



24 June 2016

Cities Division
Department of Prime Minister and Cabinet
1 National Circuit
Barton ACT 2600

Re: Water Services Association of Australia Submission on Smart Cities Plan

Thank you for the opportunity to provide a submission on The Federal Government's 'Smart Cities Plan'. The Water Services Association of Australia (WSAA), the peak industry voice for urban water, applauds the Federal Government on developing a plan for cities. We believe it is essential to develop a vision and high level goals to give direction for the private and public sector to deliver those broader outcomes that make cities vibrant, healthy and resilient places to live, work and play.

Water provides more than just drinking water and environmental outcomes. Healthy urban waterways and green spaces in cities support both mental and physical health by providing recreation, a place for meeting, amenity and cooling. While these are underpinned by water, the water industry is rarely thought of in design and delivery. WSAA believes that the urban water industry has a strong role to play in the planning and delivery of smart cities, beyond the core products of water and sewerage provision.

Integrated planning of essential infrastructure and services requires significant attention in Australia. The urban water industry is concerned that infrastructure solutions are not fully capitalising on the value of transport, water, energy, telecommunication and waste working together. Collaboration across sectors is essential to delivering broad economic, health and liveability outcomes. Involving the water industry in strategic long-term planning, as well as developing frameworks for sectors to work together, can improve productivity and deliver more benefits for the community at a lower long-term cost.

Delivering liveable smart cities must be community driven. We need innovative and robust ways to engage the community and demonstrate support for services and infrastructure. Utilising value capture relies on the community recognising the value of an investment. Value capture offers an excellent opportunity to think beyond transport, to 'green and blue' infrastructure and how this can further enhance the liveability status of our cities. Australian is unique in that our big cities regularly



appear in the 'top ten' of the most liveable cities. This uniqueness is probably the most critical selling point in attracting the skilled workers we need to grow our prosperous nation.

This submission provides input on the Smart Cities Plan under each of the three pillars, Smart Investment, Smart Policy and Smart Technology. It references WSAA Policy Papers and includes case studies. WSAA is happy to provide any further information that may support the development of the Smart Cities Plan. Please contact Adam Lovell on 0292210082 or adam.lovell@wsaa.asn.au

Yours Faithfully

A handwritten signature in black ink, appearing to read "Adam Lovell", is positioned above the typed name.

Adam Lovell
Executive Director
Water Services Association of Australia

**Water Services Association of
Australia**

**Submission to Federal
Government Smart Cities
Plan**

June 2016



**WATER SERVICES
ASSOCIATION OF AUSTRALIA**

OVERVIEW OF WSAA

WSAA IS THE INDUSTRY BODY THAT SUPPORTS THE AUSTRALIAN URBAN WATER INDUSTRY

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Based around our vision of 'customer driven, enriching life', WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. We are proud of the collegiate attitude of our members which has led to industry-wide approaches to national water issues.

WSAA can demonstrate success in the standardisation of industry performance monitoring and benchmarking, as well as many research outcomes of national significance.

WSAA was formed in 1995 as a non-profit organisation to foster the exchange of information between industry, government and the community, and to promote sustainable water resource management.

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1.0 Smart Investment

1.1 Prioritising projects that meet broad economic objectives

WSAA supports the holistic approach to assessing the benefits of projects as we believe that this is the first step to moving away from siloed thinking and planning. However, this section has a heavy focus on roads and public transport links. We believe that creating links for *active transport* are also important and should be part of a complete approach to transport. The plan should also recognise the additional health and wellbeing associated with communities where residents are able to walk and ride. It is not an obvious connection, but the water industry has the ability to support active transport by repurposing existing assets such as pipe easements (see Case Study 1) and stormwater assets. There are many opportunities to repurpose easements across the country. However actual investment (such as the case study below) will remain opportunistic unless the frameworks are put in place to recognise more than just a positive NPV, and facilitate collaboration amongst tiers of Government and the private sector.

Case Study 1: Repurposing assets to deliver active transport

The 'Greening the Pipeline' initiative aims to transform 27km of disused sewer pipeline in the west of Melbourne into a key community and active transport space. The Main Outfall Sewer (MOS) was decommissioned in 1993, and in 2005 the reserve surrounding the MOS was transferred from Melbourne Water to VicRoads for the development of a bicycle path. The MOS is a combination of open concrete lined channels and covered brick lined concrete, and is currently in poor condition for most of its length. Melbourne Water in collaboration with VicRoads, City West Water, Wyndham City Council, the Victorian State Government and stakeholders from the Greening the West initiative are looking to fully realise the potential of this space. Inspired by key urban projects such as the High Line Project in New York, they aim to transform the MOS into a multiple-use asset in which green shady spaces support the bicycle path and local community needs, as well as counteract heat stress in the area. Community engagement and consultation is vital to ensure the project will adequately capture the needs of local residents, and a pilot parkland is currently being constructed to help showcase the potential of the pipeline reserve.

1.2 Treating infrastructure as investment

WSAA believes that when assessing investments, that more than just financial returns should be included. Social and environmental benefits also deliver returns to cities and to this end, the proposed Infrastructure Financing Unit should consult with other departments such as health, environment and social services to include appropriate criteria in assessment frameworks.

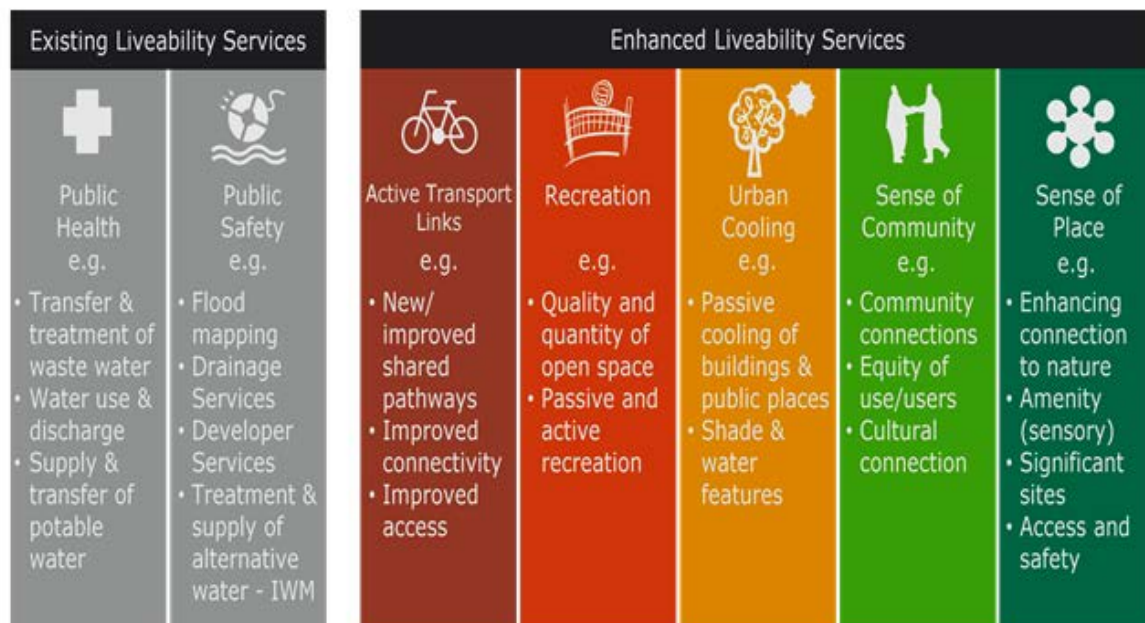
1.3 Getting involved early in project planning and business cases

WSAA strongly supports any initiative that will bring partners together to develop, deliver and fund projects. We look forward to seeing frameworks that encourage collaboration not only between different levels of Government, but also other sectors. We also support early community engagement to ensure projects address the specific needs and preferences of communities (Case

Study 2). We strongly support the view that early project planning will also encourage proposals to address broader outcomes and include relevant stakeholders.

Case Study 2: Services based on community engagement

As part of their 2016 price submission to the economic regulator, Melbourne Water conducted extensive community consultation to better understand the expectations regarding the broad spectrum of services it provides.



The findings of the engagement include:

- High willingness to pay for renewable energy
- Expectation to clean up waterway pollution hotspots
- Customers are willing to pay for amenity and in particular for ecological improvements
- Customers want Melbourne Water to contribute to liveability

The key benefit of this process is that Melbourne Water customers and the community defined value and indicated their willingness to pay for these additional services. Other outcomes include:

- Melbourne Water developed greater insights into customer's needs and the new engagement methodology has improved organisational capacity in engagement.
- The process gave Melbourne Water the justification to deliver beyond the services prescribed in the Water Industry Regulatory Order including waterway health benefits, biodiversity and amenity improvements
- Reputational and relationship benefits: earned/ confirmed trust from regulator, government and customer

1.4 Increasing investment

WSAA supports exploring the role that value capture could play in expanding the funding options for infrastructure.

Value Capture is not just for transport infrastructure. There is evidence that investments that provide green spaces, amenity and improve urban waterways are also valued. These innovative financing mechanisms have been used in overseas cities such as Millennium Park in Chicago, US to contribute to 'green infrastructure'. As shown in Case Study 3, the water industry can support these outcomes for communities and if value capture can provide funding, there are many more opportunities where the industry can make a difference.

Case Study 3: Cooks River bank naturalisation creates capital value

In the 1940s the Cooks River in the inner west of Sydney, was channelised as a flood mitigation measure. The concrete channel required restoration, which was used as an opportunity to re-think the role and potential of the Cooks River in the local community. Sydney Water, together with local councils and a very engaged community, developed a Masterplan for the river. Now, with the help of a Federal grant, the Masterplan is being implemented by all parties involved. Sydney Water renaturalised the River along an 1100m stretch, councils have formed the Cooks River Alliance to continue collaboration, and the community remains actively involved in the maintenance -and of course the enjoyment- of the river. The local area has greatly benefited from the project, through new parks and bike paths, but also financially through a capital uplift of adjacent properties by 4.8%-8.9%¹.

¹ Thomy et al, "Valuing urban riparian corridors: the interaction of riparian buffers and channel condition and their influence on property prices" 2016

2.0 Smart Policy

2.1 Delivering City Deals

WSAA supports the concept of City Deals as at its heart, it brings different levels of government, stakeholders and the private sector together to agree on a vision, goals and priorities for a city. This is the foundation for collaboration. It is important to highlight that the community should be involved in defining these visions and goals.

The water industry is an important stakeholder that supports the goals of a city. As such, it should be included in determining incentives. For example, to increase housing density, there needs to be capacity in the water and sewerage systems or this could result in significantly more expensive costs to upgrade. The water industry contributes to green spaces by looking at alternative, fit for purpose water supply options. They are also able to contribute to reduced greenhouse gas emissions and reducing food waste through enhanced cogeneration. All these require early involvement when designing precincts, and coordination with industry, community and government. The Bradford, UK City Deal is an example of how early consideration of water can deliver broader outcomes and become the cornerstone of the economic rejuvenation of the city centre².

2.2 Leading regulatory reform

WSAA has played a leading role in advocating for regulatory reform within the urban water industry.

In collaboration with Infrastructure Partnerships Australia and formally launched by the Treasurer Scott Morrison in November 2015, WSAA set out a comprehensive urban water reform agenda '[Doing the urgent as well as the important: Reforming the urban water sector](#)'. The report set out the changes necessary to:

- Improve economic regulation of the sector
- Develop frameworks for competition that would benefit customers; and
- Governance reforms.

While water is a state issue the report argued there was a strong case for the Commonwealth to work with the States to implement reforms.

The Smart Cities Plan states that 'making our cities better must start with an acceptance by all levels of government that a strategic approach is necessary'. WSAA supports this call. Involving the water industry in strategic land use planning is a key step as laid out in our 2014 [Occasional Paper 29: The Urban Water Planning Framework](#). It also includes the involvement of customer and community at various points of the planning process. While the planning and housing reforms mentions alignment of transport and metropolitan planning, WSAA believes that there should also be alignment of water and metropolitan plans to ensure that costs to service are taken into account when determining development fronts for a city.

Water plans should also move beyond just considering water supply and security and also consider how water is used and moves throughout the urban and natural environment. There are very few (if

² <http://www.centenarysquare.co.uk/mirror-pool>

any) city or regional plans that take this holistic view and as a result, there are lost opportunities for liveability, amenity and health outcomes. It can also lead to increased costs for flooding, poor aquatic health and loss of biodiversity. Case study 4 shows how water can make a broader contribution to the goals of city and deliver wider economic benefits.

To lead regulatory reform, WSAA would like to see a *reinvigorated National Water Initiative* (NWI) that requires State Governments to involve the water industry in strategic land use planning, as well as developing more holistic water plans that go beyond supply and security. The NWI is the most practical mechanism to include stormwater into the total urban water environment and introduce long term goals for the resilience of cities and built environment to extreme events and climate change.

Case Study 4: Water and economic development in South Australia

In response to a number of state-wide financial and social pressures, there is a strong imperative from the South Australian Government to bolster economic development. One priority for the Government is positioning SA as a 'renowned producer of premium food and water, from its clean water, clean air and clean soil'. KPIs and targets ensure previously siloed departments or organisations can move toward the same goal. For SA Water, this means they are able to consider projects which may not be under their direct obligations, but does provide broader value to the state. Projects are financed via reduced dividend contributions to Treasury; hence these projects do not impact the customer base through higher water bills. One such project is the Bolivar Treatment Plant upgrade, which will deliver an additional 20 GL of recycled water to support high value food production for export markets in the Northern Adelaide Plains. This will contribute to an estimated \$250 million of horticulture production annually.

2.3 Measuring success

WSAA endorses the development, measurement and reporting of indicators and targets for cities. These should be based on the Vision and Goals of the city and determined with stakeholders and the community. Different sectors will obviously have accountability for different parts of the goals but in many cases, objectives will align.

The open reporting of data encourages sharing and collaboration, and a more productive investment of funding to meet common objectives. Most of the higher level goals require contribution from different stakeholders to deliver an outcome. WSAA has two [Occasional Papers \(30 and 31\)](#) that discuss how water utilities can make a broader contribution and support other stakeholders, particularly Local Councils. Paper 31 includes a 'menu' of liveability indicators that water utilities can use to develop their own unique Liveability Scorecard. The measurement and discussion of these indicators has encouraged engagement with Local Councils and identified collaborative projects that will deliver better community outcomes at no additional cost.

3.0 Smart Technology

3.1 Thinking of technology solutions first

WSAA supports the use of technology to improve the customer experience. However, we do recognise that customers have different needs and as an essential service, water utilities need the provisions in place to communicate with, and service different segments of customers in different ways. The technology solution may not always be appropriate for disadvantaged, remote or elderly customers.

3.2 Leveraging open and real time data

The water industry has vast amounts of data relating to assets, water and wastewater quality, much of it publically available. We strongly believe that making data available from other parts of the water environment, such as stormwater and urban water quality, more easily accessible will not only help identify areas for collaboration, it will also facilitate better measurement of improvements.

3.3 Driving use of Energy efficient technologies

The water industry is strongly supportive of energy efficient technologies and also generates its own renewable energy through biogas capture at wastewater treatment plants and the installation of micro turbines on pressurised pipelines. The water industry is also trialling co-digestion methods for energy generation with the added benefits of greenhouse gas emission reduction and improved productivity.

WSAA Policy Papers

Full papers can be found at <https://www.wsaa.asn.au/publications>

1. Occasional Paper 29: The Urban Water Planning Framework 2014
2. Occasional Paper 30: The contribution of the urban water industry to liveability 2014
3. Occasional Paper 31: Liveability Indicators 2016
4. Improving Economic Regulation of Urban Water 2014
5. Doing the important as well as the urgent: Reforming the urban water sector 2015