
Hot Topics: Integrated Water Management, Clause 56.07 and beyond

Findings from the Clearwater Hot Topics Workshop
16 November 2012



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Introduction

The Victorian State Government has committed to applying the current approach to stormwater management in residential subdivisions more broadly. This is in response to the *Living Melbourne, Living Victoria* Implementation Plan released earlier this year.

In response to the above, Clearwater considered it vital to provide our audience with an opportunity to hear from State Government representatives and to input into the discussion around how Clause 56.07 is currently being implemented and how any extension of the clause to other zones could be approached. The chosen avenue was a half-day workshop, which enabled facilitated peer-to-peer discussion on the topic and featured an expert Panel including representatives from State Government who were available to answer questions and delivered short presentations.

This workshop, held on 16 November 2012, forms part of the Clearwater series of Hot Topics forums and was delivered in partnership with Melbourne Water, the Office of Living Victoria (OLV), the Department of Sustainability and Environment (DSE) and the Department of Planning and Community Development (DPCD).

The findings outlined in this report are collated from participant feedback at the workshop.

Workshop Methodology

The three key objectives of the workshop were:

1. Share information about the plan for review and amendment of Clause 56.07
2. Celebrate successes brought about by the implementation of Clause 56.07
3. Give audience the opportunity to have their say about improvements to Clause 56

The workshop was designed to address the above objectives through a combination of discussion sessions (see below) and the following presentations:

- *Living Victoria* – Emma Bishop from OLV provided an overview of the Living Melbourne, Living Victoria initiative and the role of the Office of Living Victoria in the proposed broadening of the Clause.
- *Water smart cities and settlements* – Peter Durkin from DPCD presented on the role of land use planning in supporting integrated water management.
- *Coburg Hill* – a case study into the successful application of Clause 56.07-4 within a residential subdivision in Coburg. The presentation included four perspectives presented by Con Gantonas - Melbourne Water, Vaughan Grey - Moreland City Council, Leigh Holmes - Spiire Australia, and Guy Williamson - Satterley Property Group.

Three facilitated workshop discussion sessions were run responding to the following questions:

1. How suitable are the Clause 56.07 planning provisions for application to other forms of subdivisions i.e. commercial and industrial?
2. What were the main lessons for applying Clause 56.07 within a residential development?
3. What could a new provision look like that meets best practice stormwater management and could apply to residential, commercial and industrial subdivisions/developments?

Participants working in groups recorded their collective responses on pre-prepared templates before selected tables were invited to report their comments back to the floor. At the end of each session, the templates were posted on sticky walls around the room for participants to view.

Following the workshops, these written responses were collated and reviewed to identify key findings. Additional workshop data was also drawn from anecdotal notes taken during open discussion sessions and formal evaluation feedback.

Audience

70 participants from 20 different organisations attended the workshop. 21 were local government representatives employed across 14 municipalities both in Melbourne and regional Victoria. 20 representatives from industry attended, with a representation from across 16 different consultancies. 15 attendees were from water authorities (mostly Melbourne Water) and 5 from state government.

The current job role of workshop participants included 43% in engineering, 32% in planning and 15% in environmental practice. The majority of these participants (57%) occupied an officer level position in their organisation and 26% occupied middle management positions.

Workshop Findings

Feedback from the workshop participants is summarised under three workshop questions outlined below.

1. How suitable are the Clause 56.07 planning provisions for application to other forms of subdivisions i.e. commercial and industrial?

- Commercial and industrial developments share catchments with residential developments and contribute equally to stormwater impacts and liveability
- Councils are already implementing WSUD across a range of uses and are experienced with the current provisions
- Need to fine tune the Clause to respond to different land uses, i.e. modifications are required, new challenges include heavier pollutant loads, increased impervious surfaces, different priorities
- Separate WSUD toolkit needed
- Need to understand maintenance requirements and accept when requirements cannot be achieved on site
- 'No more free kicks for industry'
- Harvesting and re-use opportunities
- Mechanisms for financial contributions made available
- Simplify process for individual projects to achieve best practice
- Uncertainty in tenants and uses on industrial areas at the subdivision stage
- Drive change through innovation and incentives
- Shift towards IWM

2. What were the main lessons for applying Clause 56.07 within a residential development?

- There is no such thing as a 'one size fits all' approach – need a flexible approach
- Make stakeholder engagement a priority
- Consider the end user ownership – maintenance!
- Improve understanding and collaboration to achieve appropriate and cost effective WSUD solutions and overcome maintenance barriers
- Sell it, support it, improve it
- Offsets can be a 'get out' clause too often
- Feedback on maintenance issues to designers and checkers
- Capacity building through information sharing
- Collaboration – breaking down silos in councils
- Construction and maintenance of WSUD features
- Best-for-catchment approach – strategic plan
- Collaborative approach, consistency across the board

3. What could a new provision look like that meets best practice stormwater management and could apply to residential, commercial and industrial subdivisions/developments?

- We need a comprehensive catchment approach
- Inclusion of all developments (within defined triggers) to improve best practice requirements and ongoing obligations
- Current planning or building practice regulations can't catch all – multi-pronged approach required
- Define other benefits and clearly define objectives
- Incentive approach for lot implementation
- Collaboration (ongoing) in developing the strategy to achieve the target
- Don't just ask us to do it, give us the ability upfront!
- Involve CMAs to set water quality targets in regional areas
- Planning regulation and building regulation need to talk to each other
- Provisions with a catchment approach
- Flexibility with innovation

Overall it was considered that in many cases councils are already requiring IWM but need a stronger mandate to do so. Different targets will be required if and when the Clause is broadened which links up to the current review of the Best Practice Management Guides. Participants considered that new innovations are required to meet required targets on these new land uses and also capacity building is an important component.

The main lessons for applying Clause 56.07 within residential subdivisions centred on maintenance, and the need to achieve a best-for catchment approach, closing off procedural developments (loopholes) and the importance of early and ongoing stakeholder engagement.

Summary: Next Steps

Based on participant feedback this report summarises the main discussion points around the potential broadening of Clause 56.07 to other land uses. The information from the day will be provided to the Office of Living Victoria, Department of Sustainability and Environment and the Department of Planning and Community Development to help inform the imminent review of Clause 56.07.

Useful links and resources

Clause 56.07 wording

http://planningschemes.dpcd.vic.gov.au/aavpp/56_07.pdf

Clause 56.07 DPCD Practice Note

http://www.dpcd.vic.gov.au/_data/assets/pdf_file/0020/41717/VPP_Clause_56_4-Intwaterman.pdf




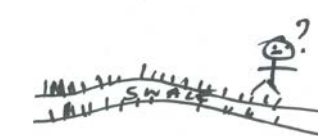
Clearwater's C56 Tool

<http://www.clearwater.asn.au/content/c56-tool>

Living Melbourne, Living Victoria – Implementation Plan and Government Response

<http://www.water.vic.gov.au/livingvictoria>

Appendix: Complete write up of workshop discussion notes

Question 1: How suitable are the Clause 56.07-4 planning provisions for application to other forms of subdivisions i.e. commercial and industrial?			
Table	Headline	Details	Visual
One	Commercial and Industrial Developments "Greening Your Environment"	<ul style="list-style-type: none"> - Commercial and industrial developments share catchments with residential - Contribute equally to stormwater impacts and liveability - Huge opportunities for water supply and environmental outcomes - Potential for new WSUD technologies to overcome land space availability - Centralised harvesting and treatment as an option 	
One	Council Links Residential and Commercial Development through Clause 56	<ul style="list-style-type: none"> - No part of Clause 57.06 excludes industry/commercial - Councils already implementing WSUD across a range of uses - Councils/Consultants experienced in application of Clause 56.07 	
Two	Insert Subclauses for "Industrial and Commercial"	<ul style="list-style-type: none"> - Fine tune the clause to respond to different land use types - Don't need to start from scratch 	
Two	It is only "Suitable" if Stakeholders have Knowledge and Capacity to Achieve	<ul style="list-style-type: none"> - Demonstrate benefits and capacity build - Understand maintenance requirements - Accept when requirement can't be achieved 	
Three	Local Policy to Implement Improved/Higher Level State Objectives/SWQ Requirements that Captures all Development (not just at subdivision stage) Clause 57.06 and other drivers, compliance	<ul style="list-style-type: none"> - Modifications required - Challenges <ul style="list-style-type: none"> o Heavier pollutant loads o Greater hard surface areas o Can't expect same amenity of treatment options (diff priorities) – ownership o High demand for re-use of water o What are the values o Making SWQ "seen" o Reducing runoff/flows - Geelong DDO – address SWQ @ develop' stage - Question for Peter – Status IMAP SWQ local policy - SPPF need to catch development and subdivision 	
Four	No More Free Kicks for Industry	<ul style="list-style-type: none"> - Retrospective application on older subdivisions is an issue - Should be amended to include industrial and commercial - Extra controls if applied (Industrial runoff, pollution it heavy metals) - Harvesting and re-use should be explored - Maintenance issues - Broader controls – hard to implement (also building code to deal with) 	

Question 1: How suitable are the Clause 56.07-4 planning provisions for application to other forms of subdivisions i.e. commercial and industrial?			
Table	Headline	Details	Visual
Five	Mechanisms for each Development Site to Continue Financially to Broader Scale Treatment Strategy	<ul style="list-style-type: none"> - Best endeavours on site must be demonstrated - Supplement with \$ contribution via DCP to fund larger scale works (especially important for dealing with phosphorus and nitrogen) - Redirecting resources to support WSUD strategy for a broader area (i.e. looking beyond the site boundaries to achieve whole of catchment priorities) 	
Five	Standard B.P Design Drawings – Strong Lead	<ul style="list-style-type: none"> - Centralised standard drawings - Ability to localise standard through addendums - Strong leadership shown by umbrella/high level organisation by production of best practice standard design drawings - List of preferred/approved suppliers (filter media etc) - Simplify process required for individual projects to achieve best practice 	
Six	Provisions Need to be Tailored to Take Into Account Specific Conditions for Commercial/Industrial	<ul style="list-style-type: none"> - Scale of industrial/commercial developments calls for a separate WSUD toolkit - Seek opportunities within usual civil infrastructure eg: <ul style="list-style-type: none"> o Use permeable paving o Use of buffer/landscape areas o Use of detention zones need to achieve predevelopment flows - Industrial subdivisions with individual lots poses management issues for WSUD 	
Six	<ul style="list-style-type: none"> -Difference Between Commercial and Industrial -Different Types of Stormwater Contamination – e.g. more gross pollutants in commercial -Different Water Re-use Opportunities – e.g. low water user-density in industrial areas unless a major “wet industry” arrives 	<ul style="list-style-type: none"> - Uncertainty of user types in industrial areas may affect early (subdivision stage) planning as scope for harvesting and types of pollution may be difficult to predict 	
Seven	Driving Change Through Innovation and Incentives	<ul style="list-style-type: none"> - Community usability is lower - CL 56 not suitable for infill - Are DDOs a better mechanism for infill industrial? - Need to look at innovation from industrial point of view - Need for new tool kit 	
Eight	Local Government Leading the Way with IWM Planning	<ul style="list-style-type: none"> - CL 56 extended to commercial/industrial (“tweaking”) - Opportunity to learn from LG that have applied CL 56 to industry - Shift towards more IWM inc. sewer mining - Offset/alternative site use beyond immediate premises - Cost implications should be considered 	

Question 2: What were the main lessons for applying Clause 56.07 within a residential subdivision?			
Table	Headline	Details	Visual
One	There Is No Such Thing As "One Size Fits All"	<ul style="list-style-type: none"> - Be flexible but balance with practical considerations (e.g. maintenance) - Early stakeholder engagement is critical (particularly with regard to long term maintenance) - Don't assume compliance, have a backup plan and be prepared to enforce - Be willing to learn from mistakes - Expect the worst and hope for the best - Be prepared! Implementation and contingency plans - Site characteristics and other external factors are important 	
Two	Make Stakeholder Engagement Priority	<ul style="list-style-type: none"> - End user ownership WSUD – Maintenance! - Early communication - Site investigation - Cost effective WSUD – chosen type, maintenance 	
Three	Improving Understanding and Collaboration to Achieve Appropriate and Cost Effective WSUD Solutions and Overcoming Maintenance Barriers	<ul style="list-style-type: none"> - Barriers : <ul style="list-style-type: none"> o Maintenance o Five star building regulations o Solar option \$\$\$\$ o Strategic planning stage o Physical Landscape o Functionality o Cost/Benefit Analysis - Enabling : Collaboration, Flexibility/negotiation, community education - Support/Assistance : Council resources (part of council planners job), a technical resource available for application and interpretation of the clause - Modifications – needs to catch all - Geelong CC push back towards wetlands – issues rain gardens maintenance 	
Four	Sell it, Support it, Improve it	<ul style="list-style-type: none"> - Innovative, open approach to meet objectives can be achieved - Main barrier being maintenance issues – single lot to larger developers - Application of 56 can be ambiguous (council to council) - No assessment of 56 town planning application before subdivision is a major loophole - Offsets can be a "get out" clause too often 	
Five	Feedback on Maintenance Issues to Designers and Checkers	<ul style="list-style-type: none"> - Designer needs to know what assets will be acceptable to council - Maintenance not controlling design, more informing 	
Five	Capacity Building through Info Sharing	<ul style="list-style-type: none"> - What designs have worked well both cost wise and maintenance wise 	
Six	Collaboration – Breaking Down Silos in Councils		

Question 2: What were the main lessons for applying Clause 56.07 within a residential subdivision?			
Table	Headline	Details	Visual
Six	Construction and Maintenance of WSUD Features	<ul style="list-style-type: none"> - Ongoing Maintenance of WSUD features - Protection of WSUD during construction 	
Seven	Best-For-Catchment Approach	<ul style="list-style-type: none"> - Strategic plan for what response where - Think outside the box for solutions by councils and developers - Off-the-shelf solutions for infill tight constraints - verified 	
Eight	Collaborative Approach, Consistency Across the Board	<ul style="list-style-type: none"> - State level help- ensure planning to development – ongoing maintenance, collaborative approach right from the start - Consistent toolkit at all scales – applied at dual lot major subdivisions - Cost benefit analysis – who pays ongoing costs and who benefits? Help understanding why/who responsible 	

Question 3: What could a new provision look like that meets best practice stormwater management and could apply to residential, commercial and industrial subdivisions/developments?			
Table	Headline	Details	Visual
One	We Need a Comprehensive Catchment Approach	<ul style="list-style-type: none"> - Flexible solutions - Practice notes - Offsets provisions - Deemed to comply standard (but flexible) - Clarify ownership and responsibilities - At development stage not just sub-development - Local policies and overlays 	
Two	Inclusion of All Developments (with defined triggers) to Improve Best Practice Requirements and Ongoing Obligations	<ul style="list-style-type: none"> - Demonstration of an ongoing maintenance commitment - Develop standards for different land uses - Catchment specific objectives <ul style="list-style-type: none"> o Upper catchment = high values (more stringent) o Lower Catchment = standard BP 	
Three	Current Planning or Building Practice Regulations Can't Catch All: Multi-Pronged Approach Required	<ul style="list-style-type: none"> - Integrated Water Management tool <ul style="list-style-type: none"> o Greenfield – Growth Areas PSPs o Clause 5H and 55 – BCA - Enforcement through S137 (not ideal) - Council street works – leading by example, education and capacity building - Provisions to remain broad to allow for flexibility for achieving WSUD i.e. WSUD guidelines - Key drivers to push councils and support them – OLV, Water Industry, DSE/DPCD - Enforcement – samples, geotechs etc. - Resources to enforce 	
Four		<ul style="list-style-type: none"> - Define other benefits and clearly define objectives of CL 56 through WSUD - More rigid "framework" to strengthen CL 56 - Incentive approach for lot implementation – putting a price on stormwater - Impose a "real cost" offset (maintenance, WSUD etc.) that truly reflects 	

Question 3: What could a new provision look like that meets best practice stormwater management and could apply to residential, commercial and industrial subdivisions/developments?			
Table	Headline	Details	Visual
		SW cost and treatment	
Five	Collaboration (ongoing) in Developing the Strategy to Achieve Target	<ul style="list-style-type: none"> - Include all stakeholders in developing the strategy - Need to tap into different skill and knowledge sets e.g. operational performance - Need to develop a master plan for strategy on servicer 	
Five	Don't Just Ask Us to Do It, Give Us the Ability – Upfront!	<ul style="list-style-type: none"> - Give us the answers with the policy – up front - Thinking done first - Strategy First - Area-wide strategies (cross council scale) - Technology tool-kit 	
Six	Involve CMAs to Set Water Quality Targets in Regional Areas	<ul style="list-style-type: none"> - In regions, Councils are stormwater authority - Treatment targets in BPEM were developed to suit Melbourne (The Bay) - CMAs should be involved in setting treatment targets appropriate to catchments - CMAs need resources to participate! 	
Six	Planning Regulations and Building Regulations Need to Talk to Each Other	<ul style="list-style-type: none"> - Scope for targets/performance standards to be met at regional/subdivision scale instead of at building scale – there should be a means to achieve these without duplicating at the building scale. Can be more effective in some cases? - Can the building code respond to what has already been achieved and pick up residual or site specific requirements? 	
Seven	Provisions With a Catchment Approach	<ul style="list-style-type: none"> - Local, precinct and regional scale - Combination of master plan and prescriptive objectives - “Best bang for buck” - Catchment Authorities and Councils taking a lead in determining catchment objectives (master plan) and being proactive in understanding future “likely” assets and maintenance costs 	
Eight	Flexibility With Innovation	<ul style="list-style-type: none"> - Should sit in planning provisions/building code very important backup - Less prescriptive – More goal focused interactive ways of stakeholders negotiating desired outcome, Possible rating system where multiple targets can be flexible - LG play a big part in setting desired vision and leading by example - Cost benefit assessment tool put forth at outset of subdivision application 	