Environmental Justice Australia

Submission

in response to

Improving stormwater management advisory committee consultation process

prepared by

Environmental Justice Australia

3 July 2018

Environmental Justice Australia
ABN 74052124375

PO Box 12123
A'Beckett Street PO
Melbourne VIC 8006
L3, 60 Leicester St, Carlton

T (03) 8341 3100
F (03) 8341 3111
E admin@envirojustice.org.au
W www.envirojustice.org.au

About Environmental Justice Australia

Environmental Justice Australia (formerly the Environment Defenders Office, Victoria) is a not-for-profit public interest legal practice. We are independent of government and corporate funding. Our legal team combines technical expertise and a practical understanding of the legal system to protect our environment.

We act as advisers and legal representatives to community-based environment groups, regional and state environmental organisations, and larger environmental NGOs, representing them in court when needed. We also provide strategic and legal support to their campaigns to address climate change, protect nature and defend the rights of communities to a healthy environment.

We also pursue new and innovative solutions to fill the gaps and fix the failures in our legal system to clear a path for a more just and sustainable world.

For further information on this submission, please contact:

Dr Bruce Lindsay, Lawyer, Environmental Justice Australia

T: 03 8341 3100

E: bruce.lindsay@envirojustice.org.au

Submitted to:

DELWP by email: stormwater@delwp.vic.gov.au

1. EJA welcomes the opportunity to provide a submission to the Ministerial Advisory Committee on ways to improve stormwater management in urban areas. We are available to speak further to any of the points raised in this submission.

2. As the Issues Paper notes, stormwater management in urban areas is a problem of considerable scale and complexity. It might be described as the 'elephant in the room' in regards to the management of the hydrological cycle in urban areas. The challenges posed by stormwater management include:

    a. Management of stormwater flows;
    b. Management of poor water quality associated with stormwater (stormwater composition);
    c. Impediment to soil health and water infiltration into soil and groundwater (stormwater infiltration);
    d. Riparian repair of urban streams (stormwater mitigation);
    e. Failure to use the water resources provided by stormwater flows (stormwater re-use).

3. Urban stormwater problems require programmatic responses as well as legal, policy or regulatory responses. Responding to these challenges requires action at a range of levels, such as behavioural and normative change (e.g. widespread adoption of stormwater capture at the property level); legal and regulatory change (e.g. strengthening legal incentives and costs facilitating behavioural change;, use of economic tools (e.g. pricing and taxing measures to encourage improved management); and human resources base (e.g. skills in construction and maintenance of effective stormwater management schemes).

4. We broadly agree with the direction of proposed reforms expressed in the Issues Paper with respect to strengthened planning standards (p. 17 of the Issues Paper). These conceptual directions would appear to include wider application of stormwater management standards.

5. Clear, consistent and overarching regulation is required in respect of urban stormwater management which includes the setting of ambitious long-term goals for reduction in adverse impacts over time. Preferably, such overarching standards should be expressed in legislative form and aim at progressive, substantial reduction in adverse impacts from urban stormwater over a fixed timeframe and consequential increase in beneficial uses of urban

stormwater over the same timeframe. In taking such a 'nested' approach, local agencies and municipalities would be required to prepare measures capable of giving effect to overarching standards with incentives provided to do so.

6. A great deal of important research and practical work has been completed over more than two decades in relation to urban stormwater management, which indicates scientific, technical and urban design pathways available to improve stormwater management and respond to the above challenges. In particular, the work undertaken by Associate Professor Chris Walsh and colleagues has shown the need to establish urban hydrologic regimes approximating a 'natural flow paradigm',[1] and identified practical and strategic tools to enable a significant shift in hydrologic regimes.[2] In our view, the ambitions and scientific and technical approaches advanced in this body of work should be prominent in informing the next generation of policy and legal controls for urban stormwater.

7. A new generation of urban stormwater standards should response directly to the challenges noted above. The scientific and technical noted above emphasizes that these are appropriate and key categories for the formulation of a new generation of standards. Urban stormwater controls need to operate under an expanded set of purposes and categories:

    a. Water quality – to manage, reduce and avoid the impacts of identified contaminants (as the current BPEM focuses on);
    b. Water flows – to manage and reverse damaging hydrologic impacts;
    c. Infiltration – to redirect stormwater flows to soil and groundwaters;
    d. Riparian restoration – to promote protection of streams;
    e. Harvesting and re-use – to promote the capture and management of stormwater as a resource.

8. Legislative reform directed to improved stormwater management, such as through new provisions under the *Planning and Environment Act* (PE Act), would reinforce and complement emerging legislative programs focusing on protection and restoration of urban rivers and waterways (e.g. *Yarra River Protection (wilip-gin Birrarung murron) Act 2017*).

---

[1] Christopher Walsh et al 'Principles for urban stormwater to protect stream ecosystems' (2016) 35 Freshwater Science 1 398; Tim Fletcher et al 'Protection of stream ecosystems from urban stormwater runoff: the multiple benefits of an ecohydrological approach' (2014) Progress in Physical Geography 1

[2] Tim Fletcher, et al 'Restoration of stormwater retention capacity at the allotment-scale through a novel economic instrument' (2011) 64 *Water Science and Technology* 2 494; Christopher Walsh, et al 'Restoring a stream through retention of urban stormwater runoff: a catchment-scale experiment in a social-ecological system' (2015) 34*Freshwater Science* 1161

9. Legislative reform could also provide clear direction to planning and responsible authorities operating under the PE Act to give effect to stormwater management standards in the preparation of planning scheme amendments or grant of planning permits, where relevant to those tasks. This approach would be complementary to proposed changes to the *State Environment Protection Policy (Waters of Victoria)*, at clauses 32 and 34, but in a manner aimed at strengthening protective outcomes, including for receiving waters, soil health and groundwater systems. We have made submissions to the SEPP (Waters of Victoria) review proposing redrafting of these clauses. These proposed changes are included in the appendix to this submission.

10. Some attempts have been made to use planning schemes to respond proactively to establish stricter controls on stormwater at the property level, such as the ESO applied in the Little Stringybark Creek catchment. Similarly, IWD projects and precinct structure planning have sought to include stormwater control measures at the local (sub) catchment level. Noting these project or precinct based approaches to stormwater management, an apparent shortcoming is the piecemeal, ad hoc or opportunistic response to the stormwater management challenges. While acting at the project or precinct level is undoubtedly important, change must also be driven by stronger, common rules and approaches. Among other things, a strategy of opportunistic improvement alone (e.g. at project or precinct level) can lead to uneven and limited outcomes. For example, protection of urban creeks in expanding suburbs in Melbourne's West is highly variable in relation to stormwater management, including buffering reserves, retention basins and other WSUD features.

11. It is our understanding that one of the major shortcomings with urban stormwater management over the past two decades has been implementation of strategies, policies or relevant plans. We understand that many Stormwater Management Plans have been prepared by municipalities, as the BPEM intends, but implementation, monitoring and appropriate review has been, at best, uncertain or highly variable. This may be as a result of variable resources available to municipalities to undertake implementation and review. We suggest that, if it is not already occurring, a performance audit or evaluation of existing stormwater management instruments is undertaken with a view to considering the effectiveness of those arrangements.

12. On the question of the use of offsetting tools in relation to stormwater management those devices should be used or endorsed very cautiously. In particular, capacity for alternative, 'compensating' arrangements to be approved in place of obligations to avoid or prevent harm

(notably environmental harm) to streams arising from stormwater is highly problematic in urban settings. This is a particularconsequence of the substantial adverse changes to stream ecology resulting from even small increases in urban effects (e.g. connected stormwater drainage, impervious surfaces).[3]

13. Improved management of stormwater will necessarily have to look at wider regulatory and land-use frameworks than those solely available under land use planning, notably the following:

    a. Harvesting and re-use of stormwater, which is likely to be essential in any programmatic approach to reducing the impact of stormwater flows on urban streams, may require further review of water resources law and policy to enable use of this source of water for environmental or other purposes;
    b. Reform of provisions relating to the regional waterway strategies and/or regional catchment strategies may be required to enable those instruments to direct or establish binding obligations in relation to urban drainage schemes, in particular to reduce, avoid, prevent or minimise stormwater impacts on urban waterways via connected drainage systems;
    c. Review of public lands across urban catchments which may be relevant or amenable to improvement of stormwater management at local catchment level, including to consider the nature and purposes of those public lands and assessment of potential contribution to improved stormwater management under the categories proposed above.
    d. Expanded use of streamflow management plans and/or special area plans as tools for improved stormwater management outcomes including engagement of local communities in that task.

[3] See Myles Coker et al 'Alternatives to biodiversity offsets for mitigating the effects of urbanisation on stream ecosystems' (2018) *Conservation Biology*, https://onlinelibrary.wiley.com/doi/full/10.1111/cobi.13057

Appendix: Extract from EJA proposed *SEPP (Waters of Victoria)* text

32. Planning schemes and permits

(1) Where relevant, planning authorities must take all appropriate steps to implement or apply this Policy when developing and amending planning schemes under the Planning and Environment Act 1987.

(2) If a planning permit is required by a planning scheme the responsible authority must, where relevant, take all appropriate steps to implement this Policy through the exercise of its powers and discretion in deciding on and/or granting a planning permit.

…

34. Urban Stormwater

(1) Stormwater must be managed in order to avoid or if avoidance is demonstrably not possible minimise risks posed to beneficial uses from the impacts of flow, sediments, nutrients, pathogens, toxicants, litter and other pollutants into receiving waters.

(2) Councils must require all new developments meet the objectives for environmental management of stormwater as set out in the Best Practice Environmental Management Guidelines for Urban Stormwater, or any superseding document, to—

(a) avoid or if avoidance is demonstrably not possible minimise the quantity of stormwater leaving the property boundary and to hold or use it as close to where it is generated as possible; and

(b) avoid or if avoidance is demonstrably not possible minimise the pollution of stormwater.

(3) Owners and managers of assets created to protect water quality, including constructed sediment ponds and wetlands, must ensure assets are—

(a) maintained for the purposes for which they were constructed; and

(b) designed and managed so they are not harmful to humans or have unacceptable impacts on animals; and

(c) managed so that their impact on beneficial uses in receiving waters is avoid or if avoidance is demonstrably not possible minimised; and

(d) renewed or replaced with substitute assets, so that discharges from these assets meet equivalent environmental quality standards.

(4) Councils must, in consultation with the Authority, catchment management authorities established under the Catchment and Land Protection Act 1994, water corporations, landowners and the community, develop and implement stormwater management or equivalent plans that—

(a) identify potential adverse impacts of stormwater; and

(b) identify measures to prevent the generation and transport of pollutants in stormwater; and

(c) identify measures to avoid and if avoidance is not demonstrably possibly minimise the generation, velocity and volume of stormwater flows; and

(d) identify options and measures for stormwater reuse; and

(e) identify preferred options and measures, together with costs, funding needs, timelines and priorities; and

(f) set out a program for the implementation of preferred options and measures, including through amendments as relevant to planning schemes; and

(g) outline a monitoring, reporting and evaluation program.

…