



Sewerage authorities often need State and/or Federal assistance to develop projects that create more resilient cities. Typically State and Federally funded projects are large centralised systems (which provide the base resource) but it is the local, smaller projects which provide the distributed systems that augment the centralised systems. With good distributed systems, the centralised systems providing the base load can be smaller (or augmentation can be delayed). The localised distributed systems are not necessarily hard infrastructure but can, and often do, include soft programs. A good example of this in water supply where the large, centralised water supply run by the Water authority is augmented by a distributed system which includes local stormwater harvesting, water sensitive street and open space design and management, community education programs and provision of water efficient devices - all of which provide alternative fit-for-purpose water supplies and demand management. If this approach could be applied across other water related aspects of cities they would be more resilient.

One of the interesting long term effects of the Millennium Drought (throughout the early part of this century) is that the intense community education programs about reducing water usage (eg Melbourne Water's Target 155) seem to have struck a cord with the community and the reduced water usage patterns developed through that period have largely continued.

**e) Model land use planning and building controls to maximise benefits and minimise impacts in both new and legacy situations.**

*1) Improve the coordination of water related authorities towards land use planning*

Water related land use planning involves input from a variety of authorities and it is now common practice to require plans defining how all water related matters are to be coordinated. Again in regional Victoria, there are a range of authorities involved and a coordinated response to land use planning has not always been achieved. The range of authorities includes –

- i) The drainage authority, typically local government
- ii) The floodplain manager – typically the catchment management authority
- iii) The Groundwater manager – eg Southern Rural Water
- iv) The water and sewerage authority – eg Barwon Water

In the Geelong region this has been recognised and, in 2012, The Barwon Region Integrated Water Cycle Management Network (BRIWCMN) was formed. Signatories include the five local governments of the G21 region (i.e. City of Greater Geelong, Surf Coast Shire Council, Borough of Queenscliffe, Colac Otway Shire Council and Golden Plains Shire Council), Corangamite Catchment Management Authority, Barwon Water and Southern Rural Water. Members of the group meet to discuss issues of common interest. One of the group's initiatives was the development of the "Urban Water Planner" – see 8a) below.

*2) Make flooding information more consistent*

Similar to 5a) above, in regional Victoria, information about flooding and how flooding effects development sites may be provided by various authorities including –

- i) The drainage authority, typically local government
- ii) The floodplain manager – typically the catchment management authority
- iii) Building surveyors / Local Government building departments
- iv) Planning authorities – typically Local Government

Each of these authorities operates within different sets of legislation. The flood related requirements of flood designations, Special Building Overlays (SBO's), the Planning and Environment Act and the Building Code too often are not in concert and lead to differing responses depending on the source of the information. There is an opportunity to better coordinate these departments/legislation so that the development related, flooding information provided to developers is more consistent.

**f) Funding models and incentives to support strategic planning and investment in desirable stormwater management, including local prioritisation.**

- 1) *Provide access to funding which helps address the intergenerational benefits and the benefits of a project funded by one authority but the benefits of which are accrued by others*

Project funding (and particularly with larger projects) is frequently subject to cost benefit analysis. The benefits that accrue from many water related projects relate to amenity, wellbeing and other long term community benefits that are not readily converted into a dollar value. Also, projects which are undertaken by an authority may create assets (eg the rehabilitation/ preservation of an urban waterway) which are to the long term benefit of other groups/authorities. In both of these cases, it is often difficult for the originating authority to make a clear business case for the project, although there is broad recognition of the real, wider benefits. Providing some sort of funding pool and/or process of valuation of the intangible benefits to help address the intangible, inter-authority and intergenerational benefits would help get these worthy projects up and running.

**g) Asset management and operations to encourage efficient investments and longevity of benefit**

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- 1) See Stormwater Australia submission

**h) The role of innovation in supporting desirable outcomes and transparent decision-making, including access to information and novel technologies for planning, design and implementation**

- 1) *Provide opportunities/funding for the development of better tools for landuse planning*

The BRIWCMN initiated the development of the "Urban Water Planner". This is a web based tool which (when fully developed) will allow developers to develop all the water related aspects of projects from the earliest stages through to development approval with on-going communications with all the water based authorities which are able to provide coordinated responses to project proposals. Government needs to facilitate the development of such tools and any supporting legislation so that land use planning can profit from the full gamut of water related benefits and help urban development to achieve resilience

We look forward to the final report and recommendations when the committee reports later in the year.

Yours sincerely

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