

## **Case Studies**



## Achieving gender balance in water utilities

Numerous water utilities



The inclusion of women at all levels in the water sector is a priority for Australian water utilities and the Australian Government. Utilities recognise that having an inclusive work environment and diverse workplace is recognised as a way to sustainably respond to industry challenges, including growing customer expectations, climate change and technological capability.

Many water utilities are undertaking specific action to support gender equity including targeted leadership programs for women.

One example is the recent board position process in Victoria where 50 per cent of appointees were women and the number of female chairs increased from three to eight of the 19 boards.

### Implementation

Water industry efforts for inclusion of women at all levels in the sector is outlined in the WSAA paper *Tapping the Power of Inclusion and Diversity in Urban Water*. It has sought to boost inclusion and diversity in the workforce. Increased participation and leadership of women is a key target within these efforts.

Similarly the Australian Government has outlined case for women in water through the High-Level Panel with the Women for Water Initiative. The Australian Water Partnership's recent paper *Gender & SDG 6 The Critical Connection* outlines the critical role of women in achieving the clean water and sanitation goal (SDG 6).

Actions being undertaken by water utilities around Australia to help achieve gender equity include:

- Communicate the value of gender equity to the organisation.
- Feature profiles of men and women in non-traditional roles, and of employees utilising flexible work practices.
- Include an explicit diversity commitment in job advertisements.
- Request that shortlists for management roles include at least one woman.
- Ask 'if not/why not' in selection decisions to achieve gender-balance across all leadership levels and monitor the pipeline for women leaders.
- Set targets (for example, Sydney Water has a target to achieve 40 per cent female representation of leadership roles by 2020).
- Encourage participation of high-potential women in internal and industry-wide leadership programs.
- Train all leaders to recognise unconscious gender bias and to promote inclusive leadership behaviours.
- Provide reverse-mentoring and sponsorship program for women.
- Promote gender equity in community engagement activities.

The Women in Water Leadership Program offered by the Peter Cullen Trust is an example of a water industry program designed to support women in leadership roles.

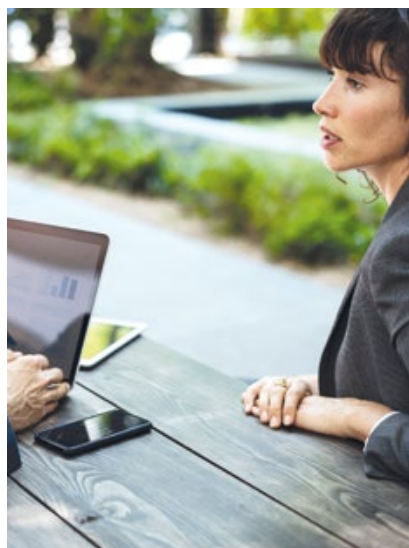
### Benefit / Outcome

- Increases in the proportion of women in roles traditionally held by males (for example at Queensland Urban Utilities, the proportion of women in civil infrastructure project manager and engineering roles has increased from 10.7 per cent in 2010 to 19.8 per cent in 2016).
- Better gender balance on water utility boards.
- Increased focus on inclusion and diversity, including gender equity.

### Further References

WSAA, 2017, *Tapping the Power of Inclusion and Diversity in Urban Water* ([wsaa.asn.au/publication/tapping-power-inclusion-and-diversity-urban-water](https://wsaa.asn.au/publication/tapping-power-inclusion-and-diversity-urban-water))

AWP, 2016, *Gender & SDG 6 The Critical Connection* ([waterpartnership.org.au/publications](https://waterpartnership.org.au/publications)).





## Partnering and innovating to create shared value for future generations

### Queensland Urban Utilities



Queensland Urban Utilities' (QUU) customers, shareholders and the community expect that essential services will continue to be sustainable, affordable, reliable, and resilient for future generations. QUU aspires to be a Utility of the Future – an organisation that thinks about the future and acts accordingly. This is the primary driver for innovation.

To accelerate the development of next-generation sustainable solutions, QUU has established an Innovation Precinct, which extends the reach of the existing Innovation Program by engaging and partnering with universities and industry, providing career pathways, and enabling community engagement.

#### Implementation

In the last twelve months QUU has delivered 53 Projects–13 Technology trials targeting efficiencies, 18 Pilot Investigations into water quality and wastewater practices, 12 University partnering projects exploring new products and technologies and 10 industry partnering projects enabling process optimisation. The utility hosts \$5 million in research across the university projects at the innovation centre with in excess of 30 partners. QUU observes significant leverage on investment with \$15 of partnered investment for every \$1 of QUU research and development investment.

The Innovation, Research & Development (IRD) Program gives employees permission to create, collaborate, adapt, respond to change, to fail safely and to share lessons. The principle is that culture is vital to successful innovation, in particular, leadership, corporate strategy and a capable and motivated workforce. It also makes it economically feasible to ask 'what-if' questions and generate preliminary answers.

The Innovation Precinct has enabled QUU to engage in diverse projects to support sewage-related infrastructure and treatment technologies, and to inform future investment and operations. Information and learning from projects has been disseminated widely, to benefit the industry and community. Every dollar invested in innovation supports the objectives of the partnerships. The Precinct catalyses the reach of innovation, attracting community, partners and investment.

Co-locating the Innovation Precinct at a sewage treatment plant and partnering with other Utilities and Research and Development agencies gives QUU the ability to create value beyond their own capability and capacity. Instead of transferring small test samples back to laboratories for analysis, staff can plug and play technologies in-situ with access to live sewage flows.

The focus of the current research is in energy and resource recovery. Two key projects housed at the Innovation Precinct are:

- **Electrodialysis** – this identified as a blue sky method for the recovery of trace nutrients from wastewater. In this project, the potentially low-cost treatment will be investigated for the removal of a difficult-to-treat colour compound from the water. This will enable improved and lower-cost disinfection of the water, and recovery of the contaminant as a valuable bio product.
- **UGold** – a patented microbial fuel cell technology. The technology can be used for high-value fertiliser recovery from source-separated urine. A purpose-built toilet block enables staff and visitors to make donations for experimental purposes.

The Precinct facilitates efficient investigations and delivery of multiple activities in partnership with industry bodies and research organisations. QUU also leverage opportunities to enhance outcomes.

#### Benefit / Outcome

- Enhanced global partnerships.
- Innovation in waste reduction and resource recoveries.
- Cost reduction (current projects are expected to achieve \$15 million in cost reduction, revenue resilience, customer benefits, new knowledge and intellectual property).
- Improved organisational culture (71 per cent feel encouraged to have new ideas and better ways of working and 66 per cent have the opportunity to have ideas adopted and put into use).

#### Further References

For more information please go to QUU's website ([urbanutilities.com.au/about-us/innovation](http://urbanutilities.com.au/about-us/innovation)).



## Integrated Water Cycle Management in the Barwon Region

### Barwon Water



Utilities, councils, developers and other key stakeholders in the Barwon region have a keen interest in adopting good practice Integrated Water Cycle Management (ICM) particularly in the context of prolonged water stress and population pressures and the opportunity to influence the design of new urban developments.

Barwon Water realised that for a system as complex as the urban water cycle, collaboration with key players is critical to achieving greater system resilience. In 2012, they spearheaded the establishment of the Barwon Region IWCM Network with local government and the Corangamite Catchment Management Authority to commit to a more integrated approach to urban and water planning. Through collaborative projects the Network have developed clear processes and tools to help facilitate implementation of IWCM in practice.

#### Implementation

The Geelong region is one of the fastest growing in Australia and experienced considerable water management challenges during the millennium drought. New urban landscapes are being planned and designed at a rapid rate. A key challenge for urban planners, developers and governments is how to design and build new urban landscapes which are more liveable for residents and more resilient to external pressures like climate change.

While utilities, councils, developers and other key stakeholders share an interest in adopting good practice, integrating urban and water planning can be complex and difficult meaning opportunities are missed and/or inefficiencies arise. All participating stakeholders have recognised the need and opportunity for greater cross agency collaboration to help ensure the water cycle is considered as early as possible in the design stages of new

developments. Barwon Water led the creation of Victoria's first Integrated Water Cycle Management Network. Established as a partnership between the water corporation, Catchment Management Authorities and Local Government, the Network commits the agencies to working towards a more integrated approach to urban and water planning. The partnership assists to coordinate, raise awareness, and build knowledge and confidence in tools around IWCM. The Network has initiated various projects across the region pioneering a more integrated approach. These include:

- Colac IWCM Plan – a whole of city water cycle-based masterplan. This was developed in collaboration with key agencies in Colac to deliver a broader community vision.
- Urban Water Cycle Planning Guide – an online resource to help urban developers, consultants and planners embed the concept of IWCM into the design of new urban subdivisions. This includes built and natural infrastructure as well as water servicing options.



- Atlas of alternative water opportunities – a detailed database describing all existing, planned and potential demands and supply nodes for alternative water for use in all serviced areas across the region.

In the past five years the region has continued to push the boundaries of integrating water and urban planning with Barwon Water leading the preparation of IWCM plans at various scales, (township, precinct and sub-precinct). The utility has created an online guide to help consultants negotiate the integration process ([www.urbanwaterplanner.com.au](http://www.urbanwaterplanner.com.au)). Key members also developed an innovative process to better integrate the water cycle considerations in urban masterplanning and developed a peer reviewed paper with presentations at various state and national forums (Overman et al, 2016).

#### Benefit / Outcome

- Cross agency collaboration and relationship building.
- Capability building in Integrated Water Cycle Management.
- Efficient city planning and decision making.
- Better solutions for resilient communities.

#### Further References

For more information please go to the Barwon Water online guide ([urbanwaterplanner.com.au](http://urbanwaterplanner.com.au)).

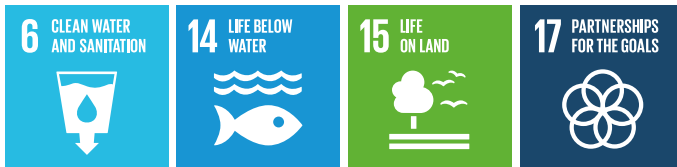


INTEGRATING WATER CYCLE MANAGEMENT



## Managing wetlands for sensitive waters

### Unitywater



Unitywater has 17 sewage treatment plants (STPs), 13 of which discharge to a waterway or the ocean, and the other four discharge to land. Unitywater has investigated options that would allow investment in catchment management works, such as wetlands, to offset increases in nutrient loads released from sewage treatment plants. As a result of investigations a large former sugar cane plantation (190 Ha) has been purchased that will become a managed wetland. This will enable nutrients to be taken up in vegetation.

#### Implementation

With its understanding of the importance of waterway health and operating within environmental licence standards, Unitywater is considering options to offset increases in nutrient loads released from sewage treatment plants.

The Queensland Government's nutrient management mechanism enables Unitywater to invest in alternative options to meet water emission discharge limits for sewage treatment plants, while delivering an improvement in water quality in receiving waterways. Nutrient management solutions include riparian area restoration, constructed wetlands and stormwater management. Unitywater has implemented nutrient management opportunities for the Maroochy River catchment and the Caboolture River.

Unitywater purchased two lots of former cane-farming land on River Road, Maroochy River as part of a larger program to improve the health of the rivers and creeks in the area. Much of the former cane land will be restored as wetlands. These wetlands will remove nutrients and sediments from the river, which will improve river health.

Unitywater will be able to offset the amount of nutrients removed by these wetlands against the nutrients discharged to the Maroochy River following treatment of the local community's sewage.

The project has led to further opportunities including the potential for an education/tourist centre for this site, to bring together neighbouring sites, which include a 15 megawatt solar plantation built and run by Sunshine Coast Council, and a State owned forest reserve, to provide an eco-information hub and tourist destination. Other future nutrient management opportunities to explore include Yandina Creek Wetland, Caboolture River, Pine River, South Pine River, and the Mooloolah River.



#### Benefit / Outcome

- Environmental outcomes at lower cost using alternative approach.
- Improved river health.
- Improved stakeholder relationships.

#### Future References

For more information please go to Unitywater's website ([unitywater.com.au/Coolum-Demonstration-Wetlands-Project](http://unitywater.com.au/Coolum-Demonstration-Wetlands-Project)).



## South East Queensland's Water Security Program

### Seqwater



Seqwater is the sole bulk water supplier for the South East Queensland Region and is tasked with delivering a safe, secure and cost-effective water supply.

The severity of the Millennium Drought combined with population growth highlighted the need for the region to improve its resilience, with the largest regional dam reaching 15 per cent storage capacity in 2007.

In response to the Drought, the community and industry reduced water consumption and constructed climate resilient infrastructure (desalination and recycled water schemes) and an interconnected water grid to move water around the region.

The Drought demonstrated the need to plan future water supply well in advance to prevent a crisis and that deterministic planning based on previously observed conditions was not adequate to respond to a changing and uncertain future. Additionally, planning needed to consider climate extremes, including drought and flood.

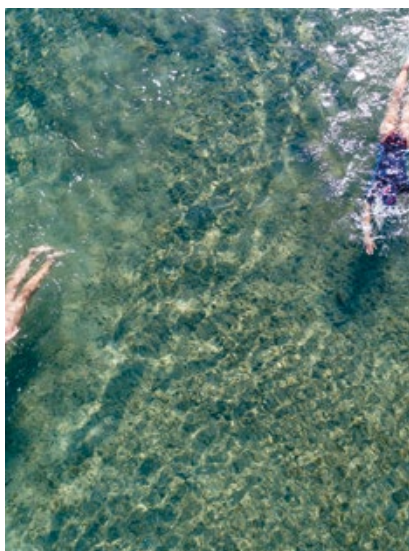
#### Implementation

The Water Security Program is Seqwater's plan to provide South East Queensland with drinking water for 30 years. This includes planning for extreme weather to improve resilience of supply and adapt to changing conditions, including climate change.

The Water Security Program investigated water security options spanning new supply options, demand management options and options to change how the system is operated. The trade-offs between options and their ability to respond to different conditions including drought and flood were explored in the development of the program.

The Program incorporated community consultation which shaped the program to reflect the values of the community. Community forums provided information on water security options and their trade-offs, generated discussion amongst community members in relation to options and provided the opportunity for community members to decide on the relative importance of considerations.

Investing in water infrastructure, particularly new sources of water, is an intergenerational decision – the cost, benefits and implications will be felt by generations to come. South East Queensland's Water Security Program helps to make the right decisions based on community values for the region at the right time.



The Water Security Program is adaptive. It does not propose one water security solution with a set timeframe. Rather, it identifies ways to respond to changing influences and sets triggers for implementing options or reviewing and changing responses. While responses are planned in advance, investment decisions will be made based on conditions at the time and depending on what options have previously been implemented.

#### Benefit / Outcome

- A resilient and adaptive plan for future water security.
- Improved stakeholder relationships.
- Better understanding of community values.

#### Further References

For more information please go to Seqwater's website ([seqwater.com.au/waterforlife](http://seqwater.com.au/waterforlife)).



## WaterCare: supporting vulnerable customers

Yarra Valley Water



Yarra Valley Water (YVW) has developed industry leading programs to support their vulnerable customers and those facing financial hardship. These programs focus on early identification and intervention, including increasing the organisation's awareness of groups with a higher risk of vulnerability.

YVW has demonstrated there is a positive business case for proactively intervening to support the most financially vulnerable in a community. Research by Saul Eslake suggests that measures to address financial inclusion and resilience would see potential economic benefits of an increase in nominal GDP of approximately \$2.9 billion per annum over a ten-year period.

Financial hardship threatens 42 per cent of Victorian residents. In 2013, the Essential Services Commission allocated \$5.25 million to the retail water utilities in Melbourne to assist customers who are financially vulnerable and to manage the impact of rising prices. YVW used that funding to create 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 has been recognised as best practice by the Energy and Water Ombudsman Victoria, the Consumer Policy Research Centre (CPRC) and the Essential Services Commission in Victoria and won the Prime Minister's Award for Excellence in Community Business Partnerships. It has produced significant improvements in the number of YVW customers accessing government support, meeting their payment plans, and transitioning back to mainstream bill payments.

### Implementation

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 YVW build trusting relationships with their customers, ensuring customers know their water utility is available to assist them manage their bills.

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

Central to YVW's customer outcomes is a team of people dedicated to delivering the best possible service to vulnerable customers. Community outreach for the WaterCare program includes running information/training sessions with community support workers so they can inform their clients about the support available, and developing

targeted communications and outreach programs for customers who may be at risk. The online resource WaterCare Hub ([www.watercare.com.au](http://www.watercare.com.au)) gives community sector workers quick and easy access to all YVW support programs, updates and connection to other Hub members and experienced utility staff.

Fundamental to the success of YVW's approach is the long-term commitment in building trusted relationships across the sector, and working in partnership with the community sector, other government agencies and businesses. Collaboration with industry has also seen YVW take the lead and partner with other utility businesses to develop and implement cross referral programs.

YVW also participated in the pilot phase of Kildonan Uniting Care's 'CareRing', which was subsequently rolled out to other utility businesses. The project, described as an Australian-first, aims to identify vulnerable customers at the earliest stages of financial stress while also screening for co-occurring issues that could be contributing to or compounding problems.

### Benefit / Outcome

- Around 50 per cent reduction in number of supported customers whose debt levels exceed \$1000.
- Customers transitioning back to mainstream payment plans has increased by 168 per cent.
- Cross sector collaboration to take action on inequality, disadvantage and exclusion, to tackle the systemic societal issues that co-exist with financial vulnerability.
- Development of a successful and well-founded business case for supporting the most financially vulnerable.

### Further References

For more information please go to WaterCare's website ([www.watercare.com.au](http://www.watercare.com.au)).





## Renewable energy

### Australian water utilities



The Australian water sector is a large energy user during the supply, treatment and distribution of water. Energy use is heavily influenced by the requirement to pump water and sewage and by sewage treatment processes. To avoid challenges in a carbon constrained world, future utilities will need to rely more on renewable sources of energy. Many utilities already have renewable energy projects underway to meet their energy demands.

#### Implementation

Sydney Water has built a diverse renewable energy portfolio made up of cogeneration, hydroelectricity and solar, which now accounts for approximately 20 per cent of its total energy demand. Of this, cogeneration accounts for approximately 15 per cent of energy production, having been rolled out in eight of the larger wastewater treatment plant sites. Sydney Water are now trialling co-digestion of sewage sludge and organic food wastes; reflecting a gradually changing mindset that Sydney Water could provide broader benefits as a 'waste services' provider by expanding its current capability treating one significant stream of waste. Hydroelectricity and a small amount of solar is also generated in suitable sites within the network.

Melbourne Water also has a significant renewable energy program. Nine mini-hydros across Melbourne's water supply system generate 61,000 Megawatt hours of electricity each year – enough to power 9,000 households. In all, the water supply network generates more electricity than it uses. On the wastewater side, Melbourne Water captures biogas from the waste treatment processes at both treatment plants, and uses it to power 40 per cent of the electricity required for treatment processes. The Western Treatment Plant is on track to become energy self-sufficient (utilising its own biogas) in 2016/17. As part of its continued commitment to reduce

emissions, Melbourne Water also has a pipeline of R&D and commercialisation. These projects include algae for treatment and biofuel production, advanced biogas recovery and small scale hydro and solar generation.

Yarra Valley Water, has constructed a waste to energy facility linked to a sewage treatment plant and generating enough biogas to run both sites with surplus energy exported to the electricity grid. The purpose built facility provides an environmentally friendly disposal solution for commercial organic waste. The facility will divert 33,000 tonnes of commercial food waste from landfill each year. The waste is delivered by trucks from commercial waste producers, such as markets and food manufacturing. As well as helping to keep organics out of landfill it is also helping to make recycling commercial organic waste easier and more affordable for businesses.

SA Water's Bolivar wastewater treatment plant is 87 per cent energy self-sufficient following new infrastructure at the plant to make the best use of biogas to produce renewable energy. The renewable electricity generated at the Plant is enough to power 4000 houses a year. SA Water is also taking large strides in energy efficiency across its other sites. Since 2013-14, its innovative energy management program has helped reduce carbon emissions by 13,000 tonnes per year across wastewater treatment sites.

Queensland Urban Utilities operates three cogeneration units at its biggest sewage treatment plants at Oxley Creek and Luggage Point. The state-of-the-art technology produces up to 50 per cent of the plants' electricity needs, delivering savings of up to \$2.5 million a year. They have also unveiled Australia's first poo-powered car. The car runs on electricity generated from sewage at the Oxley Creek Sewage Treatment Plant in Brisbane's west.

Water Corporation are offsetting the electricity needs of their Southern Seawater Desalination Plant by purchasing all outputs from the Mumbida Wind Farm and Greenough River Solar Farm. Greenough River Solar Farm produces 10 megawatts of renewable energy on 80 hectares of land. The Mumbida wind farm comprise 22 turbines generating 55 megawatts of renewable energy. In 2015-16, planning started for a project to provide a significant reduction in operating costs and greenhouse gas emissions by offsetting most of the power consumed by the Beenyp Wastewater Treatment Plant. Delivery of this project is expected to be complete in 2018.

Many other utilities across the country are also making a contribution. These contributions range from small to large scale. They include small-scale solar to shared large-scale solar farms, wind towers to supply all of a utility's needs and off-grid solutions.

#### Benefit / outcome

- Financial benefits – reduced energy costs and hedge against future price increases and insecurity of supply.
- Reduction in greenhouse gas emissions/climate change mitigation.
- Contribution to liveable and resilient cities.
- Reputational benefits for utilities.

#### Further References

For more information please go to the websites for:

– Sydney Water ([sydneywater.com.au/SW/water-the-environment/what-we-re-doing/energy-management/index.htm](http://sydneywater.com.au/SW/water-the-environment/what-we-re-doing/energy-management/index.htm));

– Melbourne Water ([melbournewater.com.au/whatwedo/Liveability-and-environment/energy/Pages/Energy-efficiencies-and-renewable-sources.aspx](http://melbournewater.com.au/whatwedo/Liveability-and-environment/energy/Pages/Energy-efficiencies-and-renewable-sources.aspx)).





## Business resource efficiency

### City West Water



City West Water has long recognised its role in reducing its own environmental impact, but also assisting its customers to do the same. Although assisting customers with energy efficiency and solid waste reduction is not the direct responsibility of City West Water, helping them understand the water, energy and waste impacts of their decisions is important to water efficiency and managing trade waste. It can also help avoid unintended consequences when implementing water efficiency and cleaner production initiatives. Addressing water, energy and waste issues holistically is more cost effective and can achieve overall better outcomes than addressing them individually.

#### Implementation

In response to severe drought, in 2003, a team was created to work with City West Water's large non-residential customers to improve water and resource efficiency. This included helping the largest water users to identify and implement water efficiency opportunities. It also included at-source cleaner production initiatives to reduce salt and other critical contaminants discharged, as high levels of contaminants were constraining recycled water opportunities.

The program began with the three Melbourne metropolitan water retailers working with the top 200 water users to develop Water Management Action Plans, 104 were City West Water customers. In 2007, the program was expanded to all customers using ten or more megalitres of potable water each year across Victoria, capturing approximately 500 City West Water customers. City West Water then further expanded the work to provide all 40,000 non-residential customers with a path to become more resource efficient.

City West Water decided to take a holistic approach to water and resource efficiency to help avoid unintended trade-offs between the systems when implementing initiatives, as well as making business cases more viable.

For example, City West Water has been working closely with Melbourne Water to support the development of a co-digestion trial at the Western Treatment Plant. Co-digestion involves adding high strength organic waste to the treatment process at the Plant resulting in increased energy production through the creation of biogas. This connects businesses with a more sustainable and cost effective alternative disposal route compared to landfill.

Relationships with customers and other complementary partners are key to the success of a holistic resource efficiency program. Business customers want a level of certainty of success to engage in the process. A simple, low cost audit with high level prioritised opportunities is not only an important tool to engage customers, but also helps the water utility identify key opportunities.



City West Water also provides assistance to overcome barriers to implementation through provision of incentives (rebates, co-funding), expert advice, research and development, information and behavioural change materials.

City West Water also developed a Resource Efficiency Assist Program in partnership with the Australian Industry Group on behalf of Sustainability Victoria, to provide small to medium businesses with water, energy and materials assessments.

#### Benefit / Outcome

- Resource efficiencies through holistic management.
- Improved community capability in resource management and efficiency.
- Support and creation of more jobs in businesses as a result of higher resource productivity and profitability.

#### Further References

For more information please Citywest's website ([citywestwater.com.au/business/saving\\_water\\_energy.aspx](http://citywestwater.com.au/business/saving_water_energy.aspx)).



## Engaging remote Indigenous communities

### Northern Territory Power and Water



Many remote Indigenous communities in the Northern Territory rely on stressed groundwater or freshwater sources and are exposed to critical water shortages. Communication on the importance of water conservation with these communities has been difficult. Power and Water Corporation has employed, mentored and trained local Indigenous Water Conservation Ambassadors to educate the remote community of Galiwin'ku on positive water behaviours and water efficiency.

#### Implementation

Residents of the townships in these remote communities retain ties to traditional culture with English as a secondary language. They are not well educated on the systems and processes of water or other utility services, i.e. where it comes from, where it goes and the governance that surrounds it. Therefore they do not often make the connection between water that comes out of the tap and local issues of water stress. The communities are plagued with other social pressures such as high levels of unemployment and water efficiency is not high on the agenda for most. As they often live in public housing, there is no price signal to use less water. Power and Water Corporation in the Northern Territory face a strong cultural, language and distance divide in getting their water efficiency messaging across.

Through consultation with the local Indigenous communities, Power and Water began to understand that effective engagement would need to come from those with the same cultural and language backgrounds, and with understanding of community needs and values.

In 2012, Power and Water employed, mentored and trained four local Indigenous Water Conservation Ambassadors to educate the remote community of Galiwin'ku on positive water behaviours and water efficiency. Power and Water worked with local organisations, Community Development Employment Program providers and Community Enterprise Australia to assist in ensuring the right community ambassadors were chosen and provide culturally appropriate training and ongoing mentoring.

Following the success of this program, in 2013, Power and Water took part in the Low Income Energy Efficiency Program (LIEEP), a Federal Government funded project which in the Northern Territory was trialled in six remote communities, including Galiwin'ku.



The LIEEP program built upon the community engagement process used in Galiwin'ku, and also took the opportunity to leverage this funding in energy efficiency to include some water efficiency education/services. The program involved recruiting and training 80 local Indigenous community members in local languages, and preparing communications materials that spoke to the communities. Part of the training also involved more general activities such as experience in workplaces.

Power and Water are now leading the way to explore opportunities with other government agencies who may have the need for similar Indigenous community engagement programs to pool resources and implement joint training or employment programs.

#### Benefit / Outcome

- Water efficiency outcomes with savings of up to 8 per cent observed after household water education survey.
- Upskilling and empowering remote Indigenous community.
- Employment opportunities in a region where unemployment rate is high.
- Better relationship with and understanding of the local community.
- Sustainable management of water.

#### Further References

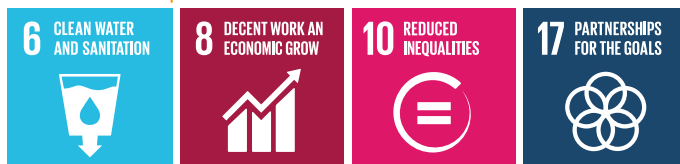
For more information please go to Power and Water's website ([powerwater.com.au/sustainability\\_and\\_environment/remote\\_sustainability\\_initiatives](http://powerwater.com.au/sustainability_and_environment/remote_sustainability_initiatives)).





## Reconciliation Action Plan – turning good intentions into measurable actions

### Water Corporation



The Water Corporation's 2015–18 Reconciliation Action Plan (RAP) is the Corporation's fourth RAP and aims to achieve "Elevate" status with Reconciliation Australia. This status is achieved by organisations considered to be leaders in reconciliation. All target areas contain actions and measurable targets.

Water Corporation formally began its journey to support better outcomes for Aboriginal people in 2006 with an Aboriginal Engagement Story and Plan. In 2008 the Corporation's first Reconciliation Action Plan was developed. The RAP has been refreshed with new priorities developed every three years.

A RAP committee of employees, chaired by the Chief Executive Officer, meets every three months to progress priority programs and actions.

#### Implementation

The Water Corporation has a range of activities underway as part of the RAP in 2016–17.

Awareness raising activities include Aboriginal Cultural Awareness training and on-line Aboriginal Cultural Awareness Program. External partnerships including with the Clontarf Foundation and Yirra Yaakin Theatre Company support Aboriginal development and raise awareness of Aboriginal culture. There is also continued promotion of Aboriginal cultural events and reconciliation activities to the Corporation's employees throughout the year.

The development of a Native Title Strategy ensures the Water Corporation undertakes its business

with native title stakeholders in a way that not only meets the legal requirements of the Native Title Act 1993, but also the contractual obligations set out in Indigenous Land Use Agreements (ILUAs) and other formal arrangements. One outcome is the 'Two people's Bay' partnership which enables Noongar people to legally carry out certain land-based Aboriginal customary activities within Public Drinking Water Source Areas in the south west of Western Australia.

Water Corporation supports Aboriginal suppliers through a Supplier Diversity Strategy, to encourage and sustain the future growth of Aboriginal supplier engagement in Western Australia. Contracts of almost \$1 million have been awarded to Aboriginal suppliers as head contractors and subcontractors.

Support for Aboriginal employment through an Aboriginal employment retention strategy provides support to both managers and employees. It also supports development of a specifically focussed Aboriginal Leadership program for aspiring leaders, partnership engagement with Clontarf Foundation, South Metropolitan Youth Link and Job Networks.

Visible support from the Chief Executive Officer and key staff on the RAP committee have been critical to the success of the program.

Moving forward, the focus is to continue the significant work with Aboriginal businesses and to increase the Water Corporation's relationships with the Aboriginal community specifically in relation to the protection of native title rights and interests.

Water Corporation is committed to increasing the number of contracts awarded to Aboriginal owned and operated suppliers from Western Australia. By engaging suppliers locally owned and operated by Aboriginal people, the organisation is increasing their customer focus, delivering products more effectively, valuing every dollar and ensuring the future of supplier diversity, and continues to be at the forefront of leadership in the water sector.

#### Benefit / Outcome

- Increase in Aboriginal workforce to 3.1 per cent of total workforce, previously 2.68 per cent in 2016.
- Creation of ambitious but achievable stretch targets – 2018 workforce target has been revised up from 3.2 per cent to 5 per cent.
- Improved relationships with Aboriginal communities.
- Increase in opportunities for Aboriginal contractors and suppliers.

#### Further References

For more information please go to Watercorp's website ([watercorporation.com.au/about-us/our-commitments/aboriginal-people-and-communities](http://watercorporation.com.au/about-us/our-commitments/aboriginal-people-and-communities)).





## Twinning with water utilities in developing countries

### Sydney Water



Twinning with utilities in developing countries helps build their capacity to deliver safe and reliable water and wastewater services, protecting public health and the environment. It benefits mentoring organisations like Sydney Water, showcasing expertise in particular areas and allowing them to share knowledge that will help increase operational efficiency while protecting public health and the environment in developing economies.

Sydney Water has twinned with water utilities in Papua New Guinea and Fiji, working with them on key issues like environmental regulation and trade waste management.

#### Implementation

Since 2013, Sydney Water has been working with water utilities in the Pacific Islands to help them build capacity in key operating areas such as customer service, laboratory testing and trade waste management. The program, facilitated by the Asian Development Bank (ADB), is designed to increase water utility employees' skills through twinning with experienced operators. This helps utilities derive greater value from investments.

The ADB aims to improve the life of people in Asia and the Pacific by investing in infrastructure, health care services, financial and public administration services.

ADB has been working with developing countries like Fiji and Papua New Guinea to develop water and wastewater infrastructure through loans, grants, policy dialogue and technical assistance. As part of this,

Sydney Water has twinned with the Water Authority of Fiji (WAF) and Eda Ranu, the water supply company in Port Moresby, Papua New Guinea.

In 2013, Sydney Water's first twinning arrangement was with Eda Ranu – the water utility servicing greater Port Moresby in Papua New Guinea. Sydney Water trained Eda Ranu lab staff in sampling and analysing drinking water. Eda Ranu staff visited Sydney Water's labs, where they received training and underwent proficiency assessment in best practise techniques. Sydney Water's subject matter experts helped them develop procedures to achieve NATA accreditation. The twinning has resulted in Eda Ranu remodelling their lab, establishing procedures manuals and training its sampling and analysis in the application of Coilert-18.

With ADB's assistance, Sydney Water and Water Authority of Fiji (WAF) have entered into a Water Operators Partnership (WOP). This partnership aims to develop capability in the areas of customer water conservation, trade waste management and environment protection. Like many Pacific Islands,



Fiji is concerned with the impact of El Niño weather events, particularly with the growth in tourism and investment placing stress on urban water supplies and wastewater networks. Fiji is implementing stronger environmental legislation and WAF wanted to learn from Sydney Water's experience of managing the relationship with their environmental regulator. As part of the twinning arrangement, WAF and Environment Ministry officers visited Sydney Water and NSW Environment Protection Authority to observe how the relationship works at a strategic and operational level. WAF has now used the model for engaging with the environmental regulator in Fiji.

Sydney Water and WAF are now planning to continue this relationship, with a focus on supply chain, strategic asset management and developing better processes for working with business customers.

#### Benefit / Outcome

- Helping achieve sustainable growth in developing countries.
- Sharing of industry knowledge to upskill and empower water utilities in developing countries.
- Acknowledgement of skills and experience of Australian water utilities.
- Improvements in health and environmental management and operational efficiency.



## Partnering with the Australian water industry to achieve SDG 6

WaterAid



WaterAid is an international development organisation borne out of a socially conscious group of water professionals who felt morally responsible to share their knowledge and resources to provide people worldwide with the basic human rights – access to safe water and sanitation – that almost all Australians enjoy. This origin continues to drive how WaterAid partners with the Australian water industry to help create a better, fairer world for all.

WaterAid campaigned tirelessly over the last three years to ensure a dedicated SDG for water and sanitation. Access to water and sanitation has such far-reaching impacts for all aspects of development, they simply couldn't be left out of any framework focused on tackling poverty, hunger, inequality and environmental degradation.

### Implementation

Given this involvement in the SDG process, WaterAid's vision is most strongly aligned with Goal 6. The organisation is focused on bringing about a world where everyone everywhere has safe water, sanitation and hygiene by 2030. This vision is core to WaterAid's business model; their unwavering commitment to providing sustainable solutions and sector-wide knowledge-sharing in water, sanitation and hygiene. This is strengthened by corporate partnerships to bring this vision closer to reality.

As part of this commitment, in December 2013, WaterAid Australia signed onto the UN Global Compact (UNGC), and joined the Global Compact Network Australia. WaterAid became a signatory as an action-orientated organisation committed to eradicating

global poverty. The organisation supports the UNGC's sustainability framework as a mechanism to significantly enhance an organisation's ability to contribute. WaterAid also hope to encourage others – corporate partners and sector allies – to align their culture and strategy with the ten universally accepted principles. WaterAid use a company's commitment to the principles as part of their ethical checks on corporate partners.

Partnerships are not formed just on a moral imperative (although this is certainly a key driver for many), but also on one of deep engagement in WaterAid's mission. This mission outlines a keen desire for knowledge and skills transfer to build capacity in developing countries in Australia's region, connectivity with neighbours, and the pursuit of innovation for scalable, sustainable solutions.

Mutually beneficial corporate partnerships are a critical starting point for partnership conversations. Any worthwhile relationship takes time and energy to develop. Hopefully this approach leads to a longer 'marriage',

founded on mutual respect and closely aligned values, in which both parties are deeply satisfied.

WaterAid works with local partners to deliver clean water and toilets and promote good hygiene, and campaign to make change happen for everyone everywhere. In 2015-16, they reached 1.9 million people with clean water and over 3 million people with sanitation.

### Benefit / Outcome

- Strong partnerships and coalitions.
- Reducing inequalities through access and education.
- Working towards a vision of water, sanitation and hygiene for everyone, everywhere by 2030.

### Further References

For more information please go to Wateraid's website ([wateraid.org/au](http://wateraid.org/au)).







## Advancing the SDGs in practice

### Melbourne Water



Melbourne Water aspires to make a meaningful contribution to advance the SDGs. By supporting the SDGs, Melbourne Water is building a solid foundation provided by its vision of 'Enhancing Life and Liveability' and a strong history of sustainability.

The SDGs provide a broad lens for planning and a common framework for communicating with partners, enabling shared value outcomes and fostering innovation. Melbourne Water stakeholders, customers, and staff contributed to an understanding of what is important and where opportunities for leadership lie in relation to the SDGs. Following broad engagement, mapping of strategies and activities helped identify areas of activity for the most impact.

#### Implementation

Melbourne Water has signed up to the United Nations Global Compact, the world's largest corporate sustainability initiative. Linked to this, the Corporation also signed a public CEO Statement of Support for the SDGs along with over thirty other leaders in the Australian business community.

To continue to enhance their contribution to the SDGs, Melbourne Water has identified three broad areas of focus that align its strategy, culture and day-to-day operations to the SDGs:

#### 1. Melbourne Water aims to increase its contribution across all the goals

Melbourne Water has embedded the SDGs into strategy development and business planning processes. Using the SDGs as a lens in planning facilitates a broader perspective and encourages innovative solutions.

#### 2. Melbourne Water will be leaders for SDGs 6, 11 and 15.

Melbourne Water seeks to have a significant impact on SDG 6, SDG 11 and SDG 15. These three goals closely

align with the three pillars to drive the organisation's strategic direction, to demonstrate leadership against these goals, and assess performance in progressing these goals using strategic KPIs.

#### 3. Melbourne Water will advance the goals through strong partnerships

Valuable outcomes can be realised with a strong commitment to partnership and co-operation. Melbourne Water intends to actively promote the SDGs throughout their supply chain and in delivery of services through the customer value chain.

Specific examples of how Melbourne Water is contributing to the goals include:

- Partnering with the Hope City Mission to use Melbourne Water land for a community garden project that will help feed over 100 hundred families a week.
- Transforming 27 kilometres of the decommissioned Main Outfall Sewer pipeline into a parkland for the growing western suburbs.
- Applying best practice adaptive management to sites of biodiversity significance, more than 9,000 ha, which has led to improved

environmental health scores at 21 of the sites.

- Generating renewable electricity by installing mini hydroelectric power stations.
- Trialling co-digestion to assess new organic waste management opportunities that enable new revenue streams, reduce waste to landfill and create extra renewable energy.

#### Benefit / Outcome

- Promotion of SDGs through leadership of how they can be embedded in organisational strategy.
- Improved outcomes for customers and communities through programs that link to SDGs.
- Broader value outcomes for customers by aligning SDGs to corporate strategy.

#### Further References

For more information please go to Melbourne Water's website ([melbournewater.com.au/aboutus/whoweare/Pages/United-Nations-Global-Compact.aspx](http://melbournewater.com.au/aboutus/whoweare/Pages/United-Nations-Global-Compact.aspx)).



Healthy People

Strengthening the wellbeing of the community



Healthy Places

Co-creating the world's most desirable places to live



Healthy Environment

Enhancing the natural environment

