

Parramatta River Catchment Group
C/- City of Canada Bay
Locked Bag 1470
Drummoyne NSW 1470

28 February 2022

To: Department Planning and Environment

Re: Combined Catchment and Coastal Groups Submission to Design and Place SEPP

Dear DPE,

We welcome the opportunity to provide feedback on the Department of Planning and Environment's Explanation of Intended Effect for the new Design and Place State Environmental Planning Policy (SEPP).

Over the last four years significant policy settings have changed including the enactment of the Coastal Management Act 2016 and the development of Coastal Management Programs. Each of our four organisations are leading the development of multi-Council CMPs which represent the majority of Councils in the Sydney metropolitan area (23 of 30 councils):

- SCCG and PRCG - Greater Sydney Harbour CMP which involves 20 Councils and multiple agencies
- Georges Riverkeeper – Georges River CMP which involves 8 Councils
- Cooks River Alliance – Cooks River CMP which involves 4 Councils and Sydney Water.

The new SEPP will be a significant step towards delivering a more environmentally sensitive and greener urban form and is closely aligned with the sustainability, liveability and ecosystem goals established by each of our four organisations.

Each of our four organisations are leading the development of multi-Council Coastal Management Programs (CMPs) which seek to set the long-term strategy for the coordinated management of the coast, with a focus on achieving the objects and objectives of the *Coastal Management Act 2016*. Together we represent the majority of Councils in the Sydney metropolitan area (23 of 30 councils):

- SCCG and PRCG - Greater Sydney Harbour CMP which involves 20 Councils and multiple agencies
- Georges Riverkeeper – Georges River CMP which involves 8 Councils
- Cooks River Alliance – Cooks River CMP which involves 4 Councils and Sydney Water.

The Design and Place SEPP has the ability to greatly strengthen protections for our coastal and estuarine environment and assist in delivering well designed and sustainable built environments. The SEPP is an essential regulatory measure to establish improved environmental sustainability for the entire community delivering improved living conditions that adapt to a changing climate, improved water quality and healthy biodiversity and reduced pressure on the cost of living.

Many of our individual member Councils are providing individual submissions, which strongly supported the draft Design and Place SEPP, but we have included some of their concerns below:

- As a result of the new SEPP will likely cause resourcing challenges for Councils, who will need to appropriately upskill staff or employ specialist staff to do the additional assessment.
- Council are also making the comment about the Design and Place SEPP needing to include consideration of **applicable local** strategies and policies.
- Where new areas are being developed, detailed controls or design criteria may be appropriate, however **in many established areas of Sydney**, standard controls or criteria are unlikely to suit the character of these areas that have developed incrementally over time.
- There is opportunity to strengthen the UDG, noting that the principles in the document are too broad and general, and seem directed for greenfield and brownfield areas, or any other with the potential to change substantially.
- A BASIX **Education and Training package is developed** for local government and other stakeholders; to ensure the successful implementation of BASIX at DA, CC and OC stages, including new requirements for the BASIX Materials Index.
- Although the ADG and UDG contains positive aims to address climate change and the quality of the built environment, these guidelines can be further **improved with stringent performance-based criteria** to ensure the DP SEPP minimises the shocks and stresses experienced by our communities.

The Parramatta River Catchment Group have done considerable work in reviewing planning reforms and provide a detailed summary of the findings and the context of these findings in the following. The new SEPP has the potential to be a significant step towards delivering a more environmentally sensitive and greener urban form and is closely aligned with the liveability and ecosystem goals established by the PRCG.

We commend your work to achieve strong design focused outcomes that align with the Premier's Priorities, to improve access to quality public space and increase tree canopy and green cover. We also acknowledge that the SEPP employs a water sensitive philosophy by recognising the importance of integrating landform, bushland, hydrology and ecology.

The SEPP is considered crucial to fulfilling the vision for the "central river city" identified in the *Greater Sydney Region Plan* and *Central District Plan* and has the potential to deliver benefits to the people, animals and plants that live in the Parramatta River catchment while balancing the need for growth and development.

We support the principles-based approach taken by the SEPP, which will enable flexibility and creativity in seeking design solutions to deliver great places. However we note that mandatory considerations for water management, green infrastructure, emissions reduction, resource efficiency and tree canopy (through BASIX or other mechanisms) will be required to deliver tangible outcomes from the principles set out in this SEPP.

Parramatta River Masterplan

The PRCG is an alliance of councils, NSW government agencies and the community who are all working together voluntarily and cooperatively to improve the health of the Parramatta River. In 2018, the PRCG released [Dubu, Budu, Barra: Ten Steps to a Living River - the Parramatta River Masterplan](#). The Masterplan outlines the suite of reforms required to achieve the goal of making the Parramatta River swimmable again by 2025.

Modelling undertaken by Sydney Water during masterplan development showed that reducing the volume of stormwater reaching the river significantly improves water quality. As a result, much of the PRCG’s work is focused on reviewing the policy, planning and funding frameworks that support the delivery of blue green infrastructure and minimise the impact of stormwater runoff on our waterways, by increasing reuse and infiltration of stormwater.

In February 2021, the PRCG completed a review into the planning reforms that are required to create a living river. The resulting report [Strategic and Statutory Planning Review to create Our Living River – Final Recommendations Paper](#), is the result of many months of work between Sydney Water, PRCG partners and NSW government agencies, through workshops and extensive consultation, including with our project partners in DPIE (specifically the Green and Resilient Places team, District Teams, Planning Policy: Environmental Policy, Codes, Infrastructure funding and public space Public Space and Green Infrastructure Team, EES; Place based Science, Water for the Environment, Water floodplains and Coast; Marine coasts Estuaries and Floods, Water Markets).

While the review was undertaken to achieve the PRCG’s vision for the river, the resulting report could be applied to any catchment to deliver improvements to water quality and increase green cover.

The paper makes a number of recommendations that strongly align with the principles of this SEPP. In particular, it provides a potential roadmap to enacting the reforms required to deliver against Principle 4 in the SEPP: *Design sustainable and greener places for the wellbeing of people and the environment*.

The diagram below illustrates the main strategies that can be employed on-lot and at precinct scale, to protect our receiving waterway environment and create deep soil and landscaping opportunities, resulting in greener urban environments.

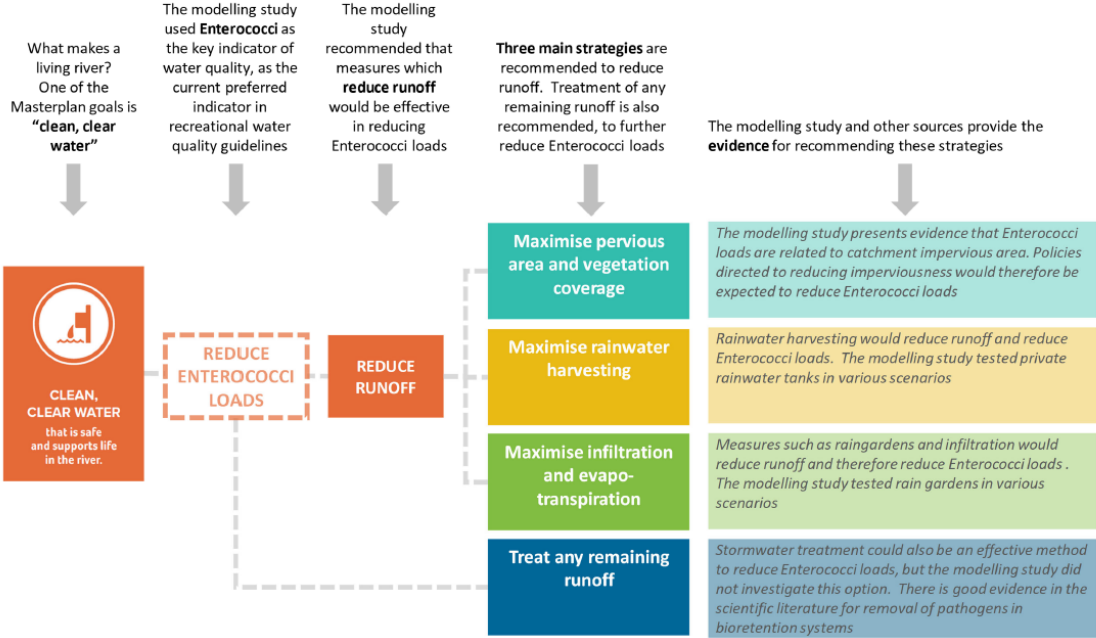


Figure 4: Strategies for improving water quality

Source: Strategic and statutory planning review to create our living river, Parramatta River Masterplan - Step 4 Final recommendations paper, Feb 2021. Accessed 5/3/2021 <https://www.ourlivingriver.com.au/content/uploads/2021/02/Recommendations-paper-Rev-F-11-Feb-2021.pdf>

Potential for a new Blue Green Index Tool

BASIX has been extremely effective in delivering increased sustainability performance from new buildings, however to meet enhanced BASIX targets there may be a requirement to build new assessment tools.

The PRCG's planning review identified a potential new framework to support healthy waterways and green infrastructure implementation that is well placed to meet this requirement. Termed a "blue green index", this framework could drive better Water Sensitive Urban Design (WSUD) outcomes, provide certainty to developers regarding environmental performance and consistency for planners assessing development applications.

[Chapter 4](#) of the recommendations paper outlines the proposed structure and content of this tool, and a pathway for development, implementation, and improvement over time. The proposed tool would be similar to existing tools (i.e. Melbourne's Green Factor tool) and could build on the existing models used in BASIX. The strategies within the tool centre on:

1. Maximising pervious area and vegetation coverage, on-lot
2. Maximising rainwater harvesting
3. Maximising infiltration and evapotranspiration, and finally
4. Treating any remaining runoff on lot prior to discharge to waterways.

The tool can build upon the performance-based approach and flexibility embedded within BASIX, and could consider other existing rating tools such as Green Star Communities. It could apply to a range of development types and scales and incorporate different performance outcomes and scoring for different catchments. As a performance-based tool it would allow different methods to achieve equivalent outcomes, as minimum standards tend to encourage compliance while a performance-based approach encourages more aspirational outcomes. If required a deemed to comply provision could be included for low density/small scale development. At the forefront we are proposing to develop a tool that is simple to use to guide development design and assessment outcomes. The tool would be suitable for implementation through LEPs and DCPs or in a SEPP.

Our final recommendations paper has outlined the stages of tool development and implementation. The PRCG are working on implementing the tool in a pilot development, with testing by select PRCG Councils in late 2022. We see DPIE as an essential partner to developing this tool and would be interested in understanding how we can progress this work together to align with the release of the Design and Place SEPP.

Specific comments on the draft Design and Place SEPP

We are strongly encouraged by the direction of the proposed Design and Place SEPP and the potential review of BASIX as an enabler to healthier waterways and greener urban form.

Specific comments on the draft SEPP are provided below:

- Pt 2 – 12 (2) should include integrated water management to deliver green spaces, reduced stormwater runoff and increase water re-use.
- Pt 2 – 13-23 in design considerations we are concerned that the wording 'must consider' is not strong language compelling action.
- We support the recognition of integrated water management and the way improved water management contributes to wider liveability outcomes for the community. However, we note that there are opportunities to improve water management at the individual lot and 'significant development' scales that would also benefit from a place-based design approach. Decentralising water management can reduce the requirement for large scale detention infrastructure that has high capital and maintenance costs.

Specific Comments on the Urban Design Guide

The Urban Design Guide provides guidance on high level principles in Objective 1, that we

wholly support, in regard to protection of areas of ecological importance, vegetation retention, inclusion of water sensitive urban design principles and the development of a water management strategy.

Care must be undertaken to ensure that a 'compact urban footprint' (Objective 3) is not synonymous to increased impervious surface that will cause a collective decline in the functionality of our waterways. An objective for good urban Design (part 2) should include targets for minimum impervious surface area per lot/development or runoff reduction targets. We support the objectives (9,10,11) under Natural Systems. It is good to see that strong targets proposed for deep soil areas and trees, including specific targets applicable to streets, public open space and private lots, however there is a concerning suggestion in the Cost Benefit Analysis that two options are under investigation that would provide more flexibility by allowing applicants to deviate from prescribed design criteria such as the deep soil and tree provisions. Tree canopy has set targets and we think it would be appropriate to set stormwater runoff reduction targets (similar to flow targets that have been set in the Western Parkland City). To ensure the principles of 9,10 and 11 can be met, that water is retained, fit for purpose water reused leading to improved functionality of our waterways.

We support the objective to improve green infrastructure at the precinct scale. We request that there is consideration of sustainable water management in the establishment of planting in precinct scale development. In particular, this could be delivered through passively watered street trees. (See Designing for a cool city: Guidelines for passively irrigated landscapes). Multi-purpose green infrastructure needs to be integrated in both the public and private domain, including streetscapes that compliment a water sensitive design approach. The SEPP should consider whether codified or more flexible, performance-based methods for water and landscape outcomes are more appropriate in different types of development.

Review of BASIX

We acknowledge that the current review of BASIX has focused on thermal comfort and energy. We also acknowledge that the review of the water targets in BASIX has been identified in the Greater Sydney water strategy and other regional water strategies.

We note the draft SEPP proposes to extend BASIX to non-residential development. Under the SEPP non-residential development includes offices, retail premises, hotels or motels and non-residential State significant development. We would strongly support the expansion of BASIX or the application of a similar tool such as our proposed Blue-Green Index to assess the full range of development types.

Currently there are no changes proposed to the water targets in BASIX, and we suggest that BASIX should no longer purely focus on water efficiency. Targets around stormwater retention rather than a singular focus on demand reduction would be more appropriate to delivering a blue-green outcome. This can be achieved by:

- Maximising the proportion of the roof connected to the rainwater tank
- Building in a rainwater harvesting tool to quantify the expected reduction
- Set a minimum standard for runoff reduction (% of post-development flows) for different development types.
- Maximise connections to different end uses (e.g. garden, toilets, laundry, hot water)
- Maximise tank volume.
- Encourage "leaky" tanks where water trickles out to a passive irrigation/infiltration area, increasing the potential for rainwater tanks to capture runoff during rain events.
- Build this feature into an infiltration tool.

Research undertaken by Sydney Water has also shown that only two-thirds of rainwater tanks are maintained to standard following their initial installation. The failure of these systems is attributed to:

1. Poor understanding by the property owner/occupant about how the rainwater tank should operate
2. Lack of a regulatory framework requiring systems to be maintained post installation

3. Inability for councils to resource compliance monitoring.

Reviewing the SEPP and/or other legislation to ensure ongoing compliance of installed systems, supported by a targeted education program could assist in resolving these issues. This needs to be supported by robust data capture through BASIX and/ or any other tools that are developed.

Rebuilding the BASIX tool on an updated software platform, would allow further modules to be included, such as those outlined in our [blue-green index tool](#). We would welcome the opportunity to continue to work with the Department on integrating the blue-green index tool and the development of potential targets and measures to support green infrastructure.

Comments on the Apartment Design Guide

We note that the apartment design guide requires the installation of rainwater tanks, specifying a minimum size and connections. However, there is no requirements to connect to outdoor irrigation which is potentially fit for use and an irrigated landscape is demonstrably cooler for residents.

Future collaboration

The PRCG understands that DPE is considering the potential for a new "green factor" tool, which could integrate the PRCG's recommendations for a Blue Green Index.

The PRCG is keen to work with DPE on the development of this tool and sees a potential opportunity to pilot works in the Parramatta River catchment.

We thank you once more for the opportunity to comment on this important piece of work.

Please do not hesitate to contact Nell Graham, PRCG Coordinator on (02) 9121 0009 should you require any further information.

Yours sincerely,



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