Digital water: Investing in regional, rural and remote Australia

Investment in water, wastewater and stormwater is an effective way to stimulate the economy in the short-run while providing lasting benefits to the community and economy in the longer term. The Water Services Association of Australia (WSAA) has consulted with water industry partners and our members across Australia to develop a program of digital water initiatives for regional, rural and remote Australia to:

- Create iobs
- Support spending and benefits local to communities
- Improve water efficiency
- Support business efficiency and continuity
- Increase water security

- Increase training and capacity
- Increase liveability
- Transition to a digital economy.

Total program value: \$200 million over 3 years delivered on a regional basis with highest impact in year 1

REGIONAL LEAK MANAGEMENT PROGRAM \$75M over 3 years – All states and territories

Non-revenue water losses across Australia are at around 10 per cent, this project would create immediate jobs while also increasing water security.

Features

- Pressure management, active leak control, sensors and telemetry, pipeline and asset management, speed and quality of repairs.
- Incentives and targets to reduce leakage.
- Apply regional hub approach.
- Larger metropolitan water utilities to provide capacity development and mentoring for regional water utilities.

Benefits

- Job creation and increase capacity
- Increased water security as more water available
- Increased customer and community satisfaction
- Delayed and better targeted long-term capital investment

DIGITAL UTILITY READINESS

\$50M over 3 years – All states and territories

A shift to a digital utility including through increased automation and data. There are 700 water supplies in NSW and Queensland and digital investment generally falls outside of state and local government investment horizons.

Features

- Install bulk water meters on regional local water supplies.
- Fund online water quality systems.
- Customer demand management tools, data and strategy, including automated metering,
- Apply regional hub approach.
- Larger metropolitan water utilities to provide capacity development and mentoring for regional water utilities.

Benefits

- Job creation and increase capacity
- Improve water quality and water efficiency
- Transition water utilities for digital future
- Delayed and better targeted long-term capital investment

DIGITIAL WATER FOR REMOTE INDIGENOUS COMMUNITIES

\$50M over 3 years – Priority NT, WA, SA, Qld, NSW

Improving data and digital readiness including through increased automation and data analytics specifically for water quality management, leakage management, water efficiency and asset management.

Features

- Community lead initiatives.
- Focus on long term capacity building, ensuring program addresses cultural and capacity in remote communities.
- Review of service delivery models.
- Implement leak management program.
- Fund upgrades to transition to online water quality systems, including monitoring for microbial and chemical contamination of source water
- Water efficiency programs developed with local community.
- Data and information management for water supply security
- Ensuring 'fit for purpose and fit for place' technology solutions
- Capacity development and training.

REGIONAL WATER EFFICIENCY

\$15M over 3 years – All states and territories

Programs for behaviour change and water efficient products. Smart Approved Water Mark individual water efficiency programs relevant to the specific local community.

Features

- Encourage behaviour change and offering rebates for the installation of water efficient products.
- Developed in consultation with local water utility and specific to their community.
- A range of residential and business water efficiency programs that have been developed based on the principles of End Use Analysis.

Benefits

- Job creation
- Increased water security as more water available
- Increased regional water utility capacity

INDEPENDENT REGIONAL WATER TRAINING CENTRE \$10M over 3 years – All states and territories

Collaboration with Water Industry Operators Association, water utilities and training organisations. RTOs and trainers are limited and reducing in numbers. Provide essential training in regional Australia.

Features

- Develop modern training and assessment resources for the National Water Training Package.
- Provide resources in an open source environment.
- Develop National Treatment Plant Process Database to understand needs and provide support in emergencies (eg, sharing of resources between regions).

Benefits

- Job creation
- Increased regional water utility capacity
- Improve resilience and capacity in regional Australia.

Benefits

- Job creation and increase capacity
- Improve water quality and water efficiency
- Improve water security and sustainability of supply.

Benefits of investing in water in regional, rural and remote Australia

	Job creation	Customer and community benefits	Water utility capacity and continuity	Water quality	Water security	Water efficiency	Delayed and targeted capital investment
Regional Leak Management	✓	√	✓		√	✓	√
Regional Water Efficiency	✓	✓	✓		✓	✓	✓
Digital Utility Readiness	✓	✓	✓	✓	✓	✓	✓
Independent Training Centre	\checkmark	√	√	✓		✓	
Digital Water for Remote Indigenous Communities	✓	✓	✓	✓	√	✓	√

Distribution of investment needs in water in regional, rural and remote Australia

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Regional Leak Management	Low needs identified	✓	✓	✓	✓	✓	√	✓
Regional Water Efficiency	Low needs identified	√	√	√	√	✓	√	✓
Digital Utility Readiness	Low needs identified	✓	✓	✓	✓	✓	√	✓
Independent Training Centre	Low needs identified	√	✓	✓	✓	√	√	✓
Digital Water for Remote Indigenous Communities	Low needs identified	√	√	√	√	Low needs identified	Low needs identified	✓

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. The figure below shows opportunities to invest 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.

In general capital investment is delivered through investment from state and territory governments and have new programs in place to bring forward investment.

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.

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.

