16 December 2020

Environment Protection Authority Victoria
Email: urbanstormwaterbpem@epa.vic.gov.au

Dear Urban Stormwater team,

Re: Draft urban stormwater management guidance

We write with regard to the Draft urban stormwater management guidance (publication 1739). The Council Alliance for Sustainable Built Environment (CASBE) welcomes the opportunity to provide the following feedback on EPA's Draft Urban Stormwater Management Guidance. We also welcome the scientific and technical insights that will enable stormwater management practices to better meet the quality and flow objectives across the development, land-use and infrastructure sectors.

BACKGROUND

CASBE

CASBE is a collaborative alliance of Victorian councils committed to the creation of a sustainable built environment within and beyond their municipalities. CASBE provides a forum for the exchange of information and ideas on innovation and best practice in ESD. Our local, ground-up approach has resulted in collaborative local government led action and broad scale positive change to Victoria's built environment and a significant reduction to its consequent environmental impacts, including stormwater impacts.

CASBE member councils include:
Banyule City Council, Bass Coast Shire Council, Bayside City Council, Brimbank City Council, Darebin City Council, Frankston City Council, Glen Eira City Council, Greater Bendigo City Council, Greater Dandenong City Council, Greater Geelong City Council, Hobsons Bay City Council, Hume City Council, Kingston City Council, Knox City Council, Manningham City Council, Maribyrnong City Council, Maroondah City Council, Melbourne City Council, Melton City Council, Monash City Council, Moonee Valley City Council, Moreland City Council, Port Phillip City Council, Stonnington City Council, Whitehorse City Council, Whittlesea City Council, Wodonga City Council, Wyndham City Council, Yarra City Council, Shire of Yarra Ranges.

Our focus is on applying widely accepted Environmentally Sustainable Development (ESD) principles to the built environment through the Victorian planning system. To enable this, CASBE member councils have developed the *Sustainable Design Assessment in the Planning Process* (SDAPP) framework - a streamlined and consistent methodology for requesting, receiving and assessing built environment sustainability outcomes through the planning process. By implementing the SDAPP framework and using its tools, councils can achieve more sustainable outcomes from their local built environment for the long-term benefit of their community.

To complement this work and address current sustainability gaps in greenfield subdivisions, CASBE in partnership with sixteen Victorian councils and the Victorian Planning Authority recently launched the *Sustainable Subdivisions Framework (SSF)*. CASBE is currently supporting 29 councils in a trial of the SSF over an eighteen-month period.

Sustainable Design Assessment in the Planning Process (SDAPP)

There are several processes that support and underpin the SDAPP framework:

- The consistent local Environmentally Sustainable Design (ESD) Policies held by 19 Victorian Councils.
- The Best Practice Standards listed in the local government Sustainable Design Fact Sheets, and
- The Built Environment Sustainability Scorecard (BESS).

Local ESD Policies

A key aspect of CASBE's work has been to facilitate the introduction of local planning policy that requires ESD design strategies to be considered by the community when undertaking development projects.

The development of the local ESD Policy involved many years of local government leadership in research and development of pilot programs, purpose-built planning tools and procedures to demonstrate the value of including sustainability in the consideration of planning permit applications. This work was fundamental to provide the justification for a collective of six councils (Moreland, Banyule, Port Phillip, Stonnington, Whitehorse and Yarra City Council) to seek to formally introduce a local ESD Policy, consistent across the councils, into their respective Planning Schemes. This process included the Ministerial appointment of the Environmentally Efficient Design Advisory Committee to independently evaluate the merits of the new policy.

This robust evaluation of the initial ESD Policy and its subsequent success in delivering sustainability design in new developments within the initial 6 councils' municipalities enabled other councils to follow suit. There are now 19 councils with this local ESD policy and more utilising the methodology and purpose-built tools aimed at delivering ESD outcomes through the planning system. A full list of these policies is provided on the CASBE website.

Stormwater objectives in the local ESD policies include:

- To reduce the impact of stormwater run-off.
- To improve the water quality of stormwater run-off.
- To achieve best practice stormwater quality outcomes.
- To incorporate the use of water sensitive urban design, including stormwater reuse.

These policies reference the Urban Stormwater Best Practice Guidelines, CSIRO, 2006 and the BESS and STORM tools.

Best Practice Standards

The Local ESD Policies are supported by the Best Practice Standards that are articulated in the suite of Sustainable Design Fact Sheets developed by CASBE councils.

These Fact Sheets form a consistent set of standards that councils use to define their sustainability expectations. These fact sheets are available for any council to adopt; however, the standards remain the same for each council.

Each fact sheet lists *Mandatory Requirements* and *Council's Best Practice Standards.* The *Mandatory Requirements* list minimum sustainability standards as outlined by the Building Code of Australia and relevant Planning Scheme clauses. The *Best Practice Standards* list councils' expectations for each of the ten Sustainable Building Categories, including stormwater.

Related to stormwater, the standards reference the Urban Stormwater Best Practice Environmental Management Guidelines (BPEM), local integrated water management plans as well as the STORM and MUSIC tools.

BESS

The *Built Environment Sustainability Scorecard* (BESS) is an online tool for assessing the sustainability of development proposals at planning stage. BESS provides a consistent assessment methodology for the Best Practice standards within the SDAPP framework. BESS has the same Sustainable Building Categories as the Fact Sheets, apart from the Materials Category. BESS provides a dynamic interface for developers and building owners to prepare a sustainability assessment of their project for the purposes of meeting councils' sustainability requirements.

SDAPP and BESS both consider whole of building environmental issues, however they also encourage development applicants to consider site and surrounding natural environments that preserve and enhance natural waterways. Stormwater is one of ten environmental categories within the BESS tool and SDAPP Framework. Principles covered in these categories include:

- The critical role that environmental infrastructure plays in securing and protecting biodiversity, wildlife habitat and waterways;
- The importance these spaces have for human amenity and liveability, including vital connections to nature;
- The role that environmental infrastructure has in ameliorating climate change impacts, including creating safe spaces for people and also habitats for wildlife during heat wave events, and how these spaces help mitigate the urban heat island effect.

The BESS tool specifically considers stormwater treatment in development. The Stormwater category in BESS includes actions regarding stormwater treatment. Development applicants must meet the Urban Stormwater Management Best Practice Guidelines (BPEM) standards for water quality (CSIRO, 1999), e.g., through a min 100% STORM score, or a compliant MUSIC model.

Currently, the BESS tool assesses compliance with the BPEM standards through the completion of a STORM or MUSIC report.

BESS also includes a Water category focussed on potable water reduction. Amongst other approaches, this category encourages stormwater related improvements through rainwater harvesting and use onsite as well as water efficient landscaping.

Other stormwater considerations that are not captured in BESS but are also encouraged as appropriate include:

- For industrial developments - containing polluting activities within the canopy line or within a bunded area
- Installing gross pollutant traps where hardstand paving drains to SW system
- Installing pervious paving where appropriate

Sustainable Subdivisions Framework.

The Sustainable Subdivisions Framework (SSF) provides a framework to assess sustainability measures in subdivision applications, which is currently being tested by 29 Victorian councils through an 18-month trial. The SSF was developed as a state-wide replicable model through a collaboration of regional and growth area councils with a focus on greenfield subdivisions, however it can equally be applied to infill subdivision and precinct sites.

The SSF includes a number of categories which relate to water management infrastructure including:

- Streets and Public Realm – which recognises the critical role of developing a people focused local street network and public realm (including open space, including playgrounds, parks and sporting fields) to encourage walking and recreation whilst increasing biodiversity, encouraging stormwater re-use and mitigating the urban heat island effect.
- Ecology – which highlights how subdivisions can retain and enhance ecology to provide key ecosystem services including waterway conservation, runoff mitigation, habitat for wildlife, urban temperature regulation, food supply and recreational and aesthetic benefits.
- Integrated Water Management – which demonstrates how all aspects of the water cycle, including reduced water consumption, beneficial use of recycled and stormwater and water sensitive design can be integrated and collaboratively managed in subdivisions, which is critical to ensuring the future water security of our communities.
- Urban Heat – which recognises the need for urban heat mitigation strategies in subdivisions to cool the landscape and enable future residents to move safely and comfortably through the community without compromising their health and wellbeing.

Specifically, the objectives of the Integrated Water Management category of the Framework are:

1. To reduce water consumption through environmentally sustainable subdivision and building design
2. To provide lots with areas and dimensions that enable the appropriate siting and construction of a dwelling that can be serviced with water, wastewater and other essential services
3. To maximise use of alternative water sources for public and private use (through strategies such as public and private rainwater tanks, stormwater reuse and localised recycled water systems)
4. To incorporate water sensitive urban design techniques into development including enhancing riparian vegetation (waterway health), drainage reserves adjacent to wetlands and protection of biodiversity and landscape features for improved amenity
5. To provide a wastewater system that is adequate for the maintenance of public health and the management of effluent in an environmentally friendly manner
6. To ensure the location and scale of open space responds to existing drainage channels

7. To meet the Best Practice Environmental Management Guidelines for Urban Stormwater
8. To control localised flooding and plan for increasingly intense rainfall events, as projected by climate change models
9. To use water as a tool for reducing urban heat
10. To support regional integrated water management solutions such as identified through the IWM forums

DRAFT URBAN STORMWATER GUIDANCE PUBLICATION 1739

CASBE welcomes the publication of the proposed new stormwater performance objectives, and we support the provision of an Urban Stormwater Management Guidance document.

We provide the following specific comments on the guideline's publication:

Quantitative Performance Objectives

CASBE councils are supportive of the inclusion of locally appropriate stormwater flow performance objectives in addition to the existing stormwater quality objectives.

We bring the *Sustainable Design Assessment in the Planning Process Framework* and the *Sustainable Subdivisions Framework* (refer Background section) to your attention as these programs are actively supporting the implementation of stormwater quality outcomes through the planning system in Victoria. Some councils also consider flow in combination with quality through both planning and the Legal Point of Discharge mechanism.

Inclusion in the Victorian Planning Provisions

While we understand that it is not intended for this document to be a compliance document, we note that under the proposed Environment Reference Standards that will come into effect on 1 July 2021, the general environmental duty of care will a) require councils not pollute, and b) require councils to have an understanding of the 'state of knowledge'. The question then is, as a statutory planning authority, what do councils do with this document which forms part of this state of knowledge, and yet is very vague in terms of its regulatory authority.

Guidance is required for Council, particularly when exercising decisions to grant planning permits, as to how Council should navigate the following legislative requirements/risks/duties, mainly with respect to flow and flood risks posed to existing development and infrastructure:

- Environmental sustainability and climate change risk obligations under the *Local Government Act 2020* (Vic) sections 9(2)(b), (c); and
- The general environmental duty under the *Environment Protection Amendment Act 2018* (Vic) part 3.2.

Section 2.1 (page 7) of the guidance document details that 'reduction levels for solids, phosphorus and nitrogen' are 'required to be achieved' under the Victoria Planning Provisions (VPP) however there are limitations with respect to language effectively utilised within such State provisions. Within a Council's Planning Scheme, the Planning Policy Framework (PPF) and Victoria Particular Provisions (VPP) do not utilise binding language when referring to the *Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999)*. Rather, the language utilised states 'consider as relevant' (see, eg, PPF clauses 14.02-1S and 19.03-3S), or that a 'stormwater management system should be designed to meet' the guidelines (see, eg, VPP clauses 53.18, 55.03-4, 55.07-5 and 58.03-8). As such, it is not a strong 'requirement', per se, that the stormwater quality reduction levels and stormwater flow are strictly adhered to.

CASBE recommends that Urban Stormwater Guidance Publication does become part of the regulatory framework, and that part of that framework is the Victorian Planning Provisions (VPP)s. Incorporating the Urban Stormwater Guidance Publication, and specifically, new locally appropriate flow performance objectives, as a statutory requirement in the Victorian Planning Provisions (VPP)s, as soon as possible, will enable councils to better meet their environmental duty of care responsibilities.

Furthermore, including this document within the VPPs will support the existing work that councils are already undertaking with respect to stormwater performance (refer SDAPP and SSF above).

Finally, there are significant developments being planned over the next few years as a result of Federal and State Government COVID-19 recovery stimulus projects. Expedient inclusion of the new BPEM performance objectives in the Victorian Planning Provisions will capture this body of new work.

Interim period

When requesting that applicants appropriately address IWM and when writing planning permit conditions, councils rely upon clauses 34 and 44 of the *State Environment Protection Policy (SEPP) (Waters)*. To that end, it is vital that the *SEPP (Waters)* clauses remain intact and are appropriately transitioned or translated to the Orders for Managers of Land or Infrastructure (OMLIs) or other suitable instrument.

Wording – Reasonably Practical

CASBE recommends that the EPA further defines the term 'Reasonably Practical' as it relates to stormwater management. As outlined in the Background section, the ESD Policy councils use the term Best Practice to define councils' minimum sustainability expectations. Guidance is required as to how the term and application of 'reasonably practicable' differs and compliments the term and definition of 'Best Practice' that is the overarching objective provided within councils' statutory ESD Policies within their planning schemes and that must be addressed when deciding a planning permit application. The interpretation and application of both terms, 'reasonably practicable' (as per section 1.1 of the document) and 'best practice' in the ESD Policies appear synonymous.

We are concerned that without clear achievable performance standards linked to the term 'Reasonably Practical', the development industry will not have clarity on the stormwater expectations of councils.

With respect to section 2.1 of the document, the test of 'reasonably practicable' should apply to both stormwater quality and flow criteria, not just stormwater flow. This is also supported by the point raised above given language utilised within a council's planning scheme.

CASBE supports the inclusion that "*Performance against the objectives in Table 1 can be used as a signal of the level of risk of waterway values being lost or impacted. EPA regards development that does not meet those performance objectives as presenting a high risk of harm.*" CASBE recommends that the "high risk of harm" measure be more clearly indicated as an unacceptable outcome. Clearer indication of what risk rating following control measures being put in place is considered an acceptable level would also assist clarity for the intended audience.

The Background information document related to publication 1739 includes that "new proposed objectives for urban stormwater flow reduction are not compliance requirements, and the level of stormwater flow reduction to achieve will depend on what is reasonably practicable." This is acknowledged. However, CASBE is consistently requested to help improve consistency and certainty for the development industry.

Clarity of the relationship between the stormwater flow reduction presenting a high risk of harm yet not being compliance measures would help consistency and certainty.

<u>Assessment tools.</u>

We note the content within the guidance document on 'appropriate' software tools to assess stormwater performance objectives. We make no comment for or against the use of, or any specific, assessment tools, however we strongly recommend that the EPA provide guidance regarding the protocols of what constitutes an 'appropriate' tool for demonstrating compliance with the new BPEM requirements.

CASBE has a diverse mix of member councils who have different approaches to what they accept as appropriate stormwater assessment tools for development. We understand that the current tools available in the market do not at this stage provide a complete approach to assessing the performance objectives outlined in the document.

CASBE recommends that EPA develop a protocol that stormwater assessment tools need to meet or deliver in order to be considered 'appropriate' for assessing the stormwater performance objectives.

CASBE would be very happy to draw on the experience of our member councils to provide specific feedback to the EPA on what might be included within such a protocol. Establishing a clear benchmark in this way for assessment tools enables other players to potentially enter the market and provides guidance to councils in terms of which tools can be accepted by councils to demonstrate achievement or even compliance with the performance objectives.

Scenarios

The provision of scenarios in the document for developers to consider in the design of new development are supported. They help to demonstrate that meeting the metrics included in the document are realistic and achievable for the range of development types included.

While the existing scenarios in the document are an excellent inclusion, they are a small subset of the diverse range of development types that CASBE member councils assess. Additional scenarios related to infill development of townhouses, medium and high density would also prove helpful.

Geography, geology and local context lead to a diversity of accepted approaches across local government areas. This should be acknowledged in the document.

Please contact me if you wish to discuss this matter further on 03 9667 5561 or casbe@mav.asn.au.
Yours sincerely

Natasha Palich

Natasha Palich
CASBE Executive Officer

Notes:

"CASBE Submission re Draft EPA Urban Stormwater Management Guidance" has been prepared by the CASBE staff at the MAV for discussion with CASBE member councils, and the State Government on urban stormwater management.
CASBE is auspiced by the Municipal Association of Victorian (MAV). This submission is made on behalf of CASBE member councils and the views represented in this submission do not necessarily represent the views of the MAV. While this paper aims to broadly reflect the views of CASBE member councils, CASBE has a diverse mix of member councils and the views represented in this submission do not necessarily represent the views of all CASBE members individually.
Individual councils may also respond to issues specific to, and on behalf of, their communities. The CASBE staff thanks and acknowledges the contribution of those who have provided their comments and advice in the development of this submission.