including the preservation of floodplain or other land for wetlands and retention basins.
- Require appropriate measures to restrict sediment discharges from construction sites

Clause 19.03-3S Integrated Water Management

- Facilitate integrated stormwater, wastewater, drainage, water supply, treatment and reuse
- Facilitate use of alternativewater sources/supply (recycled water, use of runoff, stormwater, etc) where practical
- Integrate drainage/stormwater management with environmental, landscape and amenity outcomes

Clause 14.02-2S Water Quality

 Site and manage uses/developments which potentially discharge contaminated runoff/wastes to minimise impacts to waterways

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Local Planning Policies - Summary

- Pre-date Amendment VC154 and introduction of State-level stormwater requirements
- Usually apply to wider range of application types (single dwellings and extensions >50m2).
- May have specific application requirements and policy guidance
- Sunset clause continues to have effect where there are no particular provisions in place (eg dwellings and extensions)





Particular Provisions

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What's in?

Clause	Development	Zones			
55.03-4 B9	Two or more dwellings on a lot (+ extensions) Residential buildings (+ extensions)	Residential (all except LDRZ)			
55.07-5 B39	Apartment developments (+ extensions)	Residential (all except LDRZ)			
58.03-8 D13		zone		zones	ure plan' – UGZ, ACZ, CDZ
56.07-4 C25	Residential subdivision	Residential (all except LDRZ)			
53.18	Subdivision (all <u>except</u> residential) Buildings and works (inc. extensions) >50m ²	Industrial	Comm	ercial	Public Use
					PPRZ
		Special Use	Capital City Docklands		'Structure plan' zones – UGZ, PDZ, ACZ, CDZ
		Transport Zone 1 (arterial)	Port		



















Particular Provisions

What's out?

- Single dwellings on a lot (all zones)
- Rural Zones (all development/subdivision)
- Low Density Zone (all development/subdivision)
- Urban Floodway Zone, Public Conservation and Resource Zone, Urban Growth Zone (if no PSP)
- Transport Zones (except TZ1 arterial roads)









Key requirement 1 Best Practice Environmental Management (BPEM) targets

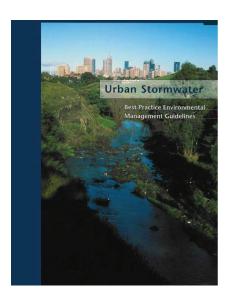




"The Stormwater management system should be designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999)."



What is BPEM?



Stormwater:

The net increase in runoff from urban development due to water not being able to seep into the ground because of impervious surfaces, such as roofs and roads.

Indicator	Performance objective		
Suspended solids	80% reduction in mean annual load (ie no treatment)		
Phosphorus	45% reduction		
Nitrogen	45% reduction		
Litter	70% reduction		
Flow volume	Maintain discharges for the 1.5 year ARI at predevelopment levels		
TO WE			

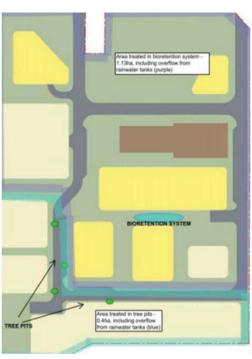
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How do I assess this?

Three step process:

- 1. What are they doing to meet BPEM?
- 2. Do they actually meet BPEM?
- 3. Is what they're doing shown on the plans?



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Step 1 – What are they doing to meet BPEM?

Application material needs to TELL you what they are doing to meet the requirements

Level of technical detail depends on scale of project and complexity of treatment required



Report / Stormwater Strategy - wetlands, bioretention, treatment trains

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Step 2 - Do they meet BPEM?



STORM - Online tool

- Print out of STORM report
- Make sure meets 100% or
- Make sure report inputs and results match plan



InSite Insite - Proprietary online tool

- Print out of Insite report
- Make sure quality result passes
- Make sure report inputs/result match plan



MUSIC – Proprietary software

- Provide a copy of the model file
- Print out the modelling results
- Provide summary of your model inputs for each treatment train (ie catchment size, % impervious, treatment area, etc)
- Provide a print out of the model schematic

Bonus points:

- Provide details of model parameters
- Provide results of MUSIC auditor run (if using Melbourne Water MUSIC Guidelines)

What model to use when?



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Step 3 – Is this all shown on the plans?

Stormwater treatment takes up space - must show in development layout

- 1. Do the plans match the modelling?
- 2. Does the treatment make sense in the context it's proposed?
- 3. Can you answer the following questions based on what's in front of you?
- . What are the land uses?
- Permeable vs impermeable surfaces (location and areas)
- . How big are the assets and where are they located?
- What level of treatment will they achieve?
- Where is the legal point of discharge can water get to the drain?
- . Who's going to own/maintain the assets?
- What does maintenance mean, and is it likely to happen?



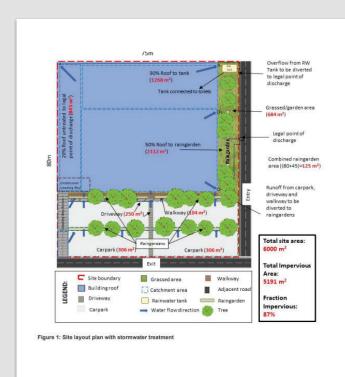




Figure 1: Site layout plan

Ways to comply

Precinct/strategic approach

MWC Drainage Vol

 Usually (but not always) consistent with DSS

PSP requirements

- Can include IWCM and/or additional measures over and above what's included in a DSS
- Must be 'planned in' to PSP and should be locationally specific.
- Scheme
 Pay contributions or
- build asset as requiredOnly complies if scheme provides SWQ
- and hydraulic services
 Less flexibility for
 Council to impose
 additional/different
 requirements specific
 IWCM or similar
 policy/strategy
 required.

Voluntary in-lieu contributions

- Payments are to Council
- Useful in non-scheme areas where there is a defined strategy/works program (SWQ and IWCM)
- MUST BE VOLUNTARY – CANNOT ENFORCE

Site specific/statutory approach

Clause 56 offset scheme

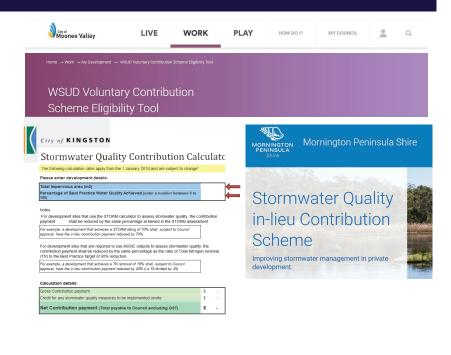
- Only applies outside of drainage scheme areas
- Not automatic Council can require
 on-site treatment as a
 planning permit
 requirement.
- Payment is to MWC
- Less relevant now that on-site SWQ required for Rescode applications

Onsite treatment (standalone)

- Requires developer to come up with proposal.
- Must be provided and assessed (stormwater strategy) as part of permit application.
- Most relevant if DSS or PSP does not apply, and there is sufficient land to achieve

Council in-lieu contribution schemes

- Provides an option for a contribution to be made to Council in lieu of on-site stormwater quality treatment.
- Must be voluntary so as to comply with the relevant planning provision.
 Mandatory in-lieu contributions are effectively a DCP.
- Must be tied to delivery of works eg a detailed strategy/program identifying what stormwater quality assets will be delivered where – and supported by modelling and cost-benefit analysis
- Most suitable in infill context where there is a risk of asset failure on private land and/or "missed opportunities" due to site constraints.



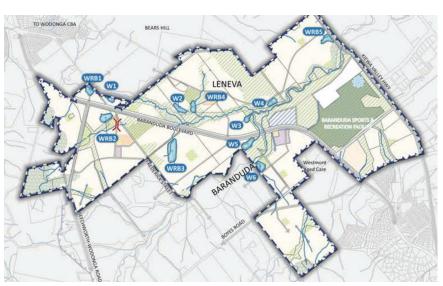
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When is it OK not to meet BPEM onsite?

- Melbourne only PSP and/or MWC drainage scheme area
- DCP which includes stormwater quality infrastructure
- Amendments to permit (depending on scale)
- If cost of full compliance with BPEMis significant non-compliance with other standards OR strategic justification (ie higher densities/site coverageactively sought by policy)
- Amendment to permit issued prior to controls being introduced (VC154 – 26/20/2018)

Remember - these are standards.

Should not must!



Key requirement 2 Urban cooling, habitat and landscape

	Townhouse/units	Apartment buildings	Subdivisions – residential, commercial, industrial	Commercial/industria I development >50m2
Treatment of stormwater to BPEM objectives	55.03-4 B9	55.07-5 B39 58.03-8 D13	56.07-4 C25 53.18-4 W1	53.18-5 W2
Contribute to urban cooling, habitat and amenity	55.03-4 B9		56.07-4 C25 53.18-4 W1	53.18-5 W2



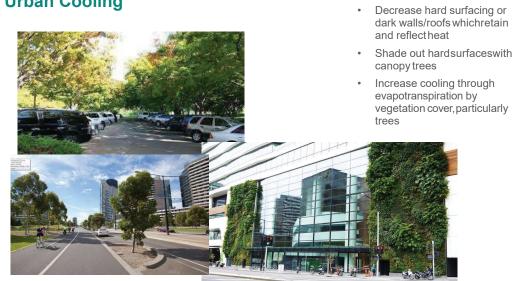
What am I assessing?

"The stormwater management system should be designed to contribute to cooling, improving local habitat and providing attractive and enjoyable spaces"





Urban Cooling



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Habitat and Amenity

- Integrate landscape into drainage design and vice versa
- Passive irrigation
- Water management as landscape/design feature.



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Key requirement 3 Site Management

	Townhouse/units	Apartment buildings	Subdivisions – residential, commercial, industrial	Commercial/industria I development >50m2
Treatment of stormwater to BPEM objectives	55.03-4 89	55.07-5 B39 58.03-8 D13	56.07-4 C25 53.18-4 W1	53.18-5 W2
Contribute to urban cooling, habitat and amenity	55.03-4 B9		56.07-4 C25 53.18-4 W1	53.18-5 W2
Rainwater tanks (laundry/toilet)		55.07-5 B39 58.03-8 D13		
Connect to dual pipe recycled water supply		55.07-5 B39 58.03-8 D13	56.07-2 C23	
Prevent chemicals/ toxicants from entering stormwater system				53.18-5 W2
Site management during construction	Clause 65 (Decision guidelines)	Clause 65 (Decision guidelines)	56.08-1 C26 53.18-6 W3	53.18-6 W3

What am I assessing?

"An application should describe how the site will be managed prior to and during the construction period and may set out requirements for managing:

- Erosion and sediment.
- Stormwater.
- Litter, concrete and other construction wastes.
- · Chemical contamination"



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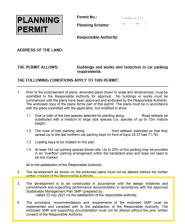
How is this demonstrated?

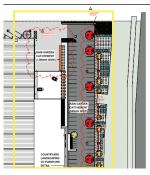


Does not impact site layout (<u>what</u> is being built), but <u>how</u> it needs to be built – permit condition.

- Site Management Plan
- · Site Environmental Management Plan
- Construction Environmental Management Plan

Decision making and permit conditions







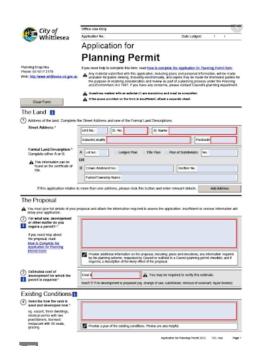


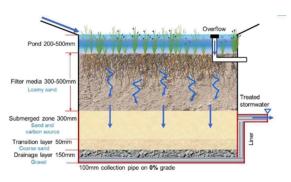


What do I need to do for a permit to be issued?

Planners

- Ensure all required information is provided with the application.
- STORM reports
- Ensure the layout provides sufficient space for stormwater management.
- Undertake a holistic assessment of how the proposed stormwater management integrates with the remainder of the planning policy framework
- Ensure permit includes appropriate conditions which ensure planning scheme requirements flow through to construction





Engineering/Assets

- Technical assessment of designs and MUSIC modelling
- Final design review and approval (including landscape)
- Does it work (ie functional assessment)?
- Review and approvals of site management plans

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What can be approved under conditions?



Prior to commencement of works

- Approved final layout (Condition 1)
- Functional/detailed engineering design approval (incl. asset design)
- Final landscape plan approval
- Site ManagementPlan approval
- s173 agreement (if relevant)

Prior to completion of development (Certificate of Occupancy/Final Inspection)

- Stormwater treatment assets are completed and connected to legal point of discharge
- Water tanks are installed and connected to internal plumbing.
- Inspection and acceptance of stormwater assets (Council land only).
- Completion of landscaping works (sign off/inspection/bond as per Council process)



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Enforcement

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Planning system **Building system** Maximise likelihood SWQ requirements translate to building permit plans and scope included in contracts Confirms building design complies with Building Regulations Conditions enforce Building Regulations Provide sufficient detail for effective **GAPS** planning enforcement – ie asset size, location, and what they must be connected Water tanks no longer required to meet energy Set up to reflect how developments are Confirms dwelling is safe and habitable (fit for occupation) Licensed plumber certifies that internal plumbing work and connections to LPD are efficiency requirements (7 star). built – eg show raingardens/bioretention strips detail on landscape plan, not just Does not cover landscape works (eg raingardens). Construction and connection of SWQ assets in accordance with endorsed plans - with a time frame (eg prior to occupancy/completion of development complete Confirms conditions of building permit met and building work meets regulations Licensed plumber certifies that Does not cover site management works). Landscape and engineering plan approvals – modify standard conditions where needed to include technical detail internal plumbing work and connections to LPD are complete Notes re: separate approvals (eg connect to LPD)