

WATER FOR GOOD

online
news
from the department for water

Welcome to the [Winter online edition](#) of Water for Good News. The newsletter is produced quarterly and is part of a key action of the *Water for Good Plan* to heighten awareness about the value of water and its importance to our health, environment and our economy.

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Plan delivers as new department puts focus on water

A year after the release of the state's water security plan South Australia is making significant progress towards diversifying our water supplies and reducing our reliance on rain-dependent water sources.

Commissioner for Water Security **Robyn McLeod** said, "Water for Good was launched this time last year and I'm pleased to report that more than seventy five percent of its ninety four actions are now underway or complete.

"Initiatives in the past year include a \$150 million investment in stormwater following South Australia's successful bid for Commonwealth funding. The new projects, along with other committed schemes, will help South Australia more than triple the annual stormwater harvest from our current 6 billion litres to over 20 billion litres.

"Adelaide's new state-of-the-art desalination plant is also on track to begin producing water by the end of this year. The plant will provide Greater Adelaide with up to 50 percent of its drinking water needs - about 100 billion litres - by 2012 and will be powered by 100 percent renewable energy."

Progress towards securing our water future also includes:

- Completion of the Glenelg to Adelaide Park Lands Recycled Water Project four months ahead of schedule, the start of construction of the Southern Urban Reuse Scheme and funding for the District Council of Loxton Waikerie's water recycling scheme.
- An enhanced H₂OME rebate scheme for water efficient household goods.
- Work has begun on mandating water-sensitive urban design through new planning regulations which will dovetail with the *Plan for Greater Adelaide* and apply to new residential and commercial urban development.
- The identification of Cathedral Rocks and Sleaford Bay as two potential locations for a desalination plant on the Eyre Peninsula, following consultation with the local community and extensive research by SA Water.
- The expansion of the *Business Water Saver Program* to require customers using over 25 million litres per year to complete a water efficiency plan.

- SA Water's bills have been improved and are now provided quarterly and include comparisons with previous use and use in similar homes.
- The Essential Services Commission is being appointed this year as the independent economic regulator for monopoly suppliers of urban and regional water and wastewater services in South Australia.
- A discussion paper for the proposed Water Industry Act was released in November 2009 and submissions are being taken into consideration in the drafting of the new legislation later this year.
- The State Government is also preparing a bill for the Safe Drinking Water Act that is expected to be released for public consultation in late 2010.
- The expansion of *Water for Good's* water education campaign through *WaterWise Communities*, a partnership initiative of the Local Government Association and the State Government.

*Murray Futures** achievements under *Water for Good* include:

- A long-term plan for the Coorong, Lower Lakes and Murray Mouth region.
- The completion of the irrigation pipeline from Jervois to Langhorne and Currency Creek and a drinking water pipeline for the Narrung, Poltalloch, Meningie, Langhorne Creek and Raukkan Aboriginal Community.

And the State's water security has been given an added emphasis through the establishment of a new Department for Water headed by Chief Executive **Scott Ashby**.

"The new Department will take the lead in implementing *Water for Good*," Mr Ashby said.

"We will help ensure there is sufficient water for South Australia to sustain our economy, our environment and our way of life."

For more information about the *Water for Good* plan and the new Department for Water visit:

www.waterforgood.sa.gov.au

*Murray Futures is funded by the Australian Government's *Water for the Future* program.

Right: Adelaide's desalination plant is on track to begin providing water by the end of the year.



From the commissioner



Robyn McLeod

South Australian Commissioner for Water Security

Welcome to the Winter edition of *Water for Good*

Welcome to the winter edition of *Water for Good News*. I hope its articles bring you up to date with the many wonderful things being done by individuals, school students, households, irrigators, businesses,

universities, communities and governments to help ensure South Australia's water future.

The creation of a dedicated Department for Water by the State Government is a great move that will build on the momentum of South Australia's water security plan *Water for Good*. It also means a change in my role as the Department will now take the lead in urban water policy, major project delivery and the implementation of the plan. My job now will now be to update, monitor and evaluate the implementation of the plan's actions and make sure all State Government departments – including the new Department for Water – are playing their part.

While South Australia is now in a position to feel more secure about our water future, with more than 75 percent of the 94 actions underway or complete, we're not out of the woods yet particularly in regional areas.

It is critical to remember that *Water for Good* is designed to be a flexible and adaptive plan. Water security, in times of climate change and population growth, must incorporate an adaptive management framework where we assess our water supply and water demands each year and recommend new actions or changed actions if required. This will be reported in an annual statement published by the Minister.

Water supply and demand plans will also be developed for regional areas to account for future growth and local supply issues.

The Murray-Darling Basin Authority's draft *Basin Plan* will be the next big challenge we face in South Australia. This basin-wide plan will address the over allocation of water by upstream states. *Water for Good's* adaptable management framework, modern regulation and legislation and actions to diversify our water sources will position us well to secure a fair outcome for South Australia.

Another big challenge in the coming months will be further consultation to enable the introduction of the *Water Industry Act*. This legislation is arguably the biggest overhaul of water industry legislation in the state's history. It will establish independent pricing to protect the long-term interests of customers, modern industry regulation and stronger protection for consumers and the environment as we continue to secure our water future together.

Water for Good News is produced seasonally by the Communication and Community Engagement Unit of the Department for Water.

To subscribe to the newsletter, visit our website www.waterforgood.sa.gov.au

If you would like to contribute a story idea, please contact Tim Laris on 8204 1051.

Sustaining the Coorong, Lower Lakes & Murray Mouth

A 20-year plan to help restore the health of the Coorong, Lower Lakes and Murray Mouth has been released by the State Government.

The *Long-Term Plan* is now being considered by the Commonwealth for the funding of actions worth up to \$200 million. \$21 million has already been provided for priority projects considered critical to stabilising the region's environment.

Minister for the River Murray **Paul Caica** said the plan was a significant step towards securing the future of the region.

"Through the plan, management of the Lower Lakes region will be based on science and local knowledge, while being informed by cultural values and community views," Minister Caica said.

The plan outlines more than 25 separate programs, including overcoming hypersalinity in the south Coorong lagoon, guarding against the risk of acidification with large scale revegetation work, and giving local communities and indigenous groups a say in the future management of the region.

The Coorong, Lower Lakes and Murray Mouth is recognised internationally as one of Australia's most significant wetlands and was declared a Ramsar site in 1985. (The Ramsar Convention is an international treaty that helps ensure the conservation of the world's most important wetlands.)

But the worst drought in the Murray-Darling Basin since records began has left the region facing critical environmental, social, cultural and economic challenges.

The wetlands are dry. Lakes Alexandrina and Albert have been disconnected. Native species are at risk of being lost and there hasn't been a flushing of salt through the barrages for some years.

The South Australian Government has been working in partnership with the community, scientists, the traditional owners and local farmers and industries to come up with the best possible responses to these challenges.

The *Long-Term Plan* is a part of the South Australian Government's \$610 million *Murray Futures* program (which is also funded through the Australian Government's *Water for the Future* program) and is focussed on ensuring the region and its communities have a healthy, sustainable and viable future.

At the heart of the plan is a freshwater future for the Coorong and Lower Lakes. The plan works towards keeping fresh water in the system by rehabilitating the region's environment so it can recover and thrive once inflows improve.

Significant research has been conducted during the development of the plan, which has helped broaden understanding of the region, its ecology and other factors that affect it.

The plan recognises that the challenges in the region are impacting on a wide range of individuals and groups.

Local knowledge and information have been critical to the plan's development.

There has been comprehensive consultation with the community with three public comment phases that have generated helpful input into the plan.

A strong working relationship has been forged with the Ngarrindjeri people – the traditional owners of the land. The region is central to the life and culture of the Ngarrindjeri, who continue to live on their traditional country.

The *Kungun Ngarrindjeri Yunnan Agreement* has set a benchmark for future consultation and negotiations with the Ngarrindjeri Regional Authority.

For more information or to download a copy of the plan visit: www.murrayfutures.sa.gov.au/lower.php



Above: Local dairy farming family, the Treloars, enjoy a day at the Coorong National Park.



Right: The *Long-Term Plan* is a 20-year plan to restore the health of the region.

Research hub for our water future

A new \$50 million water research institute will be established in South Australia to help secure and manage the State's water supply.

The new Goyder Institute for Water Research will be established in Adelaide, and will position South Australia as a world leader in water innovation and science.

The State Government will provide \$25 million over five years for the institute, which will be matched in kind by the CSIRO, the University of South Australia, the University of Adelaide and Flinders University.

The institute will provide independent scientific advice on South Australia's water system, improving the State Government's ability to forecast threats to water security and develop an integrated approach to water management. It will produce cutting-edge science to develop innovative water management strategies for the ongoing water security of all South Australians.

South Australia's Chief Scientist Dr **Ian Chessell** said the Goyder Institute will be nationally-recognised as a hub for water research.

"This Institute is a partnership between the State Government and CSIRO, as well as the University of South Australia, the University of Adelaide, Flinders University, the South Australian Research and Development Institute, and the Australian Water Quality Centre of SA Water," Dr Chessell said.

"Other key research organisations will also be invited to collaborate with the institute, which will improve connections between industry and research organisations."



More crop with the same water

The tough times facing Australian grape growers because of the poor prices being paid for their crops was an important motivation for Rohan Frahn to sign up to a new program aimed at building the business management skills of Riverland irrigators.

The Paringa grower thought he was already using water pretty efficiently on his 30 hectares of wine grapes and 20 hectares of almonds, but he decided it was worth becoming involved in the program even if he learnt just one new piece of information.

The *Irrigators Managing Business Risk Program* was launched in February to complement the State Government's \$20 million *Riverland Sustainable Futures Fund*.

The program, run by the Department for Primary Industries and Resources SA, aims to prepare irrigators for economic recovery by giving them the tools and skills to make better business decisions, minimize risks and maximize profitability. It combines a series of free technical workshops, on-farm visits by specialist consultants and information seminars coordinated by Rural Solutions SA.

The irrigation workshops and one-on-one consultations covered topics related to irrigation efficiency, water budgeting and using weather data in irrigation scheduling. The *Water, the Facts, the Flows and the Future* seminars addressed the future *Murray-Darling Basin Plan*, sustainable diversion limits, river flows and storages and water trading. The one-on-one consultations covered gross margin analysis and interpretation, business analysis and planning to help irrigators better analyse and understand the risks and profitability of their own specific enterprise.

Mr Frahn took advantage of both an on-farm consultation and one of 10 workshops held along the South Australian river corridor.

"I found it very useful," he said.

"I thought I was pretty good at managing water because I have moisture monitoring equipment, but it has given me a better understanding of evaporation and solar radiation.

"My irrigation is really efficient because I have been using drip irrigators for a long time, but I know now that I can get more crop with the same amount of water."

Program Manager **David Pocock** said the primary focus of the initiative was to help growers committed to staying in the horticulture industry and building a more viable future, to make decisions which would reduce risk and improve their profitability.

"We know that by analyzing the figures thoroughly, growers can take a much more objective view of what they are doing and where they are going to go. It's about looking at the whole business, not just water management," he said.

For more information visit the *Irrigators Managing Business Risk* section of www.pir.sa.gov.au/pirsa/drought or contact the Loxton Research Centre on (08) 8595 9138.



Grape growers have been learning about irrigation efficiency, water budgeting and trading through the program.

Creating water sensitive cities

Two South Australian consortia are playing an important role in a new national research program to boost stormwater harvesting in Australian cities.

In what's considered a world first, researchers from Monash, Melbourne and Queensland Universities have collaborated with industry and government partners from around Australia to develop the innovative 5-year program.

Commissioner for Water Security **Robyn McLeod**, who is the project's South Australian representative, said the *Cities as Water Supply Catchments* program will address issues which limit the capture and reuse of stormwater, and create a national blue print for managing stormwater in urban areas.

"The aim is to encourage the public and private sector to harness the potential of stormwater to overcome water shortages, reduce urban temperatures, and improve landscape and liveability," Commissioner McLeod said.

"The program aims to develop more efficient approaches to urban water demand management and supply, and planning - including water sensitive urban design."

In South Australia, two consortia representing State Government agencies (Department for Water, SA Water, Land Management Corporation and the Department of Planning and Local Government) and the Adelaide and Mount Lofty Ranges Natural Resources Management Board are contributing more than \$1 million in cash and in-kind support over the first three years.

"The program aspires to deliver a fundamental change in the way in which urban communities address issues associated with stormwater management," said Commissioner McLeod.

"Stormwater will become an asset rather than a liability and it will be managed in a way that adds value, not cost, to communities," she said.

Commissioner McLeod also said there was particular interest locally in Water Sensitive Urban Design which involves designing features into the urban landscape that exploit all the potential sources of water at a site, rather than relying on mains water.

A feature of the program will be demonstration sites to help build social and institutional capital within the community. Several Adelaide projects already on the drawing board have been nominated as potential sites, including the development on the former Clipsal site at Bowden, and the Lochiel Park Green Village development under construction at Campbelltown.

For more information about the *Cities as Water Supply Catchments* research program visit www.wsud.org/cities-as-water-supply-catchments



The *Cities as Water Supply Catchments* program will create a national blue print for managing stormwater in urban areas.

Wastewater win for mine and Mt Barker

Mining company Hillgrove Resources has signed an agreement with the District Council of Mt Barker for the supply of recycled treated wastewater for use at its proposed Kanmantoo Copper Mine in the Adelaide Hills.

Hillgrove Chairman **Dean Brown** said, "This is great news both for the Mt Barker community and the Kanmantoo Project.

"The arrangement is an innovative example of how mining companies and communities can cooperate to achieve an outstanding environmental outcome both at the local and national levels."

The water contract will generate a revenue stream and cost savings for the Council and it also eliminates a new draw on the River Murray.

"From the community's point of view it results in significant benefits to local flora, fauna and the water quality of Mt Barker Creek," Mr Brown said.

"At the same time, the contract allows the District Council to plan for population growth in the Adelaide Hills without the constraint of wastewater issues."

The contract commits Hillgrove to design and build a 16 kilometre buried pipeline from the council's Brown Dam to the Kanmantoo mine site.

The council has allocated up to 750 million litres per year to the Kanmantoo Mine and once completed, the pipeline will belong to the council.

Army taps into recycled water

The Keswick Army Barracks will be using high quality recycled water to help irrigate its grounds after signing up to the Glenelg to Adelaide Park Lands Recycled Water Scheme.

The barracks will initially use around two million litres of water a year – an amount expected to increase as irrigation systems around the grounds are upgraded.

The recycled water will irrigate more than 1,140 square meters of lawn including the flag pole area between the train line and Anzac highway and the grassed areas in front of the heritage listed building and the Navy headquarters.

The Department of Defence said the decision to use the recycled water was based on a range of benefits.

"The proximity of the pipeline to the Keswick barracks was a major factor, coupled with the benefits of reducing reliance on the use of drinking water," a spokesperson said.

He said water recycling is an opportunity for the department to contribute to the Government's water conservation agenda and allow it to respond to water security issues.

"Our Water Management Strategy sets objectives that include maximising the efficiency of water use and substituting drinking water with alternative sources," he said.

"The scheme provides an ideal way to save drinking water and implement innovative best practice environmental management."

The Glenelg to Adelaide Park Lands Recycled Water Project was completed in January 2010. It provides recycled water from the Glenelg Wastewater Treatment Plant for irrigation and dual reticulation purposes such as toilet flushing.

Since the completion of the project 16 customers have signed up to use the recycled water and SA Water is continuing negotiations with a further 15 customers.

Better water for Aboriginal communities

The isolated Aboriginal community of Amata may be named after a nearby waterhole, but water is not something the expanding township takes for granted.

Located at the western end of the scenic Musgrave Ranges, about 300 kilometres west of Marla and 30 kilometres south of the Northern Territory border, the Pitjantjatjara community is home to around 400 people.

Formerly part of the Everard Park cattle station, Mimili is nestled among the granite outcrops of the Everard Ranges, about 400 kilometres south of Alice Springs. It is home to around 300 people.

Department for Water Chief Executive **Scott Ashby** said both towns will see dramatic improvements to local water services over the next three years thanks to \$5.6 million in Commonwealth funding, announced in April.

"At Amata, \$3.45 million will be spent on fitting out a new bore, installing a water main and replacing an elevated tank stand and domestic water meters," he said.

"A new reverse osmosis plant to treat saline groundwater to drinking water standard will be built at Mimili, which has received \$1.96 million for the project.

"The funding will also be used to train local operators and install domestic water meters."

Another \$150,000 will be provided to deliver community water conservation programs in both communities, which were among 17 across the nation to receive a total of more than \$50 million through the Australian Government's *Water for the Future* initiative.

The funding is being provided to improve water supplies and wastewater services in remote communities as part of a commitment by all Australian governments to closing the gap of disadvantage between indigenous and non-indigenous Australians.

Both Amata and Mimili have been given priority for federal and state government investment to improve local services and living conditions under the Remote Services Delivery National Partnership Agreement signed in November 2008 by the Council of Australian Governments.

The agreement on Indigenous Remote Service Delivery focuses on the importance of access to sustainable, secure and safe water supplies and encourages the responsible use of water and water conservation.

Developing and implementing a strategy to improve the quality of water to remote communities is also a priority under the State Government's *Water for Good* plan.

A joint proposal seeking Commonwealth funding for this priority was prepared by SA Water and the Office for Water Security with advice from the Department of the Premier and Cabinet's Aboriginal Affairs and Reconciliation Division.

For more information about *Water for the Future* visit www.environment.gov.au/water

Cemetery gardens bloom again

War graves at Adelaide’s West Terrace Cemetery will soon be using recycled wastewater from the Glenelg to Adelaide Parkland pipeline to restore them to their former green glory.

The Adelaide Cemeteries Authority has signed an agreement with SA Water to use high-quality recycled water to irrigate the Australian Imperial Forces section of the cemetery.

Minister for Urban Development and Planning **Paul Holloway** said, “It is only fitting we preserve the final resting place of those South Australians who so bravely fought to defend our liberties.”

The cemetery will be supplied with 5,000 kilolitres through the 32 kilometre network of pipes that now brings recycled water from the Glenelg Wastewater Treatment Plant to Adelaide’s parklands.

Minister Holloway, whose grandfather Private Bill (WJ) Johnston is buried in the section of the cemetery, said water restrictions introduced in 2006 had left it and surrounding parklands parched.

“The agreement to supply recycled water will allow the Adelaide Cemeteries Authority to maintain the Australian Imperial Forces section to a high standard of presentation, even during Adelaide’s hot, dry summers,” Minister Holloway said.

“Access to the Glenelg to Adelaide Parkland pipeline should ensure that the AIF cemetery is restored to a green resting place fit for our heroes in time for next year’s Anzac Day ceremonies.”

The Australian Imperial Forces section of the cemetery was opened in 1920 soon after peace was declared in the Great War 1914 - 1918. Dedicated exclusively for the burial of ex-service personnel it was the first soldiers’ burial ground in the Commonwealth.

The section contains the gravestones of 4,155 ex-service personnel, including four Victoria Cross recipients - Lieutenant Arthur Blackburn, Joergen Jensen, Private Reginald Inwood and Corporal Phillip Davey. The Cross of Sacrifice, a gift of the Commonwealth Government, was also the first of its kind in an Australian burial ground.

Minister for Water **Paul Caica** said the Glenelg to Adelaide Parklands pipeline project is part of the State Government’s *Water for Good* commitment to recycling 45 percent of wastewater from urban areas by 2013.

“While the West Terrace Cemetery is just the latest customer, we expect councils, schools, businesses and organisations to sign up to receive recycled water from the GAP pipeline,” Mr Caica said.

Bird in Hand worth water in the hills

Work has begun on a \$60 million upgrade of the Bird in Hand wastewater treatment plant in the Adelaide Hills to improve the quality of wastewater released into Dawesley Creek.

Since 1965 wastewater from Lobethal, Charleston, Woodside and Inverbrackie has been treated in the plant’s ten lagoons.

Although the treated wastewater is released into the creek in line with Environmental Protection Authority guidelines the upgrade means the quality of the treated wastewater will be significantly improved.

The new plant will also have the capacity to provide more than 100 million litres of recycled water a year.

The upgraded plant will be able to provide nearby landholders with water for irrigation.

SA Water Chief Operating Officer **John Ringham** said he wanted to thank the local community for their involvement in planning the upgrade.

He said the upgrade is a good example of listening to and addressing the concerns of the local community and taking the needs of the environment into account to reach a positive outcome for everyone.

“The upgrade will provide a sustainable long-term treatment facility for Charleston, Lobethal, Woodside and Inverbrackie. It will cater for predicted growth in these areas until 2035,” Mr Ringham said.

“It is expected the treatment facility will be completed by the end of 2011 and the plant will be fully operational by the middle of 2012. During construction the current plant will remain operational.”

For more information about the Bird in Hand wastewater treatment plant upgrade visit www.sawater.com.au/SAWater/WhatsNew/MajorProjects

Stormwater boost for Loxton

Loxton's much-loved public parks and gardens are so important to the community that local people helped buy water to keep them alive during the toughest periods of drought in the Riverland.

It wasn't just a matter of protecting the town's image, but an attempt to save years of hard work by volunteers and to look after the well-being of the farming community according to councillor, **Mark Ward**.

"Coming into Loxton and seeing green parks and gardens gives them some confidence and helps pick them up a bit when they are sick of looking at the impact of drought," said Mr Ward, who is a councillor for the District Council of Loxton Waikerie.

Now a major funding boost from the Australian Government's *Strengthening Basin Communities* program will help ensure the town's parks and gardens are kept green in future years.

A \$1.12 million grant will fund the development of an aquifer storage and recovery scheme for the town. The grant will also pay for a new stormwater retention basin that can be linked to Loxton's effluent lagoon. Existing stormwater retention basins will also be expanded as part of the works, which are due to begin before the end of the year.

The project will increase Loxton's stormwater catchment capacity from the current 17 million litres to 120 million litres by linking the existing catchments at Loxton South and Loxton West with a new stormwater storage facility on the Loxton riverfront.

The recycled water will be used to irrigate the Lions Park, the Loxton Aquatic Park and the Apex Park as well as the main street area, lawn tennis courts and the parks and gardens around the Loxton Retirement Village.

Announcing the funding, Minister for Climate Change, Energy Efficiency and Water Senator **Penny Wong** said many communities across the basin were confronting the challenge of securing water supplies in the face of continuing drought and climate change.

"The *Strengthening Basin Communities* program is helping local councils plan for a future with less water and invest in local water saving initiatives," Senator Wong said.

"We are working in partnership with governments and water service providers to deliver water saving infrastructure that secures a stronger future for Murray-Darling Basin communities.

"Measures that will be implemented include water reuse and recycling schemes, pipeline replacement and leak reduction programs, and other water saving schemes."

A second round of funding is expected to be announced during 2010-11.

For more information about the program visit: www.environment.gov.au/water/programs/basin-communities

Badlands make good water

An area humorously dubbed ‘The Badlands’ by locals is the focal point for an environmental project at Murray Bridge which is not only rejuvenating the site and saving water but also helping young people engage with the Aboriginal community.

Unity College has built a series of gravel beds on the site and planted them with native reeds. The beds filter wastewater so it can be recycled to irrigate the school’s agricultural lot, providing year-round feed for livestock and reducing reliance on water from the river.

Completed in March, the project builds on earlier water conservation work at the Lutheran School and provides a practical learning experience for its 980 students, according to business manager **Phil Zanker**.

“With the school being so close to the ailing River Murray and with many students travelling from rural areas affected by drought, the importance of water and our responsibility to use this resource wisely is a great focus at Unity College,” Mr Zanker said.

“The project is not only turning wastewater into an asset but generating a product that can be harvested in the form of the reeds themselves.

“We have very strong links with the Ngarrindjeri people and we will be using the reeds for traditional basket weaving, which is part of the curriculum. The local community is also involved in another area of the Badlands where we have a bush tucker garden and the plants are used for cooking.”

As part of its commitment to the environment, the school was already collecting rainwater from roofs for cooking, showers and flushing toilets.

Unity College is hoping the reed bed system will recover about 90 percent of the school’s greywater although Mr Zanker said it was too early to tell exactly how much reusable water was going to be produced given it had only been in operation for a few weeks.

Funded with help from a \$60,280 grant from the South Australian Murray-Darling Basin Natural Resources Management Board, the system incorporates a settling tank to remove solids. Wastewater then flows into three beds, each about 60 metres long and two metres wide.

The beds are filled with reeds harvested from the banks of the River Murray (with permission from the area’s Local Action Planning Group) and planted out by the students. The reeds absorb nutrients and other impurities from the water which takes about six days to filter through the beds and run into a storage tank ready for reuse.

Students will also use the site to learn about water reuse and minimising waste as part of their geography studies, with field studies to monitor plant growth and water quality.

“We will try to get every student involved, from reception to Year 12 and we need to get out into the community and tell people about it because it’s something out of the ordinary,” Mr Zanker said. “Everyone who has had a look is amazed.”



Unity College students Brad Wagener, Georgia Steinert and Samantha Lubcke are helping to plant reeds in the gravel beds at The Badlands to filter the wastewater.

Community connects with Christie Creek

Retired Morphett Vale teacher Greg Megow learnt to save water when he was posted to his first school at Streaky Bay on the West Coast 50 years ago.

"When I went out teaching in 1960 I was 20 and I had lived at Colonel Light Gardens my whole life, so I was of the opinion you just turned on a tap and water came out," he said.

"I was never very concerned how much I used, but then I went out to the West Coast and outer country areas for something like 15 years. At most of those places we weren't on reticulated water so it wasn't something that just came out of the tap.

"I remember being told that you could only have a bath on Saturday night and don't stay under the shower more than three minutes. Other people valued water a lot more than I had done, and that has stuck with me for the rest of my life."

About 15 years ago Greg moved to his current home, where the backyard overlooks Christie Creek. So when the City of Onkaparinga Council called a public meeting about a major project to upgrade the creek, he decided to go along.

The \$15 million Christie Creek upgrade is part of the *Water Proofing the South* initiative led by the council, which is developing alternative water sources in Adelaide's southern suburbs. The project aims to capture and distribute up to 850 million litres of stormwater for irrigation in the catchment area, at the same time addressing flooding risks and improving the quality of water flowing into Gulf St Vincent.

Five major works are involved, including creating wetlands at reserves on Brodie Road and Madeira Drive to harvest and treat stormwater; building basins at reserves on Waverly Way and Woodcroft Drive to slow high flows and address known flooding risks; and constructing a storage dam within the Wilfred Taylor reserve to store water for summer use. A distribution scheme with 16 kilometres of piping is also being set up so the collected water can be used for irrigation.

The work is being funded by the City of Onkaparinga in collaboration with the Australian Government's *Water for the Future - Water Smart Australia Program*, the Adelaide and Mount Lofty Ranges Natural Resources Management Board and the South Australian Department for Planning and Local Government.

Project leader **Benjamin Hall** said Council approved the project in September 2009 after working with the community to select one of three proposed approaches. Work commenced on all the major elements immediately and is due to be completed by September, 2010.

Benjamin said an important part of the process had been setting up a community connection group which meets every four to six weeks. Two years after going to his first public meeting, Greg remains actively involved, providing ongoing feedback and helping to keep other people informed.

"We get an update from the contractors doing the work and the council representatives, and I have been pleasantly surprised that they tell us what is happening, warts and all," he said.

"I am pleased with the overall project and what is now coming to fruition. I can see the future looks good if this is part of an overall plan that continues to look at stormwater, wastewater and water saving, using the water we have to the best possible advantage."

For more information about the Christie Creek upgrade contact City of Onkaparinga Community Engagement Officer **Patrice Pearson** on 8384 0116 or email Patrice at patpea@onkaparinga.sa.gov.au



Greg Megow (left) and other members of the local community provide feedback about the Christie Creek upgrade.

Homes saving water

South Australian households are embracing water wise behaviour inside and outside their homes like never before with a huge uptake of the State Government’s H₂OME rebates.

The rebate scheme was expanded last year under an action from *Water for Good*, South Australia’s comprehensive plan to ensure our water future.

More than 157,000 H₂OME rebates worth over \$31.2 million have now been granted since the rebate scheme began in November 2007.

Since 2006-7 average water consumption per South Australian household has fallen from around 240 thousand litres a year to 190 thousand litres.

The rebates encourage households to save water by buying water efficient products.

One family helping to save water is the Hayes family who qualified for six rebates by buying products including new rainwater tanks, plumbing rainwater into their home and a 4.5 star water efficient washing machine.

Joel Hayes said the rebates were a welcome incentive to use water more wisely.

“By using rainwater on my garden I’m managing to reduce my reliance on mains water so the most obvious incentive is the reduced water bill” Mr Hayes said.

Mr Hayes and his family are also saving water by growing water wise plants, taking shorter showers and reusing grey water from their washing machine to water their garden.

“I am proud of what we’ve put in place to save water,” Mr Hayes said.

“Our family and friends show an interest in what we’ve done and often ask about the ongoing benefits.

“Both of my parents have seen the system I’ve set up and followed my example by installing large tanks to offset their mains use and both have made use of the rebate scheme.”

The H₂OME Rebate Scheme supports smart water use in the garden, the bathroom, laundry and in the kitchen.

Rebates range from \$30 to purchase and install a low-flow (3 stars or more) showerhead to between \$200 and \$1000 towards the cost of purchasing and plumbing a rainwater tank into a home for uses such as toilet flushing, clothes washing and hot water supply.

For more information about applying for an H₂OME rebate visit www.sawater.com.au

New rebate for rainwater tanks

A new \$200 rebate for rainwater tanks being bought for backyard garden watering is now available and is expected to increase South Australia’s national lead in rainwater tank ownership.

The new rebate has been backdated to March 11 - the date the rebate was announced by the State Government.

Minister for Water, **Paul Caica**, said the new rebate for tanks of 1,000 litres or more will be available regardless of whether or not it is plumbed into the home laundry or hot water service.

“Given the price tag for a 1,000 litre tank starts at about \$400, this rebate should be able to cover half the cost of a basic tank,” Minister Caica said.

“This \$9.47 million initiative will enable the purchase of 40,000 more tanks by home gardeners during the next four years.

“South Australia already proudly leads the nation in rainwater tank ownership, with about 45 percent of properties having a rainwater tank.”

Minister Caica said the new rebate will build on that record and enable gardeners to be less reliant on mains water by providing an alternative source for watering during dry spells.

Leaflets explaining how to claim the rebate are available from rainwater tank retailers, hardware, nursery and garden stores.

Further information about the new rainwater tank rebate including application forms is also available at: www.sawater.com.au



Joel Hayes, his daughter Alexis and son Sidney water their garden using rainwater.

WaterWise houseboats help save the Murray

Houseboat hirers and their guests are now helping to save the River Murray under a new State Government initiative supported by the house boat industry.

Minister for Water **Paul Caica**, who is also Minister for the River Murray, said the *WaterWise Houseboats* initiative provides houseboat hirers with kits to encourage their guests to use water wisely.

“Using water wisely when you take a shower, wash up or do the laundry is an excellent way to save water and reduce South Australia’s reliance on the River Murray,” Minister Caica said.

“This initiative aims to get across the water wise message to people when they’re enjoying a houseboat holiday on the River.

“Using water wisely also helps reduce the amount of greywater produced during a houseboat holiday.”

Greywater is water that has been used for washing dishes and clothes, bathing or showering.

It contains fats, oils, food scraps, nutrients, household chemicals, soap and detergent rich in phosphate, nitrate and pathogens like bacteria and viruses.

Minister Caica said houseboats can produce up to 160 litres of greywater per person a day.

“If that’s discharged into the river it can damage ecosystems and create algal blooms,” he said.

“Discharged greywater can also pose significant human health risks – especially when houseboats are moored alongside each other and drawing water from the river.”

Houseboat hirers and other commercial river vessel owners with dishwashers, washing machines, spas and showers on their vessels are required to retain greywater on board for treatment or dispose of it in land based waste management systems.

“So keeping greywater to a minimum helps houseboat hirers do the right thing and treat or dispose of the greywater properly,” Minister Caica said.

Boating Industry Association of South Australia General Manager **Glen Jones** said everybody in South Australia needs to take all possible steps to use water wisely and efficiently and take every opportunity to help maintain water quality.

“I’m encouraging our hundreds of members and their thousands of clients who go boating along the length of the River Murray and enjoy the Lower Lakes to commit to saving water and protecting its quality through this initiative,” Mr Jones said.

WaterWise Houseboats is an initiative of the Department for Water and the Environment Protection Authority supported by the Boating Industry Association of South Australia and the Houseboat Hirers’ Association

The initiative also forms part of the *Water for Good* community education program. (*Water for Good* is South Australia’s comprehensive plan to ensure our water future.)

For more information about *Water for Good* and the *WaterWise Houseboats* initiative visit www.waterforgood.sa.gov.au



Lifting the lid on the future of the loo

Year 10 student Amber Williams from Mt Barker High School has won SA Water’s *Design a Loo of the Future* competition with a thoughtful design that reflects the community’s ongoing need to conserve water.

Year 7 student Michael D’antonio from St Francis of Assisi School in Newton was runner up in the competition.

School students submitted entries that took account of how they thought our way of collecting and disposing of waste might change in the future.

The competition followed an exhibition at the SA Water Learning Centre in Adelaide celebrating the history of toilets as a part of SA History Week.

The *Toilets Through Time: History of Australian Sewers* exhibition was an opportunity for the community to learn about what happened before sewers were invented.

The exhibition and the competition were a part of SA Water’s *Brainwave* learning program for students and teachers.

The exhibition raised community awareness about the importance of wastewater networks and treatment and was a unique chance for people of all ages to take a step back in time and learn more about one of the most common things we use every day – the toilet.

It was also an opportunity to highlight past achievements and how they have contributed to today’s much-improved lifestyle.

SA Water Chief Executive **Anne Howe** said methods of waste collection and treatment have varied throughout history.

“From chamber pots and night cartmen to the water efficient dual flush systems we have today, I think people would be surprised and relieved just how much has changed,” Ms Howe said.

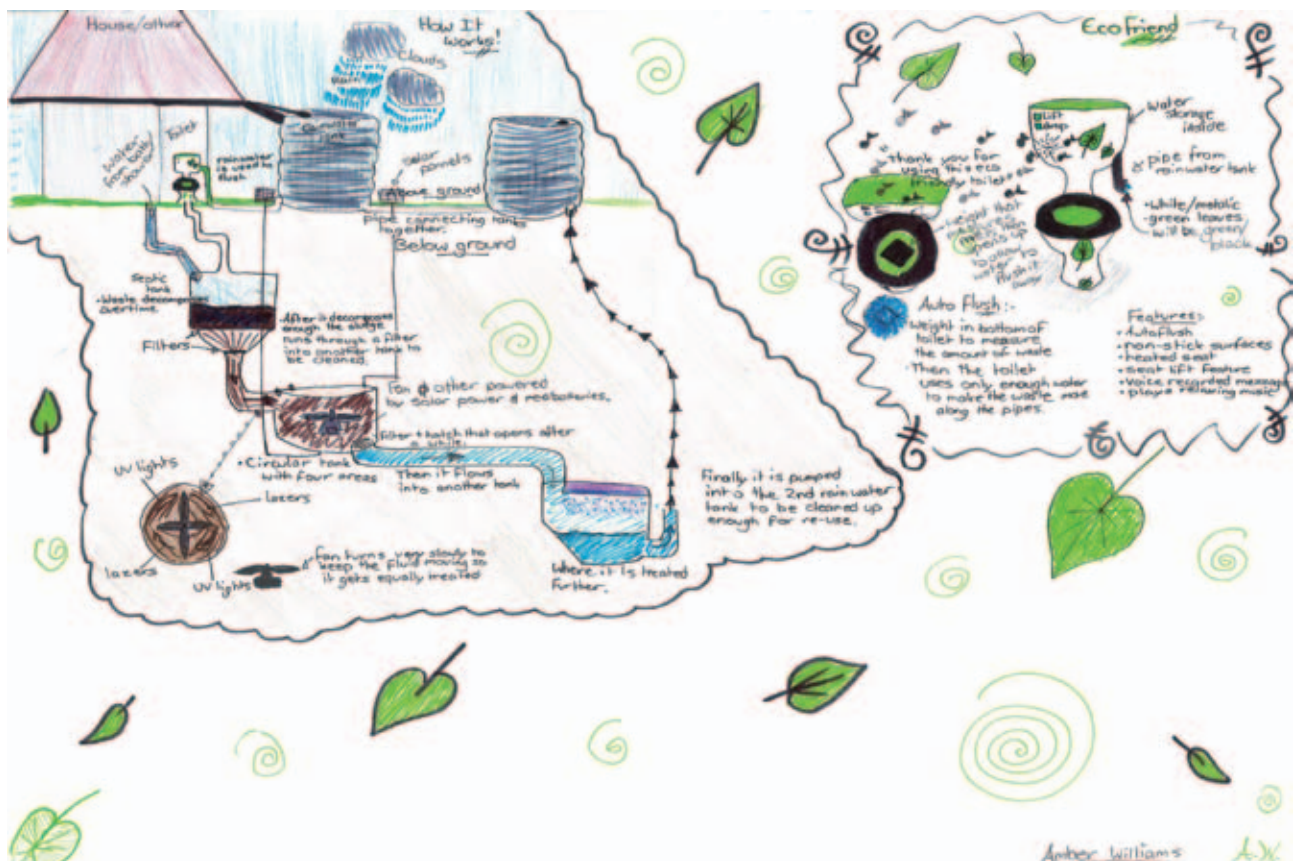
“Many of us simply press the toilet button and walk away, but there have been major changes to our sewerage systems over the years to get to the modern feat of engineering we use today.

“The exhibition included the entries in the *Design a Loo of the Future* competition, where students from years 6 to 12 had the chance to design what they thought toilets could look like one day.

“Judging by the entries we received, we could expect great things for the humble loo.”

For more details about the history of toilets and sewers – and the SA Water *Brainwave* program for students and teachers visit www.sawater.com.au

Below: The winning design from year 12 Student Amber Williams.



What's on



ADELAIDE DESALINATION PLANT TEMPORARY VISITOR CENTRE

The Adelaide Desalination Project Temporary Visitor Centre provides a great opportunity for the community to learn about the Adelaide Desalination Project. It's open from 10 am to 2 pm on Tuesdays and Thursdays each week and there is provision for community groups to get involved in evening sessions during daylight savings. To make arrangements please ring 7424 3605 or email desalination@sawater.com.au