



WATER SERVICES
ASSOCIATION OF AUSTRALIA



URBAN WATER'S CONTRIBUTION TO THE COVID-19 PANDEMIC RECOVERY

A submission to the National COVID-19
Coordination Commission

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1. Overview

Investment in water, wastewater and stormwater infrastructure is an effective way to stimulate the economy in the short-term while providing lasting benefits to the community and economy in the longer term.

In its Infrastructure Priority List, released in February 2020, Infrastructure Australia notes that Australia’s urban water infrastructure “serves industries, supporting growth in productivity and employment across the country”.

The water industry invests around \$5 billion annually in capital expenditure to provide for resilient water, wastewater and stormwater systems to cater for growing populations while protecting public health and the environment.

We are committed to continuing these vital investments to the maximum extent possible to support jobs and the economy during the COVID-19 pandemic and in the recovery phase.

In addition, we consider investing in resilience in regional Australia and in liveability outcomes across metropolitan and regional communities will deliver lasting benefits to community and environment while maximising the short-term economic recovery.



2. Urban water and the COVID-19 recovery

The water industry can provide effective stimulus to assist recovery from COVID-19 pandemic

The economic impact of investments in urban water infrastructure occurs over two time horizons:

- In the short-term investment is vital to supporting the community and businesses, to maintain economic activity during response and recovery phase;
- In the longer-term there is the opportunity for additional investment to generate high returns to the economy and the community.

While governments are naturally interested in stimulating the economy to assist recovery from the COVID-19 pandemic, water industry investments continue to deliver strong benefits for future generations. The water industry contributes to local food security (see Box 1), advanced manufacturing and community outcomes. During the pandemic a number of regional urban water utilities have supplied more water to support local businesses as they increase production to replace imports.

Box 1: Smart water sector investments for food security

Across Australia water utilities contribute to food security, by applying a circular economy approach to their operations using recycled water for irrigation and intensive horticulture. This provides significant opportunity and impact for local food bowl regions in close proximity to metropolitan areas, with multiple benefits including creation of jobs, increased agricultural productions, water security and improved environmental outcomes by reducing discharge of nutrients to receiving waters.

Examples of existing water sector investments for food security include:

- **Northern Adelaide Irrigation Scheme** – supplies recycled water to the Northern Adelaide Plains food production area, creating 3,700 jobs in and around Adelaide’s northern suburbs and adding more than \$500 million per year to the economy.
Project cost: \$155.6M. Jointly funded by the SA Government (through SA Water) and the Australian Government.
Project completed: 2019.
- **Wamuran Irrigation Scheme** (South East Queensland) - offsets the increased nutrient development from new development in Caboolture West (70,000 people), with reuse of treated recycled water for irrigation of intensive horticulture. Creating 2,500 to 3,000 new permanent jobs on farms and in the broader supply distribution chain, adding \$200 million per year to the economy and enabling improved tourism and recreation outcomes.
Project cost: \$60M. Owned by Unitywater, operated and maintained in a Joint Venture with the private sector.
Project expected to be completed: 2022.

During the recovery phase water utilities will naturally re-prioritise their capital expenditure to assist with recovery, including bringing forward ‘shovel ready’ infrastructure projects, modernisation and digital transformation, and community focused investments.

This capital expenditure is critical to maintain the baseline business as usual investment during the COVID-19 pandemic recovery. Further investment by government in additional water industry projects can provide effective stimulus resulting in economic impact as well as broader positive societal benefits. Beyond funding, all governments have a role in removing barriers and impediments to investment.

Governments generally adopt a principled based approach to decisions about providing stimulus to the economy to ensure the greatest 'bang for their buck'. Typical principles are set out in Box 2.

Box 2: Principles for government stimulus investment

To maximise returns investments for government stimulus should:

- Be additional to any planned investments by water utilities
- Be equitable, transparent, and targeted to communities facing the greatest need
- Result in immediate benefits for jobs and business activity
- Result in long-term sustainable benefits to the health and wellbeing of the community
- Be implemented in a manner that provides delivery certainty

In our view, there are two clear areas within the urban water industry that meet these principles for investment, ensuring additional funding from governments would deliver lasting benefits to the community while maximising the short-term economic recovery.

2.1. Investing in resilience in regional Australia

The recent drought and bushfires have shown that water security and resilience need to improve in some parts of regional Australia. It is widely recognised that in New South Wales and Queensland there is an infrastructure backlog in the water industry that needs investment.

In addition to investing in capital projects, investment is required to raise industry capacity to achieve water utility business excellence and develop the capability and capacity of people in regional Australia. Figure 1 shows opportunities to invest in resilient regional water utilities.



Figure 1: Investing in resilient regional water utilities

Opportunities for capital investment in regional assets include projects to:

- Address drought, water security and resilience
- Improve drinking water quality
- Renewing assets to ensure service reliability and continuity
- Improving local environmental and liveability outcomes
- Meet the expectations and standards of customers and regulators.

When investing in regional infrastructure projects, governments should apply regional scale planning combined with building capacity and ensure outcomes are linked to the funding.

Opportunities for capacity development, managing business risks and delivering outcomes in water utilities in regional Australia include:

- improving training, pro-active risk management (including emergency event planning)
- a shift to a digital utility including through increased automation and data analytics; and
- applying assessment management systems aligned to AS/NZS 55001.

Opportunities for additional government investment in regional areas will ensure stimulus is targeted at an appropriate scale, to communities that most need it, bringing jobs to regional Australia and supporting spending and benefits local to communities.

2.2 Unlocking liveability outcomes across metropolitan and regional communities

Increasingly, the water industry's wider contribution to the health and liveability of our cities and communities is being recognised. WSAA set out the significant benefits of water-enabled green and blue infrastructure to physical and mental health by making communities cooler, healthier and more attractive places to live, work and play in our report *Blue + Green = Liveability* (see Box 3).

Infrastructure Australia, in its Infrastructure Priority List (released in February 2020), included two water projects (*Town and city water security* and *National water strategy*) in its top five national high priority initiatives and there are many more potential projects at the state and local community level.

Direct investment by governments during the economic recovery would provide immediate stimulus but also go some way to overcoming the underinvestment in the amenity of our cities. Examples of the types of projects that contribute to liveability outcomes in metropolitan and regional communities are set out in Box 4 and 5. These projects are implemented and ongoing projects that received funding from federal, state and local governments. However, more remains to be done.

Box 3: Health benefits of liveability from water sector investments

Recent work by WSAA quantifies the benefits of delivering liveability outcomes for Australian and New Zealand communities. Frontier Economics identifies and quantifies (where possible) the relationships between water industry investment and improved health-related economic outcomes. The study identified four key pathways for liveability benefits generated by water industry investments, with liveability benefits in total of up to \$94 per person per year:

- ≤ \$28 Health benefits from increased activity
- ≤ \$48 Increased wellbeing from exposure to green space
- ≤ \$14 Health benefits from reduced temperatures
- ≤ \$4 Health benefits from increased air quality

The research supports the potential for significant health benefits arising from water industry investments. One demonstration case study considers applying Integrated Water Management into a large greenfield development in an outer suburban area with a catchment of 1.5 million people. The provision of recycled water sources for non-drinking purposes means there is increased green and blue infrastructure in the landscape. This provided increased opportunities for active and passive recreation, reduced urban temperatures and improved air quality with an estimated health benefit from a cost of illness approach of \$141 million.

It's not just about funding

Beyond funding, governments can unlock liveability infrastructure in a number of ways.

The Productivity Commission recently released a research report *Integrated Urban Water Management — Why a good idea seems hard to implement*. The report identifies a range of impediments to delivering these valuable projects. There is a strong case for governments to work nationally to remove the institutional barriers and impediments in the planning system to unlock value for the community through delivery of this core social infrastructure.

One of the impediments includes that a water utility may be best placed to deliver a project but lacks an existing mandate or cost recovery mechanism. At this time, governments have the opportunity to achieve cut-through by clarifying roles and responsibilities for delivery of blue and

green infrastructure. In some cases, immediate results could be achieved if governments directed utilities to undertake liveability projects underpinned by strong business cases, which would allow utilities to use their balance sheets to make a lasting impact on the amenity and health of our communities.

Box 4: Water industry's contribution to revitalising Central Geelong

The ongoing Revitalise Central Geelong program (part of the Geelong City Deal with funding from three levels of government) includes a number of initiatives supported by innovative water industry investments increasing Central Geelong's liveability. Increasing numbers of people are being attracted to the Geelong region by growing employment opportunities, affordable housing and lifestyle opportunities.

Revitalising of the city centre is improving public spaces and making it easier to move around the city. Projects like the Malop Street Green Spine and the Johnstone Park raingarden have created green space and a pedestrian route through the heart of the city, connecting to the train station.

Cost: Central Geelong Revitalisation \$38.13 million (City Deal \$370 million)

Benefits:

- Continued growth in Central Geelong's population, jobs growth, business numbers, number of transactions and total annual spend.
- Improved accessibility by providing footpaths, bike paths and public spaces.
- Storage and reuse of stormwater at the Johnstone Park Raingarden providing 50% of park's yearly irrigation requirements and prevents polluted stormwater flowing into Corio Bay.
- A green corridor between Central Geelong and Geelong train station.
- Health benefits from increased activity, access to green space, reduced temperatures and air quality.

Partners: Australian Government, Victorian Government, City of Greater Geelong and Barwon Water

Box 5: Oaklands Park Wetlands delivering water security and liveability outcomes

The Oaklands Park Wetland in Adelaide enables up to 200 million litres of stormwater to be used for irrigation each year at up to 30 council reserves. This stormwater would have otherwise flowed out to the ocean and replaces drinking water (mains) or groundwater use, and in some cases creates new irrigation areas. Parks that are regularly watered reduce the temperature of the local area. The site has been transformed into a wetland haven for native birds and fish; and is surrounded by recreational and educational facilities.

Cost: \$9 million

Benefits:

- Reuse of up to 200 million litres per year of stormwater for irrigation replacing drinking water (mains) or groundwater use, or creating new irrigated areas.
- Provide water security for ongoing irrigation of open space.
- Health benefits from increased activity, access to green space, reduced temperatures and air quality.

Partners: City of Marion (Lead Agency), Adelaide and Mount Lofty Ranges Natural Resources Management Board

Funding partners: Australian Government's Water for the Future initiative through the National Urban Water and Desalination Plan

3. Benefits of water stimulus

The water industry provides a trusted, professional delivery mechanism

A sound principle for stimulus investment is that it should provide delivery certainty. As government-owned infrastructure businesses water utilities are a ready-made vehicle to deliver stimulus in a timely, rigorous and professional manner.

Water investment is independent of short-term downturns in economic activity. Renewal of ageing infrastructure is an ongoing task. In addition, Investments in core infrastructure to cater for population growth and climate change have long lead times that are independent of year on year cycles.

The flow on benefits from water stimulus are high

The projects undertaken as part of a recovery effort would embody a high degree of localism and high levels of local content. In addition, the projects are scalable to local conditions and can be delivered quickly.

The multiplier and flow on benefits to the economy from investment in water infrastructure are similar to those of investments in construction or property:

- Utilities such as water, electricity and gas typically have output multipliers of around 2.4. A dollar of output invested in the water industry is likely to lead to an increase in total output of the economy of \$2.40.
- A job created in the water industry will lead to around 4 jobs created in the total economy.
- Data from the US (see figure) suggests that the employment benefit of investing in water, wastewater and stormwater infrastructure is similar or higher than other industries.

Investment	Jobs per US\$1 million	Expenditure type
Water, wastewater and stormwater	16	Capital and operating
Transportation	13 – 20	Capital
Clean energy	13 – 16	Capital
Healthcare	16	Operating
Personal income tax cuts	14	Personal spending
Retail spending on general merchandise	13	Personal spending
Military spending	11	Capital and operating

Note: All values expressed in constant 2014 dollars, adjusted to 2014 using IMPLAN inflation factors.

Source: Water Research Foundation and Water Environment Research Foundation, 2014. [National Economic and Labor Impacts of the Water Utility Sector: Technical Report](#). September 2014.

4. About WSAA

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and wastewater services to over 24 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Contact details

WSAA welcomes the opportunity to discuss this submission further. If there are any details you wish to follow up on please contact:

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5. Sources

1. Bureau of Meteorology (2020). Urban national performance report 2018-19 – Part B.
2. Australian Bureau of Statistics (2019). 8155.0 Australian Industry 2017-18.
3. Bivens (2019). Updated employment multipliers for the U.S. economy, Economic Policy Institute; EconSearch Pty Ltd (2005). Quantifying the Economic Contribution of Regional South Australia. A Report prepared for Regional Communities Consultative Council, Local Government Association of SA and Regional Development SA; Australian Bureau of Statistics (1994). 5237.0 Australian National Accounts Input-Output Multipliers 1989-90.
4. Australian Bureau of Statistics (2004).
5. Tooth, and Zhang, H. (2018). Benefits of water quality in Sydney. Sapere Research Group prepared for the Independent Pricing and Regulatory Tribunal of New South Wales.
6. Australian Bureau of Statistics (2019). 8155.0 Australian Industry 2017-18.
7. Water Services Association of Australia and Infrastructure Partnerships Australia (2015). Doing the important as well as the urgent: Reforming the urban water sector.