



Research to underpin horticultural reuse

The second stage of a major research project addressing key issues for all stakeholders when irrigating horticulture crops with recycled water has just been approved.

Land and Water Australia (National Program for Sustainable Irrigation (NPSI)) has funded the national project (VP14 Use of reclaimed effluent water in Australian Horticulture: Stage 2 – Research required to ensure sustainable development of horticultural industries in Australia), which involves partners from Victorian and Western Australian State-based agencies, CSIRO and ARRIS.

There are also strong links with the Horticulture Australia Coordinator for Reclaimed Water Development in Horticulture position through Dr Daryl Stevens and Jim Kelly.

This second stage will focus on the development of integrated best management practices and monitoring packages for growers to ensure their systems remain sustainable.

The approach will be based on risk principles with the systems framework being applied to two major case studies – Virginia Plains (SA) and Werribee Irrigation District (VIC). Most growers will be interested in the development of simple models and tools to help manage salinity and nutrients.

Pilot research will also be undertaken to further understanding of different stakeholder perceptions to the use of recycled water. Training and education will be focussed on as the tools and information packages become available.

continued page 2

A product of the Coordinator Reclaimed Water Development Horticulture project. Funded by Horticulture Australia Limited



contents

from page 1

The first stage of the project involved a six-month scoping study to determine the key impediments to the adoption of recycled water. Discussions with interested parties and a comprehensive literature review indicated that issues related to long-term sustainability of farming systems and market acceptance of produced were of the greatest concern.

A systems framework was developed to assist the assessment of risks of a recycled water scheme from the perspective of all parties involved.

For more information, please contact:

Dr Anne-Maree Boland (principal Investigator)
Department of Primary Industries Victoria
t (03) 9210 9203
m 0409 029 884



Project Steering Committee and Researchers

From the editor

ReWater has been developed in recognition of the growing interest in the use of reclaimed water in agriculture.

We want ReWater to become your forum to communicate your thoughts about the beneficial use of reclaimed water.

If you would like to receive a copy of ReWater electronically, email us at rewater@reclaimedwater.com.au

If you have articles, ideas or want to raise any issues, please submit them to the Coordinator for Reclaimed Water Development, Horticulture:

Dr Daryl Stevens
rewater@reclaimedwater.com.au
t (08) 8303 6707
f (08) 8303 6752
m 0427 821 625

Reclaimed Water coordinator prioritises work

The second milestone has been met for the Coordinator Reclaimed Water Development Horticulture. A number of activities have been initiated in order to progress towards meeting the desired outputs and outcomes for the project so far.

Page 3

National Response Strategy for issues related to the use of recycled water in agriculture

This response strategy was instigated to address issues identified with horticultural/agricultural use of reclaimed/recycled water in Australia.

Page 4

Werribee stakeholder group formed

Stakeholders in the Werribee Irrigation District Recycled Water Scheme will be kept up to date with the latest news in their area thanks to a newly formed reference group.

Page 5

Barwon Water initiatives on show

Barwon Water's recycled water projects in the Geelong region were on show in March to water representatives from across Australia.

Page 6

Horticulture secures EMS funding

Horticulture Australia Limited (HAL) and Horticulture Australia Council (HAC) have welcomed newly announced funding for horticulture under the *Pathways to Industry Environmental Management Systems (EMS) Program*.

Page 7

Events

Pages 8-9

Press Round Up

Pages 9-11

Industry Development Contacts

Page 12



Reclaimed Water Coordinator prioritises work

The second milestone has been met for Horticulture Australia project HG02092 (Coordinator Reclaimed Water Development Horticulture). A number of activities have been initiated in order to progress towards meeting the desired outputs and outcomes for the project.

These activities include: appointment of a skills based management committee from across Australia; appointment of staff to service and manage the project (Jim Kelly and Dr Daryl Stevens); newsletter development and publication; website construction and updates; assistance with the Land and Water Australia Project (No VP14 - Phase 1); and attendance/presentation at state and national workshops, conferences, public meetings and industry/government meetings regarding horticultural use of reclaimed water.

The management committee has recently helped to prioritise the work requirements for the project. These priorities include:

1. A quarterly national recycled water newsletter.
2. Preparation of reclaimed water information and training.
3. Development of a national information network to facilitate education, adoption and development of low risk horticultural irrigation schemes using recycled water. This includes a:
 - Newsletter (ReWater);
 - Website (www.recycledwater.com.au); and
 - National Issue Response Strategy (Page 4).
4. Providing time and assistance for the development of the Land Water Australia reclaimed water project (Project No. VP14).
5. Surveying growers, retailers, wholesalers and consumers of their knowledge and perceptions of reclaimed water in conjunction with the Land and Water Australia research project (VP14).
6. Participating in workshops and forums to educate key industry representatives and the wider community of reclaimed water use in horticulture.
7. Participating in the Environmental Working group for the drafting of National Reclaimed Water Guidelines. Dr Stevens is a member of the Contaminants subgroup, and the Salinity and Nutrients subgroup.
8. Promoting/communicating commodity specific codes of practice for water reclamation and reuse.
9. Continued assistance with the organisation of reclaimed water tours at state and national levels, to educate scheme operators and users of best management practice of reclaimed water use in horticulture.
10. A more consistent approach to state recycled water regulation and reuse in Australian Horticulture.
11. International Study Tour Sept 2004
www.arris.com.au/tem_current.html

Contact details

Dr Daryl Stevens
 t (08) 8303 6707
 m 0418 802 621
 e dstevens@arris.com.au
 w www.reclaimedwater.com.au

National Response Strategy for issues related to the use of recycled water in agriculture.

A product of the Coordinator for Reclaimed Water Development in Horticulture Project – Horticulture Australia Limited.

www.recyclewater.com.au

This Response Strategy was instigated to address issues identified with horticultural/agricultural use of reclaimed/recycled water in Australia. Our aim is to ensure communication is open, clear and directed to appropriate state organisations/representatives to ensure information is factually correct.

If the information is factually correct and the use of recycled water is causing environment or animal/human health issues, the Response Strategy will initiate the appropriate state and national responses to address the issue efficiently.

Dr Daryl Stevens is currently the contact person for the Response Strategy. He can be contacted seven days a week, to discuss published or potential issues regarding the use of recycled water in agriculture.

If considered appropriate, he will forward details of the issue to state based contacts as soon as practically possible, to ensure the designated state experts in food safety, human health, environmental pollution, agronomy or water treatment are made aware of the issue and appropriate actions are instigated.

Contact details

t (08) 8303 6707
 m 0418 802 621
 f (08) 8303 6752
 e dstevens@arris.com.au



Salt reduction programs underway

Extract from the latest shareholders news from Foster's Group (April 2004)

Foster's prides itself on being an environmentally responsible producer. The group has always set world-class standards in its environmental practices and is constantly seeking new ways to improve all its manufacturing and distribution processes to minimise environmental impacts. This also includes working with industry counterparts, associations and regulatory authorities.

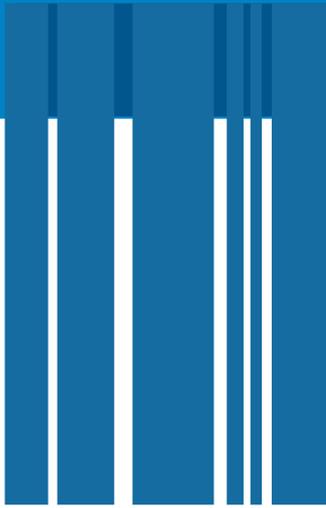
One of the key issues facing Australia in the 21st century is the availability of adequate supplies of fresh water and the associated problem of salinity. Foster's operations involve water consumption through its brewing operations and irrigation use for its viticultural activities. As such, water usage and saline discharge are key issues for Foster's.

Within CUB, a significant amount of water is used during the brewing process. Whilst most of this water is used in beer production, some of it is used for bottle and equipment cleaning in the production process.

Over the years CUB has made significant reductions in water consumption and in the last two years alone, CUB has reduced national water consumption by 11 per cent across all of its brewing operations and by 13 per cent at the Abbotsford brewery in Victoria. This has been part of the continuous improvement program over the last decade.

As part of its work to further improve its environmental performance, CUB has announced an initiative at the Abbotsford brewery, in conjunction with City West Water and the Environmental Protection Agency (EPA) Victoria. The project will review on-site water management processes to identify further means to reduce the volume of waste water and also the amount of salts (total dissolved solids – TDS) in the water.





Werribee stakeholder group formed

Stakeholders in the Werribee Irrigation District Recycled Water Scheme are now being kept up to date with the latest news in their area.

A Reference Group has been formed to provide a forum for community and customer involvement and is currently meeting fortnightly.

Information about the scheme is being provided to stakeholders in a number of ways. Grower and community representatives in the Stakeholder Reference Group disseminate information to their groups, monthly newsletters are distributed to all potential customers, and a website has been created:

www.melbournewater.com.au/werribeeirrigation

Current and historical recycled water quality data is available on the website, with an explanation for each parameter.

The website includes copies of the monthly newsletters. It also highlights the quality of the recycled water currently provided by the Western Treatment Plant, which is prior to the implementation of a final disinfection step (a chlorination plant) to ensure Class A recycled water quality is consistently achieved.

The website will be updated to include water quality data, post the disinfection step once the chlorination plant is commissioned in October 2004. The website will also provide answers to the various questions submitted by interested community members and stakeholder meeting minutes.

The Werribee scheme will predominantly supply market gardeners in the Werribee Irrigation District with Class A recycled water from Melbourne Water's Western Treatment Plant. The scheme will be commissioned at the end of October this year.

Work on the Regional and On-Farm Environment Improvement Plans has begun. The chlorination plant is currently under construction and pipeline construction will begin in May.

Contact details

Peta Maddy

Project Manager

t (03) 9235 2102

e recycling.team@melbournewater.com.au

w www.melbournewater.com.au/werribeeirrigation



Barwon Water initiatives on show

Barwon Water's recycled water projects in the Geelong region were on show in March.

Water industry personnel undertook a two day tour of Anglesea, Torquay, Barwon Heads and Portarlington Recycled Water Schemes in Victoria organised by the Australian Water Association's (AWA) Victorian Water Recycling Forum Representative, Peter Byrnes.

Barwon Water facilitated and sponsored the tour which not only focussed on its projects, but also encouraged the exchange of views and experiences across Victorian Water Authorities. Representatives from nine water authorities joined the tour and were joined by the EPA, local Council (Surfcoast Shire) and Dr Daryl Stevens from ARRIS (Coordinator Reclaimed Water Development in Horticulture – Horticulture Australia Limited).

Starting at the Tree Propagation Centre, Barwon Water's natural resource management initiatives were explained. The Tree Propagation Centre is funded and staffed by the company and has been providing a venue for community groups including schools and landcare groups to grow trees for revegetation projects since the mid 1990s.

Each year, about 30 groups are involved with up to 100,000 trees produced annually. Barwon Water also funds the fencing of waterways in the streamside revegetation program for their Catchment area.

The group also toured: Anglesea Golf Club; Ellimatta Reserve, Anglesea; Thirteenth Beach Golf Resort; Barwon Heads Golf Club; Anco Turf; Mandinia hydroponic tomatoes; Torquay Sands Residential and Golf Development; Scotchman's Hill Winery and Water Reclamation Plants at Anglesea, Black Rock and Portarlington.



One highlight was at the evening discussion, which provided participants with the opportunity to speak with a lawyer specialising in water issues, covering legal aspects of recycled water projects.

Barwon Water currently has four recycled water schemes servicing 10 customers. Nine other recycled water agreements and two further schemes are in progress. Barwon Water maintains control over end use customers, but three schemes have been built with private recycled water customer funds and remain in private ownership, while a fourth scheme was constructed with grant funding and is vested in Barwon Water.

“Customers are currently paying between \$300 and \$450 per Megalitre for delivered Class C recycled water.”

Customers are currently paying between \$300 and \$450 per Megalitre for delivered Class C recycled water. The price variations generally depend on how far they are from the Water Reclamation Plant (ie cost of delivery) and to which scheme they are connected.

In a number of coastal areas, aging sewerage infrastructure is mainly responsible for salinity levels in recycled water reaching over 1000 mg/L or ppm total dissolved salts. This has not been of major concern in the past as the treated effluent was discharged to Bass Strait.

However, salinity of this level would prove a concern to some customers if they experienced prolonged dry periods.

continued page 7



Horticulture secures EMS funding

Horticulture Australia Limited (HAL) and Horticulture Australia Council (HAC) have welcomed newly announced funding for horticulture under the *Pathways to Industry Environmental Management Systems (EMS) Program*.

Speaking at the EMS National Pilot Program Annual Forum, Parliamentary Secretary for Agriculture, Fisheries and Forestry, Senator Judith Troeth announced horticulture had successfully secured up to \$926,000 for the implementation of the "Pathways to Environmental Assurance in the Australian Horticultural Sector" plan.

HAL managing director John Webster said the funding demonstrates the Government's recognition of the importance of environmental programs in horticulture.

"Horticulturists are keen to demonstrate their strong environmental credentials. However they don't want to be burdened with complex paper work or multiple systems," he said.

"Our proposal addressed the across industry issues surrounding environmental management systems and was developed with strong industry involvement.

"This funding will ensure horticultural growers have a one-stop shop for information about EMS and tools that integrate with existing farm management systems."

The "Pathways to Environmental Assurance in the Australian Horticultural Sector" plan will build on the codes of practice already developed in many horticultural sectors including nursery, turf and vegetables. It will increase awareness of environmental assurance in horticulture and enable horticultural growers to make informed decisions about the systems they implement in their businesses.

A component of this will be the development of resource materials including a *Beginners Guide to Environmental Assurance in Horticulture* and a checklist for compliance.

The materials will be developed with input from a technical steering committee and will provide a simple, user-friendly mechanism for growers to implement good agricultural practice (GAP) on farm. These will be trialled with growers to ensure they are realistic and easy to implement.

"This funding will ensure horticultural growers have a one-stop shop for information about EMS and tools that integrate with existing farm management systems."

A conference will also be held on November 16 this year, where industry will be provided with information on the resource materials and other environmental activities underway in horticulture.

Prior to this, an Industry Leadership Group will be appointed.

HAC Chief Executive Officer, Rob Bastian said the appointment of an Industry Leadership Group would be an important part of developing the necessary pressure on environmental agencies for the rationalisation of their current administrative demands on the industry.

Horticulture is the fastest growing agricultural industry in Australia with a gross value of production of \$6.5 billion. The industry includes vegetables, fruit, nuts, nursery, turf, cut flowers and extractive crops.

Barwon Water initiatives on show

from page 6

Customers were unanimous in recognising the value of the reliable water supply to their business operations and generally were of the view that their businesses would either not exist in their current location or be much smaller without the recycled water supply.

Barwon Water has commercial agreements committing 13 per cent of it's treated effluent to recycling. A further 5 per cent is recycled for internal uses.

Contact details

More information is available from:

Peter Byrnes

t (03) 5226 9204

e peter.byrnes@barwonwater.vic.gov.au

w www.barwonwater.vic.gov.au





Australian Water Reuse Project Workshop

Across Australia during May 2004.

An Update on Progress with Research: An Opportunity to Identify Future Goals.

The Australian Water Conservation Recycling Research Program will be showcasing the latest results of water recycling research & application at eight venues (Sydney, Melbourne, Adelaide, Canberra, Hobart, Brisbane, Alice Springs and Perth) in May by CSIRO and partners. To download the registration form and confirm dates for your nearest venue visit:

www.awa.asn.au/NSIG/forum/documents/AWCRRP_ProgramRegistration.pdf

Contact details

dwiesner@awa.asn.au

Irrigation Australia 2004 – Irrigation; coming of age!

Adelaide, May 11 - 13, 2004.

For up-to-date program details download the Conference Brochure (pdf) at:

www.irrigation.org.au/conferencebrochure.html

Australian Fertiliser Industry Conference

Couran Cove Island, August 2-5, 2004.

Couran Cove Island Resort – Gold Coast Australia

www.fifa.asn.au/

SuperSoil 2004

Sydney, December 5 – 9, 2004.

Hosted by the Australian & New Zealand Societies of Soil Science

Eastern Avenue Complex, University of Sydney, Sydney, Australia

www.icms.com.au/supersoil/

A study tour of horticultural and urban water recycling

USA, September 2004.

A project of the Coordinator for Reclaimed Water Development in Horticulture, Horticulture Australia Limited - www.recycledwater.com.au

Participants will experience world's best:

- Irrigation technologies
- Marketing of reclaimed water
- Public perceptions issues

- Wastewater treatment plants
- An enormous range of horticultural crops grown with reclaimed water (Vines, orchards, avocado, row and glasshouse, bunch line, broadacre, vegetables)
- Research into reclaimed water use
- Managing salinity and sodicity when irrigating with reclaimed water

Stage 1 California (September 12- 18)

Horticultural irrigation with reclaimed water, including the largest reuse scheme in the world!

Stage 2 Arizona (September 19-22)

Water Reuse: Bringing Life to the Desert

WaterReuse Association 2004 Annual Symposium. Phoenix, Arizona

www.watereuse.org/

www.watereuse.org/Pages/04wrasymp-cfp.pdf

www.watereuse.org/Pages/2004ExhibitorProspectus.pdf

Symposium themes include:

- Operations and operator issues
- Public education and outreach
- Regulatory and institutional issues
- Storage issues, including aquifer storage and recovery
- Treatment technologies including membrane treatment and UV disinfection
- Urban reuse (golf courses, parks, residential)
- Water quality issues
- Agricultural reuse
- Dual distribution system design and operation and cross connection control
- Disinfection
- Environmental enhancement reuse
- Financing, pricing, rates and economics
- Health effects and risk assessment
- Indirect potable reuse and ground water recharge
- Industrial reuse applications
- Innovative reuse applications

Stage 3 Florida (September 23 – 30)

Urban Reuse and third pipe schemes.

To express interest please contact:

Dr Daryl Stevens or Jim Kelly

t 08 8303 6706

e dstevens@arris.com.au

continued page 9

Wastewater use in irrigated agriculture: the water chain approach

Moscow, September 9, 2004.

The aim of this meeting is to provide an array of issues related to wastewater applications in agriculture and its implications on livelihood, farm and watershed management, as well as pricing and cost recovery of wastewater. We would like to engage a wide cross section of practitioners involved in field work, management and research.

www.dow.wau.nl/iwe/ICID%20Moscow/040304-ICID.pdf

Sasha Koo-Oshima
Water Quality and Environment Officer
Land and Water Development Division

FAO of the United Nations

Viale delle Terme di Caracalla 00100 Roma

t (39) 06 5705 3798

f (39) 06 5705 6275

e sasha.koo@fao.org

w www.fao.org

Water recycling plant on the cards for Goulburn

from the ABC. Tuesday, 24 February 2004.

www.abc.net.au/illawarra/news/200402/s1051895.htm

THE Greater Argyle council wants to install a new \$25 million water recycling plant in Goulburn in New South Wales. The plant would be used to treat the council's grey water, which would then be put back into the town's drinking supply. Administrator Max Hadlow says dwindling water supplies will see stage four water restrictions introduced in April. He says the council has to look for new options to protect future supplies. "We're looking at a \$25 million plant to put this together, so it's a major project," he said. "People are getting more and more receptive to those sorts of ideas, knowing full well that you just can't make water, so the only way to make water is to recycle it."

Water label out

from Environment Link. March 19, 2004. Vol 7 (35)

PUBLIC comment is being sought on the operation of Australia's proposed water efficiency labelling scheme. The scheme is intended to slash water consumption by improving the water efficiency of many household appliances. The mandatory national Water Efficiency Labelling and Standards scheme will be phased in from later this year. By mid 2005, four appliances must carry water efficiency labels — washing machines, dishwashers, toilets, and showerheads. This scheme will help consumers make informed decisions about what appliance to purchase and the water savings that are possible. The Federal Government has released a Regulation Impact Statement that gives people a chance to comment on proposed operation of the water efficiency labeling scheme. The closing date for written submissions was COB Friday 16 April 2004. The Regulation Impact Statement is available at:

www.deh.gov.au/water/urban/scheme.html

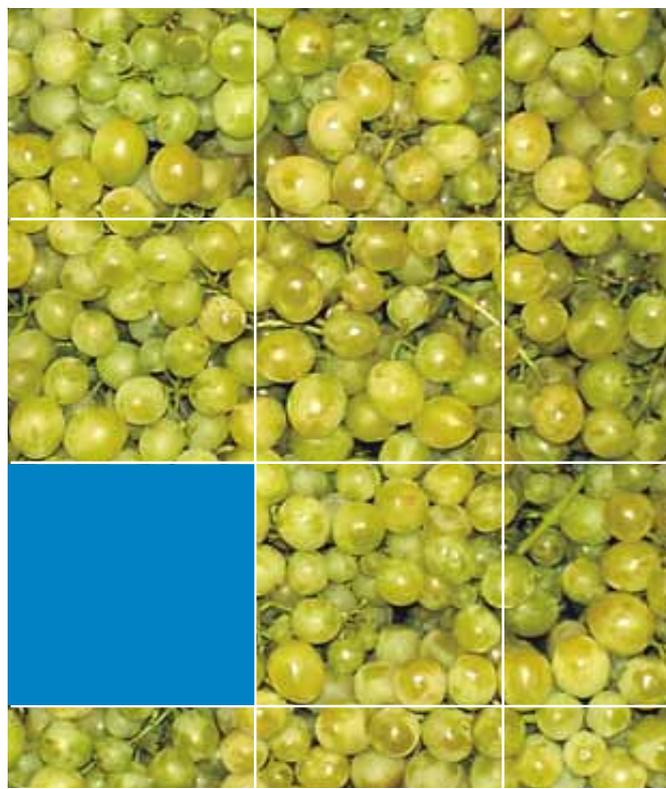
New Penalties for Unauthorised Water Use in Queensland

from Good Fruit and Vegetables. April 2004.

www.ruralpress.com.au/publications/detail.asp?publication_id=134

THE Department of Natural Resources and Mines has released details of a new penalty system to apply to excess water use. The penalty system is to apply to metered water users in unsupplemented water systems. The penalties do not affect Sunwater customers or water users within other supplemented systems. Excess water use is to be identified through meter readings and offenders will receive an infringement notice, a fine and a demerit point against their water licence.

continued page 10





from page 9

Water users who accumulate three demerit points in five consecutive water years will be prosecuted and may incur a more substantial fine. If the breach in water use is severe, the Department may prosecute immediately without issuing the infringement notice. Details of the penalty system are included in an information brochure that is being distributed widely. QFF was fully consulted on this new penalty system and supports its introduction.

Details of the new system can be obtained by visiting www.nrm.qld.gov.au/water/trading or telephoning the Department on 1800 803 788.

Computer technology to improve water use: Fischer

fw.farmonline.com.au/news_daily.asp?ag_id=19529&s=10192

AUSTRALIAN farmers should embrace computer technology to maximise their water-use efficiency, according to former Deputy Prime Minister, Tim Fischer. Mr Fischer - who chaired a session at the Power of Water conference in Albury, NSW - believes water is the most important issue in rural Australia this decade. But according to the former leader of the National Party, of Boree Creek, NSW, it's not just an issue for farmers. People running parks and gardens in Australian cities also have to become more efficient in their use of water. On the tricky matter of weighing up the merits of putting additional environmental flows down the Murray River, Mr Fischer said: "My over-arching view is you've got to drive every litre of water a lot further.

"Drip irrigation and computer-controlled smart irrigation, is the face of the future and then that means there may be more water for environmental flows because we do need a balance." Mr Fischer said Australian irrigators were very efficient with their water-use and had come a long way. Some crops, like cotton, can now be switched to forms of drip irrigation and smart irrigation. This provides for the same amount of production with a quarter of the water.

For city and country people alike, the message is: we now have the computer power to ensure that we use water to maximum efficiency and we must use it.

Three-way water buy-back split proposed

www.tinyurl.com/2npz5

THE National Farmers Federation (NFF) is proposing the cost of buying back water entitlements stemming from new scientific discoveries be split three ways between farmers and the federal and state governments. Farmers accept that they have to wear the costs associated with the vagaries of the weather and things such as droughts.

A Council of Australian Governments (CoAG) meeting in Canberra last year made it clear that governments would bear the responsibility for changes imposed on farmers through modifications to government policy. However, according to the National Farmers Federation (NFF), what remains a "grey area" is who will bear the costs of changes should new information reveal existing farming practices are unsustainable. For instance, if new scientific research finds a particular water course or aquifer has less water than was thought at the time of allocation and, as a result, water entitlements have to be bought back, who should wear the cost?

The NFF wants that cost spread evenly between farmers, Canberra and the State Governments. However, NFF president Peter Corish says the policy has two important caveats. One is that moves to buy back entitlements should only occur after the best scientific rigour has been applied to the process. The NFF suggests a panel process be established at state and regional levels to assess the science, with representation extending to the best scientists available, community representatives, environmentalists and, importantly, grassroots farmers. Its second qualification is that if the panel process deems water has to be bought back from particular sources, the amount of change imposed on farmers shouldn't exceed five per cent over a 10-year period.

Extracts from AWA Water News

www.awa.asn.au

Water Recycling in Australia (New Release)

Week ending 4th of April.

WATER Recycling in Australia by *Dr John Radcliffe* for the Australian Academy of Technological Sciences and Engineering, is now available. The 250 pp report can be downloaded in one go, or chapter-by-chapter. Printed copies are available free from ATSE by sending your postal address to ianr@atse.org.au. This is a comprehensive and useful resource for anyone interested in water recycling.

www.atse.org.au/publications/reports/waterrecycle1.htm

Water Licenses in NSW

Week ending 7 March 2004.

WATER Licenses will be issued to farmers in perpetuity, under proposed NSW legislative changes. Licences now expire in 15 years, undermining farmers' efforts to build the irrigation infrastructure necessary for products like cotton, rice, wine, fruit and milk.

fw.farmonline.com.au/

news_daily.asp?ag_id=19164&s=10192

continued page 11

from page 10

Withdrawn Surface Water Restrictions in parts of Qld

Week ending 7 March, 2004.

QLD NATURAL RESOURCES MINES & ENERGY has withdrawn surface water restrictions for irrigators in the Upper Herbert River, Lorenz Creek and Leslie Creek catchments. Groundwater users in the Atherton Sub-artesian Area now have access to 70 per cent of their 03/04 entitlement, up from the 50 per cent announced in May 2003.

fw.farmonline.com.au/

news_daily.asp?ag_id=19186&s=10192

Seawater desalination possibly an option

Week ending 28th of March

AS capital costs fall, California is becoming increasingly interested in Seawater desalination as a partial solution to high water demand. The question is not if, but how, where, when and under what conditions, desalination projects should be designed, built and operated. And for Australia?

www.coastal.ca.gov/energy/14a-3-2004-desalination.pdf
(360 Kbyte PDF)

From WaterReuse Organisation

www.watereuse.org/newsletter/news.htm

New Texas Desalination Plant Opens (13/4/04)

ON April 1, a ribbon-cutting ceremony was held at the Southmost Regional Water Authority's (SRWA) new Regional Desalination Plant in Texas, the Brownsville Herald reported. The state-of-the art reverse osmosis facility will treat brackish groundwater as an alternative supply for the Southern Cameron County region, producing 7.5 mgd of reclaimed water that will reduce dependence on the Rio Grande. "This is the largest brackish groundwater plant in the state of Texas," said John Bruciak, General Manager and CEO of the Brownsville Public Utility Board. The plant produces 40 percent of the annual water supply to its SRWA members.

NCC to rule on reclamation project

The National Competition Council (NCC) has been called to rule on Services Sydney's bid to gain access to Sydney's waste water to establish a massive water reclamation project.

Quentin Dempster (ABC Stateline) spoke with Frank Sartor (Energy and Utilities Minister, NSW), John Van Der Merwe (Services Sydney) and Ian Law (Services Sydney), in late April, about the ongoing battle to conserve water in New South Wales (NSW).

"At the moment, roughly 1000 Olympic swimming pools per day gets pumped into the ocean. To put that into context, that's roughly 200,000 full 5,000-litre rainwater tanks per day that gets discharged into the ocean - an enormous amount of water," Mr Van Der Merwe said.

North Head and Malabar have significant quantities of sewage, with low levels of treatment, pumped into the ocean, approximately 3km offshore. It is this vast resource of wastewater that Services Sydney want to utilise.

"We harvest that water. We have a north-south interconnected deep tunnel and water is diverted to a modern water reclamation plant and from there we return water back into the river systems for environmental flows and also for water for the irrigators," Mr Van Der Merwe said.

"A massive water reclamation project, using the latest water-recycling technologies."

He explained that water, to full potable standards, could be returned to reservoirs that are currently under strain due to negligible falls in catchment areas. Mr Van Der Merwe also believes his company's reclamation plan has been "parked" by the State Government and Sydney Water. Claims the government denies.

"We haven't parked this project. We've consistently asked Services Sydney to be much more specific, to tell us how this would work financially and economically without any burden on the taxpayer," Mr Sartor said.

He explained that they are wary of schemes that sound good but could end up proving costly to the taxpayer.

"I have not seen a financial feasibility yet that is specific enough to assure me that it's in the public interest," he said.

Mr Sartor says he is not opposed to private sector involvement in water reclamation, but believes there are more cost effective alternatives.

Continued page 12

from page 11

"I have no problem with this company or other companies coming forward with proposals, provided they make financial sense," he said.

Mr Van Der Merwe says, "We are not about privatising water, we are about providing value for money for the customer for the next 25 years.'

Significant technological improvements in recent years have allowed water reclamation to become very competitive, he explained.

Regardless of the NCC's decision, cheap, high quality drinking water will soon be a thing of the past in Australia.

Public submissions to the National Competition Council close on June 4.

*i*n brief

Good reads

Queensland Guidelines for Safe Use of Recycled Water.

Queensland EPA has released a Public Consultation Draft for consultation www.epa.qld.gov.au/environmental_management/water/safe_use_of_recycled_water/

Water Recycling in Australia (New Release Apr. 2004)

by *Dr John Radcliffe* for the Australian Academy of Technological Sciences and Engineering.
www.atse.org.au/publications/reports/waterrecycle1.htm

Interesting website

Barwon Water, Victoria
www.barwonwater.vic.gov.au/index.cfm?h2o=environment.water_recycling

contacts

Industry development contacts

Horticulture Australia has a network of Industry Development Officers (IDOs). They cover a range of industries including: Almonds; Apples and Pears; Avocados; Bananas; Chestnuts; Citrus; Custard Apples; Dried Fruits; Flowers; Irrigation; Macadamia; Mango; Melon; Nashi, Pome and Summer Fruit; Nursery; Pawpaw; Pistachio; Potatoes; Processing Tomatoes; Prune; Pyrethrum; Raspberry; Strawberry; Summerfruit; Table Grapes; and Vegetables.

If you have any enquiries with respect to using reclaimed water with the industries above, please contact Horticulture Australia Limited (details below) to obtain the contact details of the nearest Industry Development Officer for a particular crop.

Horticulture Australia Limited
Level 1, 50 Carrington Street
Sydney, 2000

t +61 2 8295 2300

f +61 2 8295 2399

e info@horticulture.com.au

w www.horticulture.com.au

Edited and designed
by Arris Pty Ltd



ACN. 092 739 574

DISCLAIMER: Every attempt is made to ensure the accuracy of all statements and claims made in ReWater. However, due to the nature of the industry, it is impossible for us to know your precise circumstances. Therefore, we disclaim any responsibility for any action you take as a result of reading ReWater.