

## New arrangement saves costs for grapegrowers in the Clare region

Over the past 18 months, SA Water and the Clare Region Winegrape Growers Association have developed and agreed to a trial arrangement for the use of SA Water infrastructure by irrigators in the region, which will improve the affordability of transporting their water.

An approach was explored whereby SA Water's infrastructure would be used to transport water that has already been secured by the irrigators under their River Murray licence, at restricted times when the cost to deliver water is cheapest.

Under the arrangement, water will be transported via the Morgan to Whyalla pipeline and the Clare Water Supply Scheme to the region's vineyards during peak periods. The water will be transported at a time of day when pumping is cheaper and there is spare capacity in the network. SA Water already offers an off-peak water transportation service in winter, but this new trial arrangement aims to assist the irrigators during the peak period from the beginning of December to the end of March.

The agreement is for a three year trial to enable SA Water to assess the volume of water being transported, the overall impact on the drinking water network and the irrigator's satisfaction. It is expected that the arrangement will be extended beyond this period. SA Water is currently finalising the contracts

with the Clare growers. We will then confirm the final volume and subsequent price. Once this has occurred the growers will be contacted with the proposal and SA Water will commence installing smart meters.



A similar third party arrangement is currently being discussed with farmers in the Coorong region. Over the past few weeks SA Water has met with council officers to draft a Memorandum of Understanding (MoU). The council is expected to make a decision regarding the draft MoU in the near future and SA Water will work with them on a mutually beneficial arrangement for both parties.

## New connections

### *New Royal Adelaide Hospital*

In February 2015, SA Water connected three new drinking water meters and a recycled meter to service the new Royal Adelaide Hospital's water requirements.

Once the new site is operational, we expect an increase in water supply of approximately 400 megalitres (ML) per annum.

### *JMJ poultry farmers*

In January 2015, SA Water established a new water connection with poultry producer, JMJ, with an initial supply of 40 ML per annum via the Port Wakefield pipeline. This is expected to increase in stages to up to 185 ML per annum once the chicken farm is fully established.

An upgrade to the pipeline, including a 43 km extension, was completed in May 2014 to support an increasing local population and for growing poultry and piggery industries in the region.

Since the project's completion, three chicken farms have been connected to the new main, further securing their supply.

### *Beaufort Poultry*

In June, SA Water established a new water connection with Beaufort Poultry with an initial supply of 90 ML per annum. Like JMJ, this water is delivered via the Port Wakefield pipeline and complements Beaufort's existing supply, which is currently drawing 45 ML per annum.

In addition to JMJ and Beaufort, SA Water is also working to connect another chicken farm in the region, with an initial supply of 100 ML per annum, with the potential to double that in the future. This connection will require a significant extension of water main, to be able to deliver the water required. SA Water is working with the Outer Metro Region and customers to deliver the water they require for Stage 1 of the business expansion.

## Central point of contact for SA Water's major customers

SA Water's Business Relations team supports its major customers by providing a central point of contact for all SA Water-related enquiries.

Major customers managed by the team consist of the largest 200 customers by dollar value, as well as all volume load based (VLB) trade waste customers and all 68 South Australian councils.

SA Water recognises that all customers are different and have unique requirements. Through regular contact, SA Water's Business Relations team takes time to understand customers' businesses, requirements and what is important to them.

By working with major customers, SA Water gains insights into consumption trends as well as potential increases or decreases in demand.

The Business Relations team ensures that these requirements are met in order to support business growth and development.

The team also provides technical support and information forums to customers aimed at helping them get the most out of SA Water's products and services.

This support can be in the form of trade waste advice, leak analysis, water use profiling, cleaner production and irrigation advice, and has proven to be greatly appreciated by SA Water's business customers.

Throughout 2014 and into 2015, SA Water has been supporting businesses to expand and improve their operations by providing additional water, wastewater and trade waste services.

# Improving water management

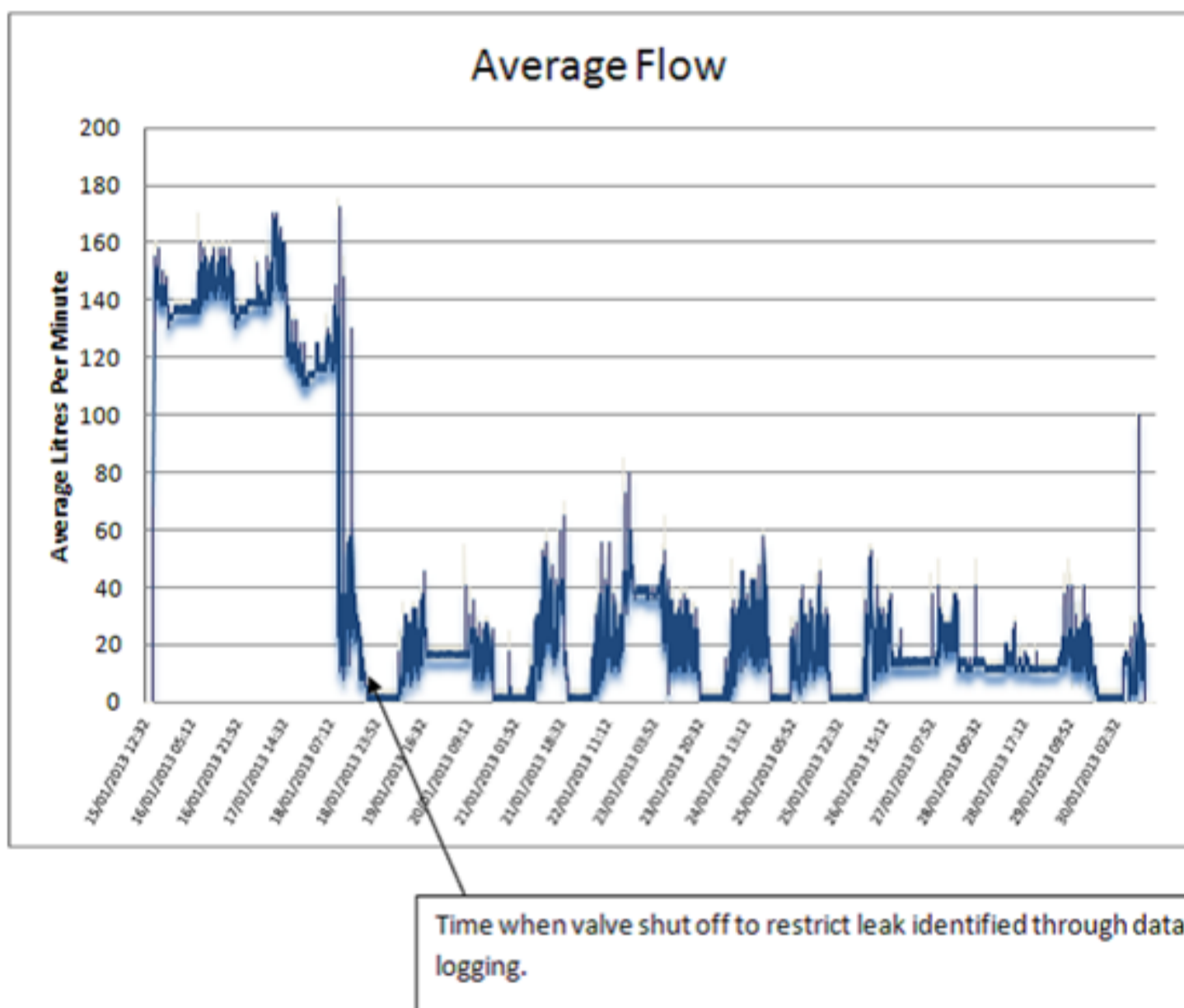
SA Water is working closely with the Department for Education and Child Development (DECD) to identify opportunities to manage schools' water use more effectively. The Leak Analysis and Water Profiling service is being run in collaboration with DECD's Environmental Resources Team.

Between October 2014 and May 2015, SA Water installed temporary water monitoring devices and provided 20 large water-consuming DECD schools a water consumption analysis and account review.

As part of this service, data logging equipment is attached to water meters to record water consumption at set intervals. This data is collected and analysed, helping to identify base flow leaks, instances of equipment left running, irrigation patterns and other cost-saving and water efficiency opportunities.

To date, water efficiency recommendations and logging reports have been provided to 20 schools. A workshop facilitated by SA Water with representatives from participating schools was held in July at the Adelaide Desalination Plant.

The [graph](#) below illustrates how another SA Water customer was able to significantly reduce their average usage once a significant leak was identified and repaired. The ongoing monitoring also provided confirmation that the repair work was successful.



## More sign-ups and possible savings in smart meter trial

SA Water is currently trialling the use of smart meters with several of its major metropolitan and regional business customers.

As part of the pilot project, a data logger is attached to a customer's water meter and securely sends information to a business' individual online portal.

The smart meters can help realise potential leaks, other faults in the water network and periods of high water use – which can lead to significant savings for the customer.

The Business Relations team has connected six customers to the service since the beginning of 2015, bringing the total to nine. This includes Baida Poultry Limited, Holden, Nyrstar, Adelaide and Monarto Zoos, Westfield Tea Tree Plaza and Marion, Thomas Foods and Urrbrae Agricultural High School.

An additional 11 customers have also been signed up in the past six months and are expected to be connected by August 2015.

A further 11 customers have registered their interest to utilise the smart metering product, once the project has progressed from a trial stage.

Feedback from customers participating in the trial will be used to determine whether to make the service available to all large SA Water business customers.

Residential customers have indicated they would like access to smart metering, but wouldn't support a rollout at the current estimated cost we presented to them as part of our state-wide customer engagement program.

SA Water will however continue to investigate options to provide a service that suits residential customers' needs.

# Greening the South

Councils, sporting clubs and schools all manage sports grounds and recreational areas across the State. They all grapple with the challenge of maintaining green open spaces at 'fit for purpose' while working towards maximum water efficiency.

SA Water was closely involved in establishing the original Irrigated Public Open Space (IPOS) Code of Practice. The IPOS Code provides guidelines and direction for the management of irrigated public open space and has been endorsed by the irrigation industry across South Australia.

The IPOS Code of Practice is currently being reviewed by the South Australian Local Government Turf and Irrigation Technical Group (LGTITG), and the Business Relations team is involved as SA Water's representative. The team has also participated in forums and workshops, to help SA Water customers better understand and benefit from the IPOS Code and related toolkits.



*"As far as their dealings with us are concerned, SA Water is to be commended for their responsiveness and customer focus."*

*"We value the integrity, professionalism and trust that underpin our relationship, and we rely on the technical support, data and analysis provided by SA Water."*

*Andrew Wark - City of Onkaparinga*

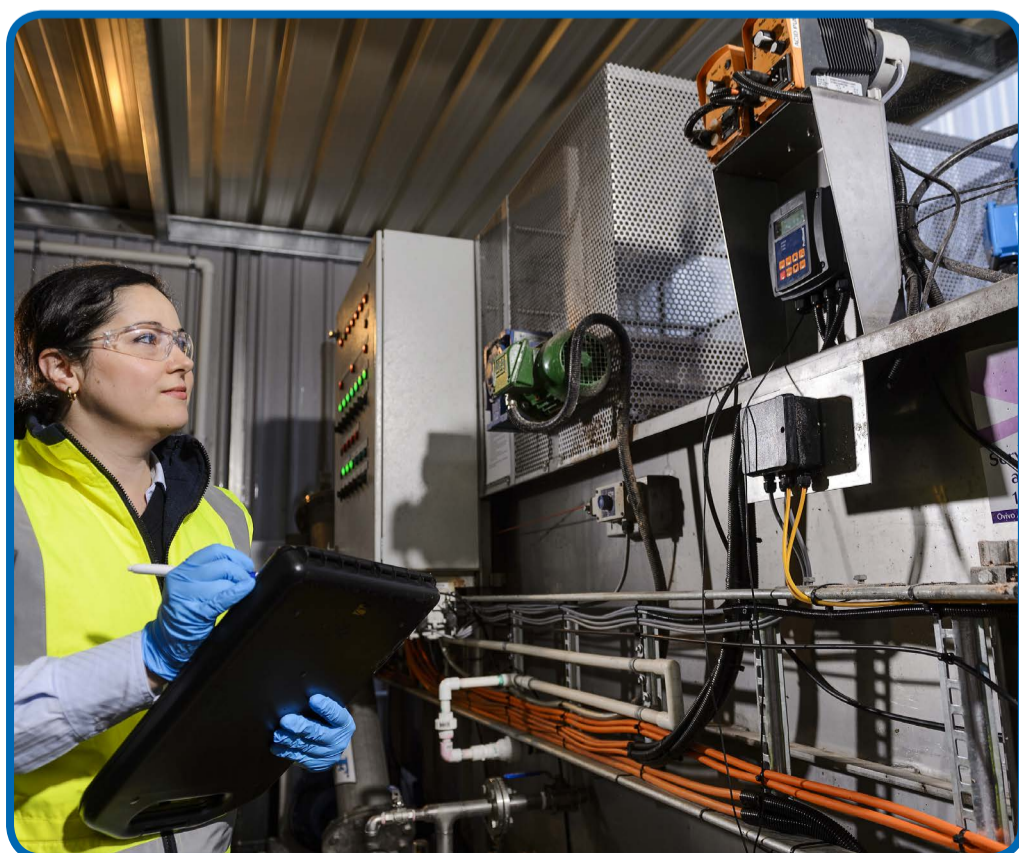
In its day-to-day work with IPOS, the Business Relations team provides a range of services to customers including:

- Providing information on water consumption, accounts and exemptions from standard rates and charges;
- Issuing of permits;
- Making available climate updates and fact sheets on irrigation requirements and efficiency;
- Assistance in monitoring water usage; and
- Providing information on water quality, flow and pressure.

The City of Onkaparinga has benefited from technical support provided by the Business Relations team, including being able to access better flow and pressure from the SA Water supply, to sufficiently irrigate some of their parks for the first time since the drought. The build-up of calcium at previously-unused SA Water connections in the council area was restricting flow and pressure at some local reserves. The Business Relations team worked with SA Water's metropolitan alliance partner, Allwater, to assess the issue at each site and were able to flush the connections. This improved pressure and flow, allowing for more efficient irrigation and more green open space.

The City of Onkaparinga's Senior Open Space Operations Officer, Andrew Wark, appreciates the good working relationship with SA Water that has resulted in substantial benefits:

## SA Water service a benefit to customers and the environment



The Business Relations team provides a free service to VLB trade waste customers aimed at improving the quality of trade waste discharged. The Cleaner Production service can lead to lower treatment and disposal costs, as well as improved efficiencies for these businesses. Recently, a customer was able to reduce costs by about \$8000 per annum as a result of using the service.

SA Water's technical consultants are currently working with six trade waste customers to identify and implement strategies to improve trade waste quality and compliance, and to minimise costs for both the customers and SA Water.

SA Water's consultants assist customers with:

- Background analysis of business and industry best practice techniques;
- On-site audits;
- Follow up background analysis;
- Identification and focus on problem areas;
- On-site meetings to discuss issues and potential cleaner production opportunities;
- Wastewater sample analysis, where necessary;
- Report on findings and recommendations; and
- Tailored on-site education to key staff.

This service benefits the local environment by keeping contaminants out of the sewer network, avoiding sewer degradation and assisting in compliance with Environment Protection Authority (EPA) requirements. The higher quality wastewater is also more suitable for re-use.

Other benefits for customers include avoiding the need for some pre-treatment equipment installation and upgrades, helping meet trade waste discharge limits and a reduction in chemicals used to treat wastewater.

# SA Water collaborates with Taiwan and China to increase research opportunities

SA Water's Research and Innovation Services (R&IS) have been working with the Water Industry Alliance and Austrade to develop a Memorandum of Understanding (MoU). The MoU is for joint research with the Beijing Water Authority (BWA) and the Research Centre for Eco-Environmental Sciences in China (RCEES), who are a long-term collaborative research partner. It will initially relate to joint research but also aims to provide a platform for SA to access business development opportunities in the Chinese water sector.

In October last year, SA Water's Mike Burch, Senior Manager, R&IS travelled to China at the invitation of the RCEES. He visited a number of water utilities and participated in an information exchange around reservoir management. A MoU between BWA and SA Water is expected to be signed in October when a delegation of BWA and RCEES management will be in Adelaide to discuss mutual opportunities for research collaboration.

The AWQC and SA Water joined a new International Water Research Centre in 2013 in partnership with the National Cheng Kung University (NCKU) and China Steel Corporation (CSC), a Taiwanese company with strong expertise and diversified business in water and wastewater management.

The Centre is Taiwan's first university-based research institute for water resources. The Centre aims to explore water quality and wastewater issues and find innovative solutions by developing leading-edge research in novel techniques to monitor, treat and manage water and wastewater.

In November, 2014 four SA Water staff travelled to Taiwan to review the first year of the program for the joint Research Centre and to further develop research opportunities with NCKU and China Steel and to extend the collaboration to the Taiwan Water Corporation. The meeting was also attended by representatives of Austrade, who are supportive of the program to explore opportunities for increasing trade between Australia and Taiwan.

The visit will be followed up with the development of further joint projects with both NCKU and China Steel in the water and waste water treatment area. A further promising development from the visit is the opportunity to develop a stronger relationship with the Taiwan Water Corporation in the area of water loss and network management, including leakage detection & asset condition assessment.

## New desalination plant improves water quality for Hawker residents

In September 2014, SA Water's \$5.75 million reverse osmosis Desalination Plant at Hawker in the Flinders Ranges began operating with the capability of supplying up to 440 kilolitres of treated drinking water a day to local homes and businesses.

The new plant now supplies approximately 200 local SA Water customers, who have noticed a substantial improvement in the taste of their water. Twenty jobs were created during its construction, but is now self-operating with existing local operators available to manage it if required.

Prior to this water supplied to the Hawker Township was sourced from a local groundwater basin. The natural characteristics of the water made the groundwater hard and high in total dissolved solids which made the water very salty. While the water quality complied with the Australian Drinking Water Guidelines (2011) health criteria, it was regarded by the local community as being too salty for drinking purposes.

SA Water worked closely with The Flinders Ranges Council to identify an appropriate desalination solution which was suitable for a remote location. In 2012, SA Water undertook a detailed investigation of the



quality and quantity of the available groundwater. An option was then selected which would improve the quality of drinking water and provide a sustainable long term solution for residents, businesses and tourists and be delivered efficiently and within budget.

The desalination plant reduces salinity levels to within acceptable aesthetic targets outlined in the Australian Drinking Water Guideline (ADWG), less than 600 milligrams per litre. The water is sourced from a groundwater basin, which is then treated at the desalination plant and piped to customers.

## Low cost recycled water helps to secure future water demand

In an increasingly uncertain climate, it is important that SA Water can continue to meet future water demand in South Australia. Through the use of recycled water schemes, SA Water is helping to ensure future demand and manage its water resources.

SA Water currently has the capacity to produce an additional 20GL of recycled wastewater during the winter period from the Bolivar Wastewater Treatment Plant. In the next few months the community will be consulted and proposals for the use of the 20GL will be sought that provide the most sustained economic benefit to the state.

SA Water is working closely with the EPA, DEWNR and SA Health to develop a Managed Aquifer Recharge scheme with recycled wastewater. The scheme will increase the amount of recycled water available for the

horticultural industry on the Northern Adelaide Plains and capture available recycled wastewater during the winter period. The plan is for this water to be stored in the T2 aquifer for extraction during the peak summer period for crop irrigation.

SA Water has a number of other recycled water schemes in operation and more are being planned. These schemes are helping to keep costs low for businesses and local council areas. Several regional golf courses at Whyalla, Mannum and Pt Augusta are using a combined total of around 0.5GL of recycled water. This affordable water source allows them to maintain lush fairways, whilst keeping their membership fees low and in turn increases recreation and tourism opportunities in the area.

## Expanding workload

In 2014, SA Water's Business Relations team grew the number of customers it manages from 50 to 260. This equates to over 20,000 properties. Each customer is assigned a consultant who is able to provide technical advice and help solve the customer's individual issues and challenges.

Between January and June this year, the team undertook 112 face-to-face visits with major customers. These visits have been well-received and are helping to improve customer understanding of the services that SA Water provides.