

# Creating water sensitive cities

## CRCWSC response to the Productivity Commission National Water Reform draft report

### The CRCWSC welcomes a reinvigorated water reform program

The Productivity Commission's draft report on National Water Reform provides a comprehensive review of reform progress, and outlines many of the key challenges facing the water industry and the communities it serves.

The Cooperative Research Centre for Water Sensitive Cities (CRCWSC) strongly supports the Commission's recommendation to establish a reinvigorated Council of Australian Governments (CoAG) water reform program by 2020. Australia needs a national approach because the challenges of population growth, climate change, economic prosperity and fair allocation of our scarce water resources go beyond state boundaries. A national approach can also ensure Australia maintains its international leadership in water reform and meets its commitments to achieving the United Nations Sustainable Development Goals (SDGs).

### The CRCWSC supports many of the Commission's draft recommendations on urban water

Transitioning cities and regions into water sensitive, future-focused communities requires genuine cross-collaboration. The CRCWSC was established to facilitate this process, and to help change the way Australia designs, builds and manages our cities and towns. The CRCWSC brings together many disciplines, world-renowned subject matter experts, and industry thought leaders who want to revolutionise urban water management in Australia and overseas (box 1).

Two of the CRCWSC's key roles are helping to develop practical solutions to urban water management issues, and promoting their adoption by influencing policy, regulation and practice. The CRCWSC welcomes the following reform recommendations, which address some of the issues currently facing water utilities and other stakeholders trying to develop and implement innovative solutions to urban water management challenges:

- expanding the coverage and improving the independence of economic regulation, to ensure water service customers receive value for money and prices that reflect the efficient and sustainable costs of services
- fostering closer links between urban planning and water resource management that recognise the critical role water plays in creating a built environment that is liveable, sustainable and productive
- adopting outcome based environmental regulation that encourages regulated entities to move beyond minimum compliance, and creates scope for innovation and more efficient delivery of the regulation's intent
- removing policy barriers for water supply options and keeping 'all options on the table', and therefore creating a more resilient and efficient portfolio of water supply options
- encouraging more balanced consideration of centralised and decentralised options, and removing impediments to integrated water cycle management, to promote a more efficient

supply–demand balance, make water cycle manage more effective, and better integrate broader community and environmental benefits

- improving regional utility efficiency and funding arrangements, to deliver better value to customers and to deliver government objectives more efficiently
- continuing to move to prices that achieve cost recovery and better use of transparent, well defined community service obligations to achieve non-commercial government objectives.

#### **Box 1: About the CRCWSC**

The Cooperative Research Centre (CRCWSC) was established in 2012, recognising the critical role that water plays in ensuring our cities are productive, resilient, sustainable and liveable. The CRCWSC brings together 84 participating organisations from across state, local and federal governments, water authorities, universities and the private sector businesses to respond to the challenges of population growth, climate change and economic constraints as they relate to the water cycle and urban environments.

The CRCWSC will soon complete its first tranche of research projects, involving an investment of \$34 million over five years, working with over 300 researchers across 20 disciplines generating more than 700 knowledge outputs under four programs: social change; urban planning through water; future technologies; and adoption pathways.

This research has increased both our understanding of the challenges facing our future cities and opportunities for action. It has also highlighted areas requiring reform. The CRCWSC’s next tranche of activities will build on its first round of research. It was developed in close consultation with more than 120 stakeholder organisations over 18 months, focusing on the following priority activities for reform:

- **Transition strategies**, that will benchmark current performance, and develop a shared vision and implementation plan
- **Economic evaluation framework**, to ensure a broader range of costs and benefits are factored into water related investment decisions as standard industry practice
- **Integrated planning across different scales**, to better align water resource management and town planning at the catchment, precinct and lot scale
- **Infill development**, to provide improvement opportunities across policy, regulatory, financial, technology, and community approaches in a key area of growth.

The CRCWSC will also support a national network of capacity building organisations and develop tools and products to support practical application of its research .

For more information see <https://watersensitivecities.org.au/>

## But the recommended reforms do not address all the issues

The CRCWSC's research and engagement with water sector participants suggest that, while the draft report creates an important foundation, gaps exist in the suite of recommended urban water reforms.

In particular:

- Public health is a fundamental driver of the urban water sector. The draft report's focus on urban water supply (*water quantity*) is important, but urban water reforms must also assure *water quality* and public health through:
  - water quality regulation and community debate that is informed by scientific evidence about the opportunities and risks of different water supply sources (including stormwater and recycled water)
  - ensuring communities have access to quality open space and healthy waterways so that larger, more densely populated cities are also healthy and liveable
  - stronger action where regional water authorities are not reliably meeting basic drinking water quality standards.
- The CRCWSC supports the draft report's recognition of the impact of climate change on the potential for droughts. However, the final report should also acknowledge that climate change may also affect the costs, frequency, intensity and duration of floods and extreme temperatures.<sup>1</sup>
- Urban water reforms must promote more effective management of the *water cycle*. This approach includes a more balanced consideration of drainage and waterway services alongside water and sewerage services. The draft report notes the significant progress made in reforming urban water and sewerage services, however, in many jurisdictions, the same progress has not been made in relation to the governance, funding and delivery of stormwater quantity and quality management. Collaborative water cycle planning, together with accountable service delivery and funding, should support integrated water cycle solutions that more efficiently deliver community value during both floods and droughts.
- An informed and engaged community is critical for planning and implementing water cycle reforms. Further, reforms for better integrating demand side measures are just as critical as measures to improve supply.
- Outcome focused, risk based environmental regulation is important. Further, these same principles should apply to health and economic regulation.
- Prices that fall within the upper and lower bands of the CoAG guidelines are important. Improved price signals must also go hand in hand with improved consumer choice and vulnerable customer support.

The CRCWSC supports many of the reform priorities identified in chapter 6 of the Commission's draft report, but suggests the following amendments as shown in box 2 and discussed below.

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<sup>1</sup> Flooding already imposes significant community cost (for example Melbourne Water (2015) estimates that the average annual damage in the Port Phillip and Western Port region alone is almost \$400 million), while Coates et al (2014) state that from 1844 to 2010, extreme heat events have been responsible for at least 5332 fatalities in Australia and, since 1900, 4555: more than the combined total of deaths from all other natural hazards. Further, the CSIRO has forecast both flooding and extreme heat to increase in Australian cities (CSIRO 2015).

## Box 2: Where to next?

Chapter 6 (Urban Water) of the Commission's draft report includes a section titled *Where to next?* The CRCWSC supports many of the reform priorities identified in this section, but suggests it be amended as follows:

1. Better planning for growth in major cities through:
  - Closer links between water with land use planning
  - A stronger commitment to genuine community engagement and alignment of objectives across institutions
  - Improving major supply augmentation planning and integration of demand side and decentralised options.
2. Improving regulation by:
  - Broader coverage of independent economic regulation
  - Outcome focused, risk based approaches that apply to all regulation
  - Improved coordination across regulators and across levels of government.
3. Improving cost recovery, prices and protection for vulnerable customers via:
  - Price/service offerings that provide clearer signals for water use and investment in conjunction with greater consumer choice and vulnerable customer support
  - Prices that recover costs (within the band provided by the CoAG principles). The structure of prices (for example, fixed and variable components) and billing arrangements should also aid efficient water investment and use.
4. Improving service provision and customer value through:
  - Collaboration and structural change in regional areas, as recommended by the draft report
  - Support for new business models and collaboration in major urban areas through enabling regulation and, where appropriate, competition
  - Increased focus on customer value through the provision of greater customer choice.
5. Increasing impact through national and international collaboration by:
  - Committing to a reinvigorated national water reform agenda by 2020 (as recommended in the draft report)
  - Alignment of Australia's water reform initiatives with its commitments under the United Nations Sustainable Development Goals
  - A continued commitment to the world leading research.

## Better planning for growth in our major cities

The CRCWSC suggests better planning for growth in our major cities in three ways.

**First, Australian governments must encourage closer links between land use planners and the water sector (including water utilities, water resource managers and regulators), and a stronger commitment from land use planners and water utilities to genuine community engagement and alignment of objectives across institutions.**

Increasingly, researchers, policy makers, water businesses, land use planners, land developers and community groups recognise how our urban developments affect water's hydrological functions, and the value of more collaboration in achieving effective water management and commercially appealing, liveable places. Box 3 provides an example.

### Box 3: Implementing a shared WSC vision

Bringing together diverse perspectives is challenging, but it is also crucial to how cities define their water sensitive city (WSC) vision, and develop successful transition strategies for realising that vision. Gold Coast Water sits within the Gold Coast City Council, and together they are leading a project to identify a 50 year vision and strategy for a Water Sensitive Gold Coast.

The rapidly growing Gold Coast region of Queensland has experienced the significant economic, environmental and community impact of both drought and flooding.

Informed by the CRCWSC's WSC Index tool, these organisations used workshops to understand the current context, agree on a future vision, benchmark progress against other cities, and develop priority actions. The workshops brought people together, and created space for participants to develop the integrated water management approach needed for a water sensitive future. Participants could develop a shared understanding of aspirations, issues, and opportunities for accelerating the Gold Coast's Water Sensitive City transition.

Participants included representatives from City of Gold Coast Council, Seqwater, the International Water Centre, the University of Queensland's Global Change Institute, Griffith University, Healthy Land and Water, State Government, the Gold Coast Catchment Association, and community and local Indigenous groups.

Source: CRCWSC project report due for publication November 2017.

However, despite growing pressure for urban planning to play a greater role in managing water resources, a recent study by Schuch et al. (2017), for example, highlighted how rarely land use planning explicitly considers flood management and green space (box 4).

#### **Box 4: Integrating land use planning and flood management**

Planning for green open spaces can play an important role in urban design, because these spaces support important ecosystem services, including helping to manage floods. Ideally, interconnected and strategically planned networks of green spaces should be provided for early in land use planning and design processes, with consideration of water-related ecosystem values and landscape functions along with land development, growth management and physical infrastructure planning.

This study found some acknowledgement of relationships between flood regulation and green open space planning and various associated planning mechanisms in three Australian capital city regions: South East Queensland, Melbourne and Perth. However, the authors found limited explicit integration of flood management and green open spaces planning. Further, where land plans and strategies do refer to flood regulation and green open spaces, these references often lack implementation details, and/or lack science-based reasoning.

The authors also found significant onground challenges to enabling this integration to occur. First, the legacy of past planning decisions makes it difficult to retrofit existing urbanised areas with green open spaces, or restore hydrological and ecological connectivity. In addition, there are often competing interests in regional land use, which may limit opportunities to include green open spaces.

Second, there is a lack of information about how to operationalise the concept of ecosystem services in land use planning and water resource management, given this process is still being developed. The study advocates ongoing research to better understand the consequences of different land use patterns for water and flood related ecosystem services, and to assess the efficiency of implemented water sensitive urban designs and multifunctional green open spaces.

Source: Schuch, Serrao-Neumann, Morgan and Low Choy 2017.

**Second, land use planners and water utilities must also foster stronger links with the communities they serve.** Water consumers and communities are an integral part of delivering services in water sensitive cities, where utilities of the future understand and deliver the services consumers want.

The draft report noted instances when water supply options were not considered because they lacked community or political support. The trial of replenishing groundwater supplies with treated wastewater in Western Australia confirmed community engagement is critical when considering options for expanding water supply sources. Box 5 explains the many ways the WA Water Corporation sought to engage the community and influence perceptions. Significantly, the project has moved beyond the trial stage and is now being implemented.

### **Box 5: Recognising the power of genuine community engagement**

The WA Water Corporation needed to gain community support for replenishing Perth’s water supply with treated wastewater. Technologically, it is a viable option, but the project also needed community support to be successful. To foster this support, the Water Corporation implemented an extensive community engagement program, which led to wide community and industry acceptance of this additional water source for the city. This engagement program included:

- conducting an open transparent trial
- investing significant amounts of time and financial resources in communication and engagement activities, such as:
  - face-to-face engagement via community forums and an educational facility built at the treatment facility for tours and open days
  - a website
  - newsletters
  - a social media campaign.
- anticipating potential developments and preparing mitigation or management procedures.

Source: Bettini and Head 2015.

**Third, Australia must improve major supply augmentation planning, and integrate decentralised options (such as stormwater harvesting schemes) and water use efficiency strategies.** The traditional response to addressing supply issues is to augment supply—often through building large scale infrastructure such as dams. While an important option, building large scale infrastructure takes time, can have environmental and community impacts and involves significant investment with the resulting impact on household and business water bills. The CRCWSC supports the draft report’s recommendation (6.3) that decision making processes relating to ensuring water supply security ‘are consistent with good planning principles, in particular that they consider all options fully and transparently (including direct and indirect potable use and reuse of stormwater) and are adoptive in response to new information’.

More and more, decision makers and water utilities are considering decentralised options and water efficiency (also called demand management) strategies. Box 6 describes Salisbury City Council’s decision to augment supplies via stormwater harvesting, while box 7 describes the demand side strategies Mackay City Council used to manage demand during peak periods.

### **Box 6: Augmenting supply by harvesting stormwater**

An early focus on restoring degraded environment in the early 1990s led Salisbury City Council to innovative large scale stormwater treatment. The city uses constructed wetlands to treat stormwater, which is then harvested and injected into a groundwater aquifer for storage.

The Parafield Stormwater Harvesting Facility started by supplying non-potable water for industry use, supplying one of Australia's largest wool processing companies with fresh water to wash its wool. The city then expanded its stormwater harvesting scheme, to provide high quality recycled water throughout Salisbury and beyond.

Salisbury Water (the water utility created by the council) manages harvested stormwater, as well as wastewater from a nearby wastewater treatment plant. This water services the non drinking water needs of municipal parks and reserves, schools, industry and new residential properties, including a community of 10,000 residents, a university and around 5000 employees in several high-technology businesses.

Salisbury now has more than 50 constructed wetlands covering 600 hectares and treats approximately 8 gigalitres of stormwater annually that is then injected into aquifers.

Source: City of Salisbury 2017.

### **Box 7: Using demand side measures to manage peak periods**

Mackay Regional Council adopted an innovative approach to manage the effects of rapid population growth were having on its water system, including partnering with private sector providers. The traditional response—increasing capacity by building more infrastructure—would result in unsustainable increases in water tariffs.

Given this, the council identified non-capital solutions to address increasing demand. However, these demand side options needed detailed data on consumption and network losses. In addition, customers needed access to this data, for demand management strategies to be effective.

The council addressed the first issue—obtaining consumption data—by introducing automated meter reading (AMR) technology. These digital readers provide information about residents' water use, and can also identify network losses (from leaks, for example). However, rather than develop the network themselves, the council partnered with a technology start-up, and procured the communications technology as a service. That is, the technology supplier owns and operates the network.

The council addressed the second issue—influencing community and customers' water use—by giving the community and customers access to information on their use, via the My H2O customer portal. It also launched a social media campaign, to build awareness of water as an important and urgent issue, and to address specific behaviours. It used a targeted campaign to explain the effects of outdoor watering during the dry season, for example.

The council estimates these measures reduced peak demand by 10 per cent, which in turn delayed capital expenditures by 4–5 years.

Sources: *Utility Magazine* 2016; *Daily Mercury* 2015; *Industry Queensland* 2016.



The CRCWSC suggests that it is not a question of *if* Australia will experience another severe drought but *when* and therefore it is critical to maintain a focus on investing in decentralised options and a culture of efficient water use to continue to build the resilience of water supply systems and the preparedness of our growing cities to extreme events. It will be too late to prepare for the next drought after it has started.

A broad suite of future options will also be critical as traditional options become more expensive and potentially less effective. For example, climate change is impacting inflows to dams and per capita water use has not bounced back to pre-millennium drought levels in many locations potentially impacting the water savings achieved through future demand management initiatives.

Certainly, the Millennium Drought showed governments and utilities do consider a range of options, but research by Leroux and Martin (2014), for example, found that there is potential to overinvest in manufactured water sources (particularly desalination plants), and underinvest in naturally occurring sources of water (such as stormwater harvesting).

### Improving water and utility regulation

The CRCWSC suggests this regulatory framework can be improved in four ways. **First, we suggest broadening the coverage and independence of economic regulation used to set prices, customer service levels and protect the long term interests of water consumers.** This change includes clear separation of the roles of policy, regulation and service provision. The CRCWSC support the draft report's recommendations relating to economic regulation as well as the WSAA/IPA recommendations on regulation reform opportunities (box 8). We also support Victoria's new approach to regulating water businesses (box 9), given its focus on a stronger voice for customers and on providing a flexible outcome based approach for customers while still holding water businesses accountable for delivering on their commitments.

#### Box 8: Striving for more effective regulation

In November 2015, public and privately owned water sector businesses joined forces to publish a consensus view on the 'structural and regulatory reforms Australia can undertake to avoid urgent and costly decisions that will otherwise be required in the future'.

The report prepared through the Water Services Association of Australia and Infrastructure Partnerships Australia made the following recommendations to improve the regulatory framework for urban water:

- better economic regulation—including clear requirements for regulators to act in the long term interests of customers and consider the ongoing viability of water businesses; strong incentives for efficiencies and genuine customer engagement; and a review and appeals mechanism for water businesses and other stakeholders
- appropriate opportunities to deploy competition—actively pursue frameworks that promote appropriate and efficient competition, including allowing for private sector providers
- clear governance arrangements—frameworks that provide competitive neutrality between existing and new suppliers, make wider policy outcomes explicit and identify who is responsible for security of supply.

Source: WSAA and IPA 2015.

### **Box 9: Introducing the PREMO assessment framework in Victoria**

The PREMO (Performance, Risk, Engagement, Management, Outcomes) assessment framework is designed to incentivise Victorian water businesses to work with their customers and deliver outcomes that reflect customers' priorities.

The framework:

- requires Victorian Water businesses to work with their customers to develop a submission that meets the four PREMO assessment elements: Risk, Engagement, Management accountability and Outcomes
- requires businesses to self-assess that submission against four possible ratings: Leading, Ambitious, Standard and Basic
- involves the Essential Services Commission (Victoria) completing its own assessment, looking at each submission and also completing a relative assessment between businesses
- allows the Essential Services Commission to set the level of return that each business will be allowed to earn during the regulatory period, based on the two assessments
- includes ongoing monitoring of performance during the regulatory period, and the potential for the Essential Services Commission to take action if a business does not deliver its customers what it promised.

Source: KPMG 2016.

**Second, the CRCWSC supports draft recommendation 6.5 relating to applying flexible, risk based approaches to protecting urban waterway health as cost effectively as possible and not preventing achievement of other public benefits.** The CRCWSC also suggests this principle may be applied more widely (for example through offset arrangements) where:

- the desired outcome is clear
- there is a clear minimum standard for achieving the regulated outcome (which may be appropriate for most cases), and
- there is the capacity for flexibility where regulated entities can provide appropriate scientific and stakeholder support.

Importantly, such flexibility should be accompanied by appropriate monitoring, to ensure accountability for achieving the intent of the regulation. For example, the draft report cites Melbourne Water's Enhancing Our Dandenong Creek as an example of the benefits of a flexible approach. Notably, the project deferred (rather than eliminated) major capital investment, which in part reflected the need to ensure the flexible approach delivers the intended benefits.

**Third, Australian governments must remove barriers to integrated water management (IWM) and water sensitive urban design (WSUD).** In recent years, the concept of IWM has emerged as a way of managing water services to maximise economic, social and environmental benefits. It draws on the view that the traditional approach to managing water—compartmentalising water supply, sewerage and stormwater services—produced sub-optimal outcomes. This compartmentalisation can be both physical (in terms of infrastructure) and institutional (in terms of responsibility for funding, providing, operating and maintaining services). Over time, it led to philosophical silos and created system boundaries.

As the name implies, IWM involves integrating the various water services, in terms of both the physical system, as well as the many people and organisations who create, maintain, and are served by urban water systems. Similarly, WSUD involves integrating urban planning with managing, protecting and conserving the urban water cycle, to ensure urban water management is sensitive to natural hydrological and ecological processes.

A study by Bettini (2015) examined how the Queensland Government and land developers incorporated several water sensitive elements to a land development, to achieve sustainable urban development outcomes (box 10). Fitzgibbon Chase is a practical example combining water management objectives and land development and planning objectives. However, as Bettini observed, this approach is still not business as usual for governments and land developers.

#### **Box 10: Connecting technological innovation, regulation and planning policy**

The Fitzgibbon Chase development (north of Brisbane) aimed to bring land to market quickly, contribute affordable housing and achieve sustainable urban development outcomes. Specifically, the development scheme had to minimise water use, maximise infiltration, and manage stormwater quality and quantity. It used several innovative features to achieve these aims:

- stormwater and rainwater harvesting schemes using novel rooftop harvesting and treatment technologies and an integrated but flexible system design
- a model for integrating water supply planning with urban design
- a hybrid centralised/decentralised water supply system.

However, the Fitzgibbon scheme posed the following regulatory challenges:

- How to access to stormwater from council owned drains
- How to regulate water quality—Existing regulatory frameworks did not define stormwater and roof rainwater as water sources. Further, defining them as recycled water assumed their source was wastewater, which imposed regulatory requirements and risk assumptions not necessarily suited to the systems and their operation.
- How to handover water schemes to an owner-operator.

Those working on the project produced guidelines and practice notes, which were made available within the planning system for others to use. This approach provided:

- readily available practice-informed guidance for developers
- a means for decision makers to justify their approval decisions.

These documents do not have full statutory standing, but they do supplement State Planning Policies (SPPs) and have some authoritative weight within the planning system.

Source: Bettini 2015.

Recent research by Choi and McIlrath (2017) supports Bettini's finding that current regulation is providing sub-optimal support for innovative water sensitive approaches. Choi and McIlrath demonstrate the significant variability in the policy framework and implementation of WSUD across jurisdictions (box 11).

### **Box 11: Making water sensitive urban design business as usual**

Water sensitive urban design (WSUD) was developed around 20 years ago, but Choi and McIlrath's review of the policy framework for WSUD found Australia still needs a suite of best practice planning objectives, key performance indicators and standards that can be applied at different planning scales, contexts and jurisdictions. Indeed, they found significant variability in the policy framework for and implementation of WSUD across jurisdictions (New South Wales, Victoria, Queensland, South Australia and Western Australia).

Given this inconsistent policy coverage, Choi and McIlrath found some local governments developed their own local policy solutions to supporting innovative water management approaches. Although useful, these local solutions impose an array of policy obligations which developers must navigate between municipalities.

This study provides a set of criteria for benchmarking the common and different policy responses in different jurisdictions. Choi and McIlrath recommended changes to the current approach that may help make WSUD business as usual, such as a national WSUD definition and a national technical standard that can be accredited for the National Construction Code and for town planning purposes. They also recommended ways to improve natural resource management and catchment planning, infrastructure funding and market based instruments, and use of rainwater tanks, stormwater and recycled water. They also included specific recommendations for each jurisdiction.

Source: Choi and McIlrath 2017.

**Fourth, decision makers must recognise the benefits of coordination across regulators and across levels of government.** As water utilities move from providing 'taps and toilets' services to delivering a range of 'liveability' services, they face an increasing array of regulatory requirements. McCallum et al. (2014), for example, identified five key regulatory systems affecting urban water services:

- water resource regulation
- price and service regulation
- built environment regulation
- environmental health regulation
- public health regulation.

McCallum et al (2014) use the Kalkallo stormwater harvesting project in Melbourne's north to examine the interplay between these different regulatory requirements, and demonstrate how the lack of coordination can stymie innovative water services.

## Improving prices, cost recovery and vulnerable customer protection

The draft report notes the progress made in relation to moving water pricing to greater levels of cost recovery. The CRCWSC agrees with the draft report, that there is still work to do, but also that the progress to date means water prices better reflect costs and better inform water use and investment decisions. Importantly, appropriate (and separate) measures must be in place to support customers at risk of, or in, financial hardship. Box 12 provides an example of recent progress in this area.

### Box 12: Developing customer bills that are efficient and fair

Yarra Valley Water (YVW) has created [WaterCare](#) — an initiative that reduces the risk of vulnerable customers falling into serious debt, and helps customers already experiencing financial hardship get back on track.

WaterCare is designed around three customer support ‘pillars’:

**Identification** – Early identification of financial vulnerability enables more opportunity for proactive intervention, therefore reducing the risk of customers falling into serious hardship.

**Visibility** – Being ‘seen’ in the community builds greater awareness and helps build trusting relationships with customers.

**Support** – Relevant, efficient programs prevent at-risk customers from falling into serious debt, and help those already experiencing hardship to get back on track.

YVW works closely with the community sector to understand the risk factors and systemic drivers of financial vulnerability, ensuring WaterCare stays responsive to the ever-changing complexity of customers’ issues.

YVW’s programs have been developed in collaboration with community service organisations, gaining valuable insights on how to effectively and respectfully support customers experiencing financial hardship. Industry partners include Uniting (previously Kildonan UnitingCare); Financial and Consumer Rights Council Inc; Consumer Policy Research Centre (CPRC); Victorian Council of Social Service; Financial Counselling Australia and, Consumer Action Law Centre.

#### Outcomes

Since launching in 2013, WaterCare has had a measurable impact on the lives of vulnerable customers:

- 168% increase in customers transitioning back to mainstream payment plans
- 50% reduction in the number of supported customers whose debt levels exceed \$1000
- 91% of hardship customers are meeting their agreed payment plans (compared to 83% in 2013).

Qualitative feedback on WaterCare from both customers and community service agencies has also been very positive. Customers gave the program a Net Promoter Score of 67 showing strong advocacy of the hardship program, which has also been recognised as better practice by many organisations, including the Energy and Water Ombudsman and the CPRC.

Building on WaterCare’s success, YVW is leading the [Thriving Communities Partnership](#) a cross-sector initiative to tackle the systemic societal issues that co-exist with financial vulnerability.

Source: Yarra Valley Water

## Improving service provision and customer value

The CRCWSC considers service provision and customer value can be improved in two ways.

**First, the CRCWSC encourages governments to support new business models and collaboration in major urban areas through enabling regulation and, where appropriate, competition.** The CRCWSC will soon release a discussion paper entitled *Water Utilities of the Future—Australia’s experience in starting the transition*. The paper draws on CRCWSC research to highlight the progress being made by state, local government and privately owned water utilities, as they evolve traditional business models, and new and potentially competing business models emerge. The paper also notes the potential for competition to drive better value for customers both in terms of price and service offerings where:

- Government policy objectives are clear
- Regulation (including public health, environmental, consumer protection and economic regulation) is neutral with respect to public, private or community ownership with reasonable compliance costs and approval times
- Robust water allocation and entitlement arrangements exist
- Wholesale prices, service standards and third party access arrangements are transparent, proportionate and cost effective to administer and maintain.

Including principles such as these in a reinvigorated National Water Initiative provides an opportunity to achieve a more consistent approach to across jurisdictions and to ensure competition delivers genuine community benefit.

A principles based approach provides flexibility to meet the needs of different jurisdictions, but to be effective, national and state government policy objectives must be clear.

For example, the draft report discusses the impact of the *Water Industry Competition Act 2006* (WICA) in promoting competition in New South Wales. However, the Independent Pricing and Regulatory Tribunal’s review of wholesale water and sewerage prices noted concerns raised by some industry participants. In particular, some participants were concerned about licence approval times and wholesale pricing methodology. Independent economic regulation will ensure prices are efficient. However, economic theory can sometime provide for a range of possible outcomes (as illustrated by the CoAG pricing principles). In these instances, clearly defined government policy is important, regarding the role of competition and the relative priority of issues like encouraging new business models and water sources, increasing customer choice, and managing any impacts on existing system efficiency and returns.

**Third, the CRCWSC advocates an increased focus on customer value, by providing consumers greater choice and giving them greater opportunities to influence the price/service offering.** As cities and utilities change, so too does the community’s expectations and their role in meeting those expectations. This is seeing a shift in the way utilities engage the communities they serve. Initially community engagement was passive—utilities informed communities about decisions made in their interests or on their behalf. Over time, communities have become more active—utilities now engage communities earlier, more openly and with a focus on outcomes rather than assets. In a water sensitive city, communities and utilities are partners, setting the vision and delivering services that fulfil that vision. Box 13 provides an example of how water utilities have sought to include consumers, communities and others in the decision making process.

### **Box 13: Involving communities in decision making**

Yarra Valley Water has adopted a new approach to understanding its customers' desire for new services and their willingness to pay for these services. It replaced traditional approaches (such as market research and willingness to pay studies) with a citizen's jury. This immersive process saw a representative group of 35 customers receive evidence and deliberate over a five day period on the following question:

'We need to find a balance between price and service which is fair for everyone. How should we do this?'

The jury received presentations and materials across a range of issues and could call internal and external experts for further insights. At the end of the process, the jury was empowered to make recommendations on behalf of the community to Yarra Valley Water, which will help the business finalise its submission to the pricing regulator.

Yarra Valley Water benefits from this approach, because investments align with community/customer expectations. And customers and the community benefit because decisions reflect their wants and needs, and they have trust in the outcomes.

Sources: WSAA 2017; Yarra Valley Water 2017.

## **Increasing impact through national and international collaboration**

Past reforms have put Australia in a leadership position internationally. To retain this position, we need to honour our commitments to the United Nations' SDGs.

The CRCWSC's proposed actions will better align national and international approaches. Australia is committed to the United Nations' SDGs, and this commitment requires a consistent reform program. The CRCWSC considers a consistent national approach is also important, given the nature of the future challenges facing the water sector (such as population growth and climate change) that go beyond metropolitan, regional, state and national boundaries.

The draft report notes past reform agendas demonstrated the importance and effectiveness of a national approach that:

- is inclusive
- has objectives that are clear and measurable
- provides sufficient flexibility to adapt reform principles to local conditions
- leads to collaboration across jurisdictions on sharing information and experience, and in developing guidelines and supporting materials to improve coordination and consistency.

The CRCWSC supports this view and notes the United Nations SDGs offer the same advantages at an international scale. An important feature of the 1995 CoAG National Competition Policy was the breadth and interconnectivity of the reform agenda across multiple sectors (roads, rail, energy, water) and issues. Aligning Australia's water reform agenda with the SDGs is an opportunity for Australia to be part of a broader reform program and recognise the critical role water plays in a wide range of industry sectors and community outcomes. It is also consistent with the Productivity Commission's terms of reference that require consideration of:

*broader water policy issues and the role of the NWI in improving outcomes, in particular:*



- *the interaction of water policy with other policy areas such as energy, agriculture, planning, urban supply*
- *whole-of-cycle water management*
- *provision to regional, rural and remote communities, and*
- *the economically efficient provision of water infrastructure.*

### An ongoing commitment to research and transition

Experience to date has shown the benefits but also the challenges associated with reform. The cost of reform is often material, upfront and concentrated with a small number of parties, while the benefits can be longer term and diffused across a large number of people and generations.

A sustained commitment to collaborative research has been critical to:

- understanding and demonstrating the need for reform
- informing reform options and managing transition impacts
- learning from experience and adapting reform efforts based on that learning.

Australia has been an international leader in water innovation and reform. A national reform agenda underpinned by a sustained commitment to research will be critical to maintaining that leadership position and ensuring that our future cities are sustainable, liveable and prosperous, and resilient to the challenges of population growth and climate change.



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