

September 2006: Edition 5

“Snippets Plus” compiled using information from the Australian Water Association & Murray Darling Association & various other sources including various printed media & presentations attended.

Compiled by Cr. Peter R. Smith OAM

South Australian Vice President Murray Darling Association

Ph 08 8569 8086 Fax 08 8569 8086 Mobile 0418 822 342

Email psmiters@lm.net.au or myriver@lm.net.au

Australian Water Association – “Promoting the Sustainable Management of Water”

Murray Darling Association – “For Conservation and Sustainable Development”

Murray Valley Standard: 31st August 06

Scientists rally to save Coorong

The Coorong will be the focus of one of the largest research partnerships ever carried out in Australia in an effort to improve the ecological health of the region and protect threatened birds and fish.

Adelaide Advertiser: 2nd September

Brave faces as threat of drought looms real.

Beneath the jovial atmosphere at the Royal Adelaide Show there is a sense of desperation among farmers as they come to grips with the effects of the winter drought.

Same Day

Next rains will send salinity soaring.

Salt in river's wounds.

Salinity in South Australia's River Murray waterway is at its lowest level in 50 years as a result of the New South Wales drought – but the next big rains will dramatically increase levels.

AWA

Three CSIRO scientists who helped develop new guidelines for the responsible management of contaminated sediments in our harbours, estuaries and rivers have won the Land & Water Australia Eureka Prize for Water Research.

Dry Area Forum, convened by IWA (and sponsored by the National Water Commission), was attended by 65 industry leaders on Friday and was an excellent first step in the dialogue about trading water between irrigation districts and cities. Economics, regulations, socio-economic issues and international examples from California and Israel were covered. We'll publish more details in 'Water'.

Reducing SALT in the River Murray, protecting the endangered southern brown bandicoot and coastal health checks are among projects being funded via an extra \$54m package from the National Action Plan for Salinity and Water Quality (NAP) and the Government's Natural Heritage Trust.

After the driest winter in 20 years, the Victorian Government has imposed Stage 1 Water Restrictions from 1 September as it urges householders to save water. Others claim it is failing to push recycling and water-saving measures further.

CSIRO, through the Water for a Healthy Country Flagship, is partnering with the University of Adelaide, Flinders University and the South Australian R&D Institute for Aquatic Sciences (SARDI), to study the Ecology of the Coorong, Lower Lakes and Murray Mouth region. This CLLAMMecology Program will receive \$2.2m from the CSIRO Collaboration Fund now, more later.

NSW Dept Energy, Utilities & Sustainability has prepared Draft Guidelines for Sewered Residential Premises (Single Household) for GREYWATER REUSE (28 August 2006) and now seeks comment on the document.

The Sydney Catchment Authority (SCA) is looking at ways to deliver extra water from its Shoalhaven Water Supply Transfer Scheme without raising Tallowa Dam wall. A Discussion Paper invites comment till 6 October 2006; examining matters such as the timing of transfers, maximal draw down levels, environmental flow regimes, and maintaining river health.

South Australia is urging the other Murray Darling states to speed up the process of sourcing more water from irrigators to return to the River. SA River Murray Minister, Karlene Maywald, says the Federal plan to buy backwater from willing sellers must be accelerated.

ECOWISE Environmental has formed a strategic alliance with software development group Agenda Systems which has 15 years of waste tracking experience and is currently launching new liquid trade waste monitoring software.

The 11th Edition of Re Water (Aug 2006), a quarterly newsletter focusing on farming with recycled water and a range of other news worth items about recycled water, is now available.

With relaunch of the upgraded DWT facility in Roetgen in late 2005, Greater Aachen now has Germany's largest Ultrafiltration membrane unit for drinking water treatment meaning the treated can be released into the raw water influent for drinking water conditioning. As a result, more than 99% of the raw water can be processed into top-quality drinking water.

Former Melbourne Water GM Bill Forrester doesn't believe Victorian Government claims about water recycling as billions of litres of water are being discharged into Port Phillip Bay.

Inter-catchment transfers alone do not guarantee sustainable supplies for Sydney, SE Queensland or elsewhere.

Squabbling over extra flows along the Murray is holding back its speed of environmental recovery. Are water rights trading working the way intended and perceived by the National water Initiative?

Malcolm Turnbull has welcomed the \$50m commonwealth funding to help waterproof Adelaide.

Sydney, a thirsty city is robbing the Shoalhaven to sate its own thirst, but the private sector could help.

Decision is near on taxing water payouts to irrigators whose give up their entitlements & are compensated by government.

Adelaide Advertiser: 5th September 06

Rann wants stronger policy on climate change.

A push to strengthen Federal ALP Policy on climate change has been flagged by Premier Mike Rann.

Adelaide Advertiser: 6th September 06

Drought ruins \$400m in crops.

Almost \$400m has been slashed from the state Government's estimated value of this season's grain crop as drought conditions threaten a disastrous year.

Adelaide Advertiser: 7th September 06

Tougher Water Rules

The State Government has warned it will implement tougher water restrictions if the State's dry continues.

Greens MLC Mark Parnell has welcomed Agriculture Minister Rory McEwin's announcement the Government would form a drought crisis team but he said it must include experts on climate change.

Murray Valley Standard: 7th September 06

Crop Estimates Slashed

The Southern Mallee could lose more than 100,000 tonnes of crop production this season after one of the driest winters on record.

Our driest winter in two decades

Murray Bridge has experienced its driest winter since 1982; only 49.4 millimetres of rain fell in Murray Bridge between June and August – the fifth lowest recording in 121 years of records.

Drought in focus for Region 6

At a Murray Darling Association Region 6 meeting held recently in Tailem Bend the drought and its impact on the local community was the main topic.

3.

Adelaide Advertiser: 8th September 06 Fears for birds as haven from drought runs dry.

The large Bool Lagoon, crucial to bird life in the Southeast, has gone dry as a result of poor winter rains.

Adelaide Advertiser: 11th September 06 The big dry

Desperation is setting in among many farming families as the drought tightens its grip. SA Farmers Federation President Wayne Cornish said it was organising meetings with financial institutions, the rural counselling service and other organisations to help deal with the growing crisis. "Now that there is anguish and real cause for concern, it much better to be pro-active." He said.

AWA

The Sha River Restoration project in China has taken out the \$225,000 International River Prize at the River Symposium in Brisbane, while the \$75,000 National River Prize was won by the Torbay Catchment in Western Australia.

The Rural, Regional & Transport References Senate Committee has tabled a report which states "Given the sustainability limits on Australian supplies together with increasing demand as our nation grows, it is inevitable that we will have to embrace Water Recycling on a much greater scale." The Chairman pointed out that the majority of Australia's major cities dams are less than 50% full at the end of winter.

The research program to protect the Coorong Wetlands mentioned in last week's email news will be a multi-disciplinary team led by Dr Mike Geddes of the University of Adelaide. It will focus on the ecology of the Coorong, Lower Lakes and Murray Mouth.

Sydney Water's plans for a new STP to treat wastewater to highest quality and a Recycled Water scheme to cater for 2000 dwellings at Appin, NSW is open for public comment.

AWMA Pty Ltd, specialising in design, manufacture and installation of water control infrastructure tech has been awarded the Telstra 2006 Victorian Hudson Business Award (for 50-100 employees) for its Water Control Solutions for the irrigation, urban and wastewater sectors.

The NSW Government has launched a new website to reinvigorate the WATER for LIFE campaign to keep people informed on progress on the NSW Government's 2006 Metropolitan Water Plan at and you can sign up to receive the new Water for Life eNews.

The feasibility plan for a Gippsland Water Alliance plan to divert 115 billion litres of wastewater from ocean outfall for recycling and reuse by industry has received approval and will now proceed to the next stage.

South Australians are being reminded of the need to comply with Permanent Water Conservation Measures to recognize the impact of a record dry winter especially since measures that delivered a 10% drop in domestic water use across metropolitan Adelaide in 2005 -06 compared to 2004-05. A table of Water Use by thirsty households in the various states shows that outdoor consumption in NSW is half that used outside the home in ACT, WA and SA - a case for tight water restrictions as apply in NSW or an example of what increased reliance on recycled water can allow in states such as SA? WSAA Facts 2005 used.

Pollution concerns have arisen for the Potomac River, a major drinking water source for Washington DC, US as a result of scientific findings that small mouth and largemouth bass, which are naturally males, are for some reason developing immature eggs inside their sex organs with waterborne hormone - like chemicals named as a most likely cause.

The EU Commission has proposed a long-term environmental strategy to clean up & protect the Mediterranean Sea which is deteriorating as a result of pollution, population pressure, major oil spills etc highlight the vulnerability of the region's environment & economic sectors such as fishing and tourism.

Water utilities in California will have to comply with a PERCHLORATE of 6mcg/L limit under a proposed rule that also provides variances for economically distressed communities. This maximum contaminant level (MCL) matches the health-based public health goal set 2004 by the state Office of Environmental Health Hazard Assessment (OEHHA).

A critic of the recent Productivity Commission report on the use of market mechanisms to achieve environmental objectives has claimed that the interaction of river & groundwater has led to potentially large scale double allocation of water in the debate over rural water trading rights because tapping of groundwater close to a river has the same effect as diverting the river water.

Fresh doubts have been raised about the centrepiece of the Beattie Government's water strategy for the recent election, with drilling at the site of the proposed Traveston Dam indicating construction difficulties, a huge cost blowout and leaks. Drilling by a mining company Renison Consolidated Mines in the early 1990s suggested the area was unsuitable for water storage.

The drought in parts of eastern Australia has cast a shadow over water entitlements and dams on one property sharing water with neighbours.

Buying a home where recycled water is offered by a dual pipe system has been claimed to increase its value.

Estimated sediment loads of 57,000 tpa into Lake Macquarie, NSW (pre-European settlement, estimate 6600 tpa) resulting in algal blooms, low levels of fish and marine life, and metal laden sediments, led to two local councils plus NSW government backed a 7-year remediation which restored water quality, wetlands and creek flow and was a national finalist at 2006 Riverfest.

Adelaide Advertiser: 9th September 06
Australia's elite agricultural region hit hard
South-East farmers' grim fight for survival
Families on the front line living in hope

The normally productive, usually reliable Upper South-East is facing a crisis like never before. It is only September, yet paddock feed is non-existent, crops are failing and the water table is dropping.

Adelaide Advertiser: 13th September 06
Our only way to beat the drought – move to the city
Moving out to beat the drought
“We haven't failed, the area hasn't failed, it's just that it didn't rain.”

Murray Mouth open to boats

Boating access beyond the Mouth of the River Murray will be available over the October long weekend. Boats will be able to travel past the Mouth during daylight hours at no cost. An extension zone for boats around dredging equipment will be marked by buoys. Access past the Mouth beyond the October long weekend is still to be approved by the Murray-Darling Basin ministerial Council. Almost \$21 million has been spent dredging the river mouth over the past five years.

River News: 13th September 06
Drought Fears

Low rainfall has lowered crop estimate right across the State with farmers in our area (SA Riverland) not as hard hit as some.

Adelaide Advertiser: 15th September 06
Water Pain to Hit Home: Rann

Tougher water restrictions – including using sprinklers on alternate days – are almost certain unless there is widespread rain over the next month.

What Other States Do

Queensland

No hosing or sprinkling of lawns and gardens/Watering only with hand-held bucket or watering can/Washing of vehicles only with bucket/Swimming pools and spas only topped up on alternate days and filling of portable child play pools banned/Hosing of hard surfaces banned.

New South Wales

Hand held watering of lawns and gardens and drip irrigation on Wednesdays and Sundays before 10am and after 4pm/Permit required to fill new or renovated pools bigger than 10,000 litres/Hosing of hard services banned.

Victoria

Manual watering systems only between 6am – 8am and 8pm – 10pm on alternate days/Hosing down of driveways banned/Cars washed only using a bucket/Pools cannot be filled without approval.

South – East Queensland

Hosing or sprinkling of established gardens, lawns and landscaping is banned at all times/Watering of gardens, lawns with hand held buckets filled from a tap is permitted at any time/Hosing of hard surfaces is prohibited at all times/Washing of vehicles, house, windows, boat is only permitted with buckets filled from a tap/In worse drought – hit areas such as Toowoomba, it is illegal to have a hose connected to a tap.

Sydney, Illawarra and Blue Mountains

Hand hosing of lawns, gardens and drip irrigation is allowed on Wednesdays and Sundays before 10am and after 4pm/No other watering systems or sprinklers to be used at any time/A permit is required to fill new or renovated pools bigger than 10,000 litres/No hosing of hard surfaces including vehicles at any time/No hoses or taps to be left running unattended, except when filling pools or containers.

Melbourne

Watering systems can only be used on alternate days during specific times – non-automatic watering systems between 6am and 8am and 8pm and 10pm, automatic watering systems between midnight and 4am/Wash vehicles with a bucket-pre-rinse and rinse only with and-held hose fitted with a trigger nozzle/Hand held hoses must be fitted with a trigger nozzle for garden lawn watering/Hosing driveways, paths, concrete and paving not allowed.

Perth

Water lawns and gardens using sprinklers or drippers only on two allocated watering days, either once in the morning before 9am or once in the evening after 6pm/Water lawns and gardens with a hand held hose or watering can.

Adelaide Advertiser: 15th September 06

Dr. David Suzuki (Renowned environmentalist), “Stop burying your heads in the sand.

He believes, “Climate Change” is the biggest threat the world faces and is much worse than most people think.

Drought

More families expected to walk off properties

Land values to sink

Rural land values are expected to fall for the first time in many years as the drought leads to a significant drop in the number of grain farmers.

Weekend Australian: Sept 16th – 17th September 06

Are the states imposing almost useless drought restrictions on water consumers while failing to building the infrastructure to convey the water to them?

AWA

Fixing Australia's water supply system is achievable and would boost our economy by \$9 billion, according to the Business Council of Australia. It found that instead of taking hard decisions to fix the problem, Governments are supporting a flawed water system that is effectively turning sufficient supplies of water at the source into scarcity for householders and business.

The National Water Initiative Committee has approved draft Guidelines for Customer Water Accounts that provide information on water use relative to equivalent households in the community. The draft guidelines were developed by a water industry expert group and are available for comment until 12 October 2006.

The \$1.1m Salt Interception Scheme at Bookpurnong SA, groundwater pumping and drainage project that intercepts saline water flows to reduce saline water discharges to the river Murray; part of the MDBC's Basin Salinity Management Strategy \$60m of salt interception works is now operating.

Water Trading has taken off big time in farming communities in the Murray Darling Basin with prices hitting record levels in August.

A week ago, Australia's largest Industrial Water Recycling scheme thus far was opened to produce very high-grade water using a high-grade reverse osmosis process. The landmark project will enable BlueScope Steel to save >7 GL/year.

The Parafield Urban Stormwater Harvesting Facility was awarded the Global Grand Prize Innovation Award for Small Projects (less than US\$5 million) at the IWA World Water Congress held in Beijing from 10 to 14 September 2006.

With Victoria in the grip of a water crisis, the government is facing a backlash from Gippsland over a \$1.5 billion plan to secure Melbourne's drinking water supply for 50 years by replacing billions of litres of fresh water used by Latrobe Valley power stations with Treated Effluent from the city.

The chief of WA's Water Corporation, Dr Jim Gill, has reaffirmed that the utility's priority was to secure the state's water future in view of the driest Perth winter on record.

In Queensland, following the recent election, Premier Peter Beattie and Deputy Premier Anna Bligh will ensure the water grid and other water infrastructure is delivered, by taking personal responsibility for delivering the commitments.

At least 100 Australian delegates joined the thousands in attendance at the IWA World Water Congress in Beijing. Delegates scurried between multiple presentations, worked in Specialist Groups and enjoyed Chinese cuisine. AWA President Darryl Day was there to represent us.

The Victorian Govt will jointly fund an \$1.18m ASR feasibility study by Barwon Water for storing Recycled Water in an underground aquifer for potential redraw and use by industry and agriculture to help secure water supplies for the Geelong area.

Gold Coast City Council has won the International Water Associations' (IWA) Global Grand Prize for Planning Innovation at the World Water Congress in Beijing for the Pimpama Coomera Master Plan which aims to save up to 84% through use of Class A+ recycled water and rainwater.

City Of Salisbury and KBR's Parafield ASR project took out the Global Grand Prize for Small Projects, at the same event.

Queensland Water Commission has announced that uniform, Level 4 restrictions will be in place in SE Queensland by the end of October - focusing on swimming pool covers (mandated by July 07) and business performance improvements.

Thames Water, infamous as Britain's leakiest water company, plans to build the nation's biggest reservoir for 25 years near Abington, Oxfordshire to provide for the growing needs of an ever-thirstier London; but it means higher water charges for customers.

In recognition of the difficulties involved, USEPA water officials are backing away from a 2008 target of having 95% of people served by local water systems reach the highest of all health-based standards.

Italy's Abruzzo Region will take steps to reform its water management, have a single agency to avoid duplication of staff, high water bills, and a scattergun approach to the maintenance of water networks resulting in a huge loss rate - up to 60% - of water through leaky pipelines.

The Greek and Turkish mayors of Nicosia, in Cyprus, have agreed to build, by 2009, a new 747m STP in the north of the city to replace the current outdated facility, which is polluting the Pedieos River and local groundwater; and to provide recycled water for irrigation.

Sydney has missed an opportunity to benefit from the wettest Septembers in years by dragging the chain on stormwater harvesting.

Adelaide, where residents staved off water restrictions due to substantial reliance on recycled water now looks like it too will have to adopt more stringent measures after a dry winter.

An innovative back-to-base communications system so aged people living alone can do so safely by monitoring water usage is being trailed in Japan.

Are the states imposing almost useless drought restrictions on water consumers while failing to building the infrastructure to convey the water to them?

BHP Billiton has proposed that commonwealth water grants be used to fund a desalination plant for its planned \$7 billion uranium mine expansion at Roxby Downs. The public funding plans were revealed in a joint BHP Billiton and South Australian government study, obtained under Freedom of Information legislation.

Irrigators and the environment are sharing the costs of cutback in allocations of Murray River water.

Adelaide Advertiser: 18th September 06
Water system 'broken'

Australians should not have to endure water restrictions, as the Nation's water supply problems are "man-made" and not due to shortages, a major report says. The Business Council of Australia will today release a report on the Nation's problems, which says the water system is "broken" and in need of "urgent solutions. "We should not accept a water supply system that requires 80 per cent of Australians to endure even harsher water restrictions," Council chief executive Katie Lahey said yesterday. "Our water supply problems are man-made due to poor planning and management." The council is calling for new options for urban water supplies, great investment in infrastructure, an expansion of water trading and a National review of water pricing.

Letters to the Editor: Same Day
Free Market Bid

The most effective means of allocating resources is via the free market. Water should be no different. Water would be sold strictly by quantity consumed or diverted.

Adelaide Advertiser: 19th September 06
Time is short for restoring the Murray.

Half of the water committed to restoring the River Murray flows is yet to be seen, while action to secure the rest has slowed, an environment conference has been told.

MDA

Australian: 15th September 06

Irrigators and environment share SA water cut backs

Allocations for South Australian irrigators will remain unchanged at 80pc after another month of record low river inflows.

In August, total inflows to the Murray-Darling Basin system were 230GL, the lowest since August 1902. For the same month last year, 1180GL was received and in 2002, 360GL flowed into River Murray storages.

The lack of inflows to the Murray system poses serious implications for the availability of water in South Australia and SA Minister for the Murray, Karlene Maywald, now expects the State will receive 1800GL of its annual entitlement flow from interstate, instead of 1850GL. "But that 1800GL forecast could decline further if we do not receive average rainfall until the end of the year," Ms Maywald said.

"Currently, irrigators allocations have been reduced by 20pc and whether that must be decreased further depends entirely on the amount of rain received in the Murray-Darling Basin during spring."

Ms Maywald says low flows have significantly impacted the ecology of the River Murray floodplain and Coorong estuary.

For the first time this year, the River Murray Environmental Manager – which monitors environmental flows along the river in SA – has prepared an environmental drought management strategy for 2006-07. "While irrigators' ability to take water is being restricted, the environment will also bear some of the consequences of low inflows and storage levels," Ms Maywald said.

"A number of initiatives are being explored to minimise wetland evaporative losses, which will involve blocking some unregulated wetlands and may save about 5GL of water."

Australian: 15th September 06
Another El Niño summer looking more likely

In terrible news for farmers already struggling with drought, the Bureau of Meteorology says another El Niño summer is looking increasingly likely.

The Bureau says that since early August, key indicators have been consistent with the development phase of an El Niño event.

These include sustained negative values of the Southern Oscillation Index, warmer than normal tropical Pacific Ocean temperatures, and a marked decrease in the strength of the Trade Winds.

During the past fortnight, weekly surface temperatures have risen above El Niño thresholds in the western and eastern Pacific, while reaching a level just marginally below in the central Pacific.

However, to qualify as an El Niño event, tropical Pacific temperatures would need to persist at their present weekly levels for around another four months accompanied by a continued weakening of the Trade Winds and above average central Pacific cloudiness.

Most computer models indicate continued warming in the Pacific, which implies a probable strengthening of the developing El Niño pattern.

The observed below average rainfall during late autumn and winter across Australia's southern half, especially in the southeast and southwest, is also consistent with the early stages of an El Niño event.

Furthermore, even if El Niño thresholds are not reached across the range of indicators, a warming Pacific and a low SOI bias the climate towards being drier and warmer than average across eastern and northern Australia for the remainder of 2006.

This is reflected in the Bureau's spring outlooks for rainfall and temperature.

Australian: 18th September 06
Joyce calls for Menindee redevelopment

Queensland Nationals Senator Barnaby Joyce has called for the redevelopment of the Menindee Storage System, near Broken Hill in western NSW. "I believe the time has come to stop giving an issue this serious, nothing more than lip service," Senator Joyce said.

Although the facility is well positioned geographically, its design ensures it is probably one of the most inefficient storage systems in Australia.

"With an average of 80pc of Queensland's total water extraction in the Murray Darling Basin evaporating every year in the Menindee, something must be done in terms of the structure of this facility.

"There are not just storage issues at play here.

"The ineffective nature of this system contributes significantly to water issues farther down the Murray and into South Australia.

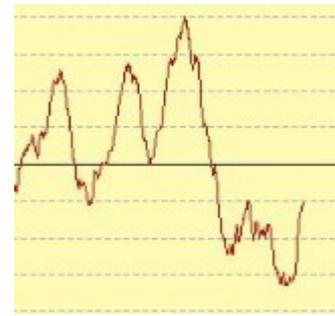
"Let's just stop the talk and start the development," Senator Joyce said.

By PENNY WATTS – Australian: 18th September 6
Water trading to \$350/megalitre in NSW's south, Vic

Record low inflows and tight water allocations have sparked a water trading frenzy in the NSW's south.

About 30,000 megalitres - enough to fill 30,000 Olympic swimming pools - have been sold in the Murray and Murrumbidgee valleys in recent weeks for an average of more than \$150/megalitre.

Farther south, demand has pushed prices even higher, with water selling for up to \$350/MI in Victoria's Goulburn Valley.



The 30-day rolling SOI.
Source: Bureau of Meteorology.

For some, the prices on offer will return more than any benefits from irrigating their enterprise with a limited allocation.

Internet-based water trading company, Waterfind, said about 10 times as much water had been traded in August than the same month last year.

And for the first time, says managing director, Tom Rooney, there's been a lot of trade between valleys.

Mr Rooney said Waterfind had last month traded about 40,000ML, compared with 4000ML every August for the past three years.

He said water trading was growing by about 20pc a year, but a big uptake on top of a dry season created a higher demand for water early in the season.

Mr Rooney said 70pc of trading was carried out in the southern Murray-Darling regions, with about three-quarters of that in the Murray-Murrumbidgee regions.

Adelaide Advertiser: 19th September 06

Time is short for restoring Murray

Half of the water to restoring River Murray flows is yet to be seen, while action to secure the rest has slowed, an environment conference has been told.

Time was running out for the commitment to return 500 gigalitres of water by 2009 was made through the National Living Murray project.

While 240 gigalitres will be provided once infrastructure projects are completed, talks must start now to buy the rest from current users, Mr Scanlon said.

“The biggest challenge we are confronting is that we have over-allocated the system,” he said.

Adelaide Advertiser: 20th September 06

Fears of rapid growth in rural social problems
\$700m cut in SA grain crop value

The escalating drought is estimated to have wiped close to \$700m from the value of SA's grain crop compared to last year.

AWA

Prime Minister Howard has announced 11 projects involving Australian Government funding of \$21 million to support total investments of \$34 million with the centrepiece being \$27 million to improve understanding of Australia's tropical northern rivers and coastal environments, located from the tip of Cape York Peninsula in Queensland to Cape Leveque in Western Australia.

IPART (Independent Pricing and Regulatory Tribunal) has released its pricing for Recycled Water in NSW to apply from 1 January 2007 for Hunter Water and Gosford City Council and 1 July 2007 for Sydney Water and Wyong Shire Council. Usage prices for recycled water at Rouse Hill will be progressively increased so as to equal 80% drinking water usage charge; the fixed charge will be reduced to \$10.28 p.a. by 1 July 2008.

A Performance Audit for Onsite Septic Systems in Victoria has been tabled by the Auditor-General. The audit found that although system operations were improving and risks generally reducing, most local governments had incomplete and/or inaccurate records of location, age and condition of tanks in use.

A \$4.6 million project to improve understanding and management of Salinity in the Australian landscape has been launched with funding provided through the Australian Government's National Action Plan for Salinity and Water Quality.

Sydney Water has awarded the contract to EL Civil Engineering to build an 8.5 km recycled water pipeline from West Camden Sewage Treatment Plant to the Elizabeth Macarthur Agricultural Institute as part of a \$50 million upgrade currently underway at the West Camden treatment plant.

The Western Australian government has relaxed the eligibility criteria for Farm Water Grants as a result of pressure on farmers from the prolonged dry season.

Victorian Water Minister Thwaites has issued assurances that Melbourne's Water is Safe to drink amid concerns that treated sewage is discharged into one of the Yarra River's tributary creeks upstream of where river water is pumped into the Sugarloaf reservoir supplying Melbourne's northern suburbs.

Farmers in Brittany are staging Hunger Strikes to protect water quality and to protest against EU subsidies, which favour pesticide and fertilizer intensive crops and which, they say, encourage intensive, water-polluting agriculture and pollute lakes and groundwater, with demonstrations now set to spread across France.

AJM Environmental has been awarded a \$4.5 million contract to upgrade trade waste treatment in Smithfield at Arnott's Snack-foods to comply with Sydney Water's BOD discharge limits. AJM has also won a \$2.8 million contract for the supply and installation of a 6ML/d DAF system for Power and Water, for a major waste reuse project in Alice Springs.

The November 2006 issue of WATER Journal will contain features on water recycling, membrane technology and 'smart' sewers. There will also be product reviews connected to the annual pump feature, as well as irrigation equipment, recycling services and products.

The Bracks government is looking for more money for water infrastructure undertaken by public-private partnerships: the target is large superannuation funds.

Investors who have seen energy prices rocket due to scarce supplies are starting to wager that forecasted shortages will cause the Value of Water to skyrocket and the costs of treating lower quality sources to rise, offering big gains to companies active in the sector. Their interest is likely to spell difficulties for governments whose regulated prices tend to keep water at artificially low prices.

The vortex formed when water is sucked down the bath plug puzzled Paul Kouris and resulted in the Kouris Centri Turbine which uses this aspect of water behaviour to generate electricity.

The costs of water recycling projects will have to be shared among residents.

Billionaire businessman Richard Pratt said Australians paid the second-lowest rates for water in the world and should pay double what they are now.

Tougher rules for water use, stricter than those recently introduced in Adelaide, are likely in the coming months, due to the low level of Murray River water. ([Website](#))

Adelaide Advertiser: 22nd September 06

Environment misses out

The environment was the big loser in the SA Budget despite new funding for a \$6m native River Murray and more than \$7m to recruit 20 extra park rangers. The initiatives would be funded through more than \$20m worth of cuts to other environment programs, including koala management and nature conservation.

Drought set to have even bigger impact

The drought will have a worse than expected impact on the state economy, cutting hundreds of millions of dollars from the Gross State Product this year.

Farmer fears hard times

This year would have an enormous impact on pastoralists and the farmers, "if we don't have farmers to buy our surplus stock because they haven't got the feed, the price of sheep will drop dramatically as many pastoralists rely on surplus sheep for 50% of our income, so that will have huge effects around the state.

Adelaide Advertiser: 23rd September 06

Wider drought funding tipped

A widespread area of South Australia might be eligible for financial support from the Federal Government under its Exceptional Circumstances drought funding program.

Herald Sun: 23rd September 06

'There's no reason why water can't be a lot more expensive' Richard Pratt

11.

Adelaide Advertiser: 25th September 06

We will all face tough water cuts as drought takes hold

South Australia households face even tougher water restrictions by early next year, as the drought hit River Murray storage system drains to record lows. The State Government already plans to tighten restrictions from the middle of next month.

Farming sector fears worst

The present drought is expected to be the most damaging in more than a century and threatens to cut the value of agricultural production by billions of dollars.

Adelaide Advertiser: 26th September 06

No ride on sheep's back

The drought is expected to plunge the national sheep flock to 98 million head this year as wool production reaches long term lows.

Howard to speed up water reforms

Prime Minister John Howard will today announce the establishment of a dedicated water agency to speed the pace of reform.

Adelaide Advertiser; 27th September 06

Turnbull 'set for top job'

Prime Minister John Howard had created Malcolm Turnbull's new federal water authority to promote Treasurer Peter Costello's main rival for the Liberal leadership, Opposition Kim Beazley said yesterday.

Carting water in the battle to survive

Water is proving a precious commodity for townships along the barren Barrier Highway in South Australia's Northeast. Some townships have been forced to cart water for public use because local supplies are so tainted they pose a health risk. In other communities tourists have been unable to top up with fresh water on long desert treks. In Yunta, population 45, residents and business owners say the biggest challenge is the lack of good quality water. Dead kangaroos reportedly have been found in supply dams and residents say that even if it does rain, the dam catchments are so littered with health risks the water only will get worse. Dams hold water of such poor quality warning signs have been placed above all taps to stop people drinking it.

Adelaide Advertiser: PM Edition 27th September 06

Stark warning on SA climate

SOUTH Australia will have hotter days and less rainfall, leading to more droughts and bushfires, a report into the effects of global warming finds.

Prepared by the CSIRO and commissioned by the state government, which released it today, the report said the effect of climate change to 2070 would be most severe inland. By 2070, average temperatures over the north of the state could rise by as much as six degrees. It said coastal regions could expect an increase in summer temperatures of up to 1.6 degrees over the next 25 years. Winter rainfall in most areas could fall by as much as 15 per cent, but with more spring and summer rain likely. The CSIRO said atmospheric greenhouse gas concentrations, considered important to climate change, were likely to reach more than double pre-industrial levels this century. "Hence, some degree of climate change across South Australia is inevitable and the impacts are likely to become increasingly apparent over the coming decades," it said. South Australian Premier Mike Rann said the report - which examined the effect of climate change on SA only - came as the state was emerging from the driest winter on record. "This is a sign of things to come, with findings that climate change in South Australia will lead to higher temperatures, lower rainfall and an increase in droughts and fires," Mr Rann said. "We are already seeing the effect that drought is having on our water resources and on our farmers and producers. "As these conditions continue, we are also going to have to deal with the impact on our wildlife and our native vegetation. "At the same time, the threat of flooding and bushfire is likely to increase as a result of more extreme weather conditions." Mr Rann said the CSIRO report showed the effect of climate change could not be underestimated. "These findings prove

climate change is an issue to be taken seriously and further validated South Australia's strong commitment to the issue," he said. "Climate change is one of the most pressing world issues."

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River News: 27th September 06
More water restrictions likely

Recently the Minister for the River Murray, Karlene Maywald announced that the 80% water restrictions placed on irrigators would remain in force. She also flagged that unless spring rains lift inflows into the Murray darling system allocations could be further reduced.

Adelaide Advertiser: 28th September 06
Climate change 'terror'

A new "terrifying" climate change report shows temperature change predictions for the State's coast have already grown by 0.3C in just three months. The Government commissioned CSIRO report tabled in Parliament yesterday, warning "no nation in the World will be more affected by global warming more than Australia".

Threat from rising oceans

Port Adelaide and much of Adelaide's West will be under water by the end of the century if a warming climate continues to melt polar caps, imagery shows.

Creek 47 times above safe levels

Students test the water and decide to act; students from Onkaparinga River region this week took part in the MYRiveR program, which tested water quality at 11 sites along the Onkaparinga River, Christies Creek and Field River. They found Christies Creek had the worst contamination levels in terms of safe amounts of phosphates and faecal matter. River, Christies Creek and Field River. They found Christies Creek had the worst contamination levels in terms of safe amounts of phosphates and faecal matter.

Week ending Wednesday 27th September 2006

Water in Storage

Dartmouth	2100 GL	54%		
Hume Reservoir	580 GL	17%		
Lake Victoria	554 GL	82%	2951 GL	35%
Menindee Lakes	242 GL	14%		

Major State Storages

Burrinjuck	317 GL	31%
Blowering	820 GL	50%
Eildon Reservoir	694 GL	20%