

12 January 2016

Adam Jones  
Principal Planner  
Department of Infrastructure, Local Government and Planning  
Level 6, 63 George St Brisbane QLD 4000

Dear Adam

**Re: Stormwater Queensland Submission - Multiple Use Public Open Space Consultation Report**

Stormwater Queensland commends the Department of Infrastructure, Local Government and Planning for commissioning the “*Multiple Use Public Open Space Consultation Report*” (hereafter referred to as the report). We believe that the report achieves its stated aim of analysing how better and more cost effective infrastructure provision can be achieved through multiple use of land for parks and stormwater.

The purpose of Stormwater Queensland is to promote the efficient management of stormwater including the delivery of cost effective stormwater infrastructure achieved through the integration of stormwater assets into urban areas. As such, Stormwater Queensland strongly supports the notion of multiple use open space.

Further to our review of the report, we believe it to present a technically sound approach towards the achievement of multiple use open spaces and support the outcomes of the report. Some more specific comments are provided below for your consideration.

**General comments**

- With the increasing density of urban development being encouraged by government, it is more important than ever that the available land bank be efficiently used. This includes maximising the value provided by green space in developed/developing areas.
- In balancing the sometimes conflicting needs of developable land and green space, it is vital that a win-win result is achieved. This should include encouraging or even rewarding developers for giving up larger than minimum tracts of land and achieving good urban design outcomes which balance the community's needs. The win for the local and broader community is the priceless green space secured in perpetuity.
- Once green space is lost, it is lost forever. Effective planning, as demonstrated by the case studies in the report, is therefore critical to ensure adequate green space which achieves multiple benefits is retained.
- Linear parks containing a waterway, in particular, offer a high degree of visual amenity and a substantial improvement to the overall urban scape. When using such corridors, the community does not typically distinguish between arbitrary separation of ‘open space’ and ‘drainage corridor’. The value of these spaces and the way they are used/viewed by the community needs to be recognised in planning frameworks. Where such corridors are rehabilitated (or already in good condition) and embellished with recreational assets (such as pathways), the developer should receive credit for such works/land dedication.

- If a developer is required to dedicate drainage reserve without any recompense, the minimum possible area will be dedicated. Minimum areas typically result in hydraulically efficient channels with little other benefit. They are designed to be high velocity, hard surfaced, unsafe and visually unappealing - a drain.
- If a developer is credited the full value of green space, financial barriers to providing all the space necessary to achieve a high value urban result area greatly minimised. With space, a waterway or overland flow path can be broader, shallower, lower velocity, vegetated, sinuous and visually appealing - a linear park with both high amenity and a stormwater function.
- Typical urban ephemeral waterways carry flows only during and shortly after rain events. In any year for example, there are approximately 4,410 daylight hours in South East Queensland. Adopting a “typical” flow event duration of 4 hours, the 20% AEP (one in five year) event occupies approximately 0.02% of daylight hours, the 10% AEP occupies 0.009% and the 1% AEP event occupies 0.001%.

The catchment drainage purpose of a multi-use linear park, whilst important, occupies only a very small component of available time. For the vast majority of the time, the space is available for a full range of urban community recreation and amenity purposes.

The design of open spaces should therefore reflect the normal condition of the park rather than exceptional storm event condition, while accounting for the safety and functional considerations during and after rainfall.

### **Barriers to implementation**

The most significant barriers to implementation of multiple use open spaces are Local Authority planning scheme codes, policies and infrastructure charges offset arrangements. Effective implementation of multiple use open space is unlikely to occur without alterations to these regulatory instruments.

Council officers are also often reluctant to accept multiple uses in creditable open space. There are many reasons for this reluctance including poor attempts at integration which have led to aversion to the broader principles of integration and perceptions that providing credits to offset development charges would result in overall loss in infrastructure charges for Councils.

Overcoming this barrier will require a range of solutions including, for example, regulatory reforms (as noted above) and promotion to Councils of the benefits of integration (including financial benefit) outlined in the report.

These and other solutions are discussed further below (refer to “Next Steps”).

### **Specific comments on the desired standards of service proposals in the report**

#### *Road frontage*

Proposed minimums will not be achievable in all topographies. This is particularly so in linear parks where a waterway might, for example, traverse around the base of a steeper sided hill.

### *Batter slopes*

Maximum batter slopes should allow a reasonable degree of local variation to suit specific topographic constraints or landscape design purposes. For example, in a 1:6 batter area, local steepening, or even a small wall, for a landscape function or to enhance a local topographic feature can be entirely appropriate. Equally, it is counter-productive to flatten a batter in a natural/semi-natural waterway simply to comply with an arbitrary guideline.

### *Depth and flow characteristic limits`*

Specific depth limits appear arbitrary and unnecessary. Public safety risk can be adequately managed by nominating appropriate depth velocity (DV) values. Whilst DV limits should apply to the more accessible public spaces, no specific limits should apply to the waterway areas as these are a function of the existing natural environment and topography.

### *Linear park width limitations*

We disagree strongly with the suggestion that the part of the park outside of the 15 m zone is not “parkland”. The entirety of linear open space, including the waterway area, has high visual amenity and adds substantially to the urban scape.

### *Linear park typical section*

The zoning in Figure 7 is too restrictive. An essential component of urban design in a linear park is activation of the waterway area. Pedestrian paths should generally meander through the whole area and not be limited to the high side.

With that in mind, the requirement that paths be set above ARI 5 (Figure 3, Tables 10, 11, 12 and Figure 6) or ARI 100 (Figure 7) is too limiting. Figure 7 is probably wrong.

Some relaxation is needed to allow paths to closely approach the waterway where appropriate.

### *Table 13: Stormwater management in waterway and wetland buffers DSS*

The limitation of half the overall waterway buffer width and the 10 metre setback are overly restrictive and unnecessary.

The prohibition of walls in the buffer is overly restrictive and unnecessary. Low walls can be entirely appropriate in particular circumstances.

## **Broader problems**

Many smaller urban developments do not involve the creation of public open space, and provide no opportunities to integrate stormwater management measures in a meaningful way as outlined in the document.

Stormwater management in these developments becomes disproportionately expensive and tends to lead to the poorest urban design outcomes. A broader review of stormwater quality measures for smaller subdivisions is warranted.

## **Next Steps**

The following points outline our recommended strategy for the widespread adoption of the framework. The points have been based on the assumption that the issues identified above have been suitably addressed.

- Integrate the framework with the State Planning Policy and SPP guideline currently in development. Wherever site constraints allow, multiple use open space should be identified as either a 'performance outcome' or as an 'acceptable outcome' for both 'liveable communities' and 'water quality' state interests.
- Translate the outcomes of the report into a short fact sheet which promotes the business case for multiple use open spaces and which refers back to the report for further detail.
- Work with the Council of Mayors and Local Government Association of Queensland to have the framework formally endorsed and reflected in local regulatory instruments.

Although the changes to the SPP would provide the regulatory impetus for change, working with these groups is a more participatory and inclusive approach which complements the regulatory changes and is therefore recommended. Ensuring political buy-in early would likely result in faster and more effective support for the framework.

- Promote the framework, case studies and fact sheet through the various industry associations (Institute of Public Works Engineering Australasia, Stormwater Queensland, Planning Institute of Australia, Engineers Australia, Urban Development Institute of Australia, Australia Institute of Landscape Architects, Floodplain Management Association, Queensland Environmental Law Association and the Environmental Institute of Australia and New Zealand).
- Undertake a tour of all the major regions in Queensland to promote the report, fact sheet and new SPP provisions.

We would like to thank you for the opportunity to provide a submission on the report and offer our support in promoting the widespread adoption of an appropriate framework for the integration of land and water planning in multiple uses open spaces. Should you have any questions or would like to discuss our submission further, please contact Tony Loveday of the Stormwater Queensland Advocacy and Engagement Sub-Committee (4659 611 or 0448 035 303 or [tony.loveday@rmaeng.com.au](mailto:tony.loveday@rmaeng.com.au)).

Kind regards



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