TATE SALINITY COUNCIL

Newsletter of the Western Australian State Salinity Council also online at **www.salinity.org.au** September 2001

Taskforce Report Released

A review of salinity management in WA released this month has recommended that the Government make a 'deliberate shift away from the broad-brush distribution of spreading funds across the landscape', which was found to be 'unlikely to contribute significantly to managing salinity'.

The Ministerial Taskforce, established by Minister with Special Responsibility for Salinity, the Hon. Dr Judy Edwards, has spent three months considering all aspects of salinity management and related natural resource management in WA.

Their report, released by Minister Edwards earlier this month, indicates a general endorsement for the government's current programs but includes 94 recommendations covering areas such as the application of public and private resources, the protection of public assets, the development of commercially viable industries, the improvement of extension and the creation of stronger institutional arrangements.

A key recommendation of the report was the creation of a Natural Resource Management (NRM) Council to replace the State Salinity Council.

The NRM Council would be the peak body to coordinate and oversee natural resource management in Western Australia and would advise the Government on all natural resource management issues related to use and conservation of land and inland waterways.

Other recommendations included:

- the development of a long-term vision for the landscape of the south west of Western Australia
- future Government investment should be guided by the State Salinity Council's Framework for Investment in Salinity Management
- substantial additional funding for the protection of public assets at risk from salinity (especially biodiversity)

- substantial additional funding for the development of new commercially viable management options and industries including engineering options, perennial vegetation and the productive use of saline land and water
- a comprehensive monitoring and evaluation framework to inform the Government on progress and improve decision making about the effectiveness of existing activities and guide investment decisions
- a new training program for departmental staff and community support officers to improve technical expertise and the extension of employment contracts for community support officers to five years as part of enhanced extension activities coordinated by the Department of Agriculture
- the development of a new Salinity Strategy to give effect to the Taskforce Report and any negotiated outcomes of the National Action Plan for Salinity and Water Quality.

The Government will consider the recommendations of the Taskforce's report and will prepare a response over the coming months.

The current institutional arrangements will continue until the Minister implements any changes. The Salinity Council will be working with the Minister to advise on the proposed changes and any transitional arrangements.

Copies of the full report are available on the internet at www.ministers.wa.gov.au/edwards or through the office of Minister Edwards on telephone (08) 9220 5050.

Full story inside...

State Landcare Award winners



STATE SALINITY COUNCIL

South Tammin Cleans Up

The South Tammin Catchment Group has been awarded the inaugural State Salinity Council Salinity Management Award, one of the State Landcare Awards announced earlier this month at the State Landcare Conference.



Fay Chatfield from the South Tammin Catchment Group receives the State Salinity Council Salinity Management Award (on behalf of the group) from the Hon. Dr Judy Edwards, Minister for Environment and Heritage, and Alex Campbell, Chairman of the State Salinity Council.

The award, sponsored by the State Salinity Council, aims to recognise a community organisation, group or individual for demonstrating initiative in addressing salinity associated with land, water, biodiversity and/or infrastructure.

Judges of the awards felt that the South Tammin Catchment Group met the criteria of the award and deserved recognition for

OTHER WINNERS IN THE STATE LANDCARE AWARDS ARE:

Farm Weekly Primary Producer Award: Geoff Bee, Jacup

Alcoa Landcare Community Group Award: South Mortlock Catchment Group

Soil and Land Conservation Council Landcare Professional Award: Garry Heady, Fairbridge Village and Alexandra Gartman, Shire of Victoria Plains



■ Land & Water Australia (LWA) is offering four scholarships and four fellowships for projects eligible to commence from I February 2002. Scholarships and fellowships may address any one of LWA's research areas (sustainable primary industries, future landscapes, river landscapes and vegetation landscapes) or themes (perceiving and valuing, learning and understanding, organisation and governance, and living-in and managing). Information and application forms are available at www.lwa.gov.au (under Commissioned Research/Scholarships

their efforts in tackling the continued degradation of their landscape.

The South Tammin Catchment Group, formed in 1989, consists of twenty family farms covering more than 35 000 hectares in the south west portion of the Shire of Tammin, which is the shire most affected by salinity in WA.

White Pages Landcare Catchment Award: Carrolup Catchment Group

Water and Rivers Commission River RATs Living Streams Award: Bannister Creek Catchment Group

Bushcare Nature Conservation Award: Malleefowl Preservation Group

NHT Rivercare Award: Geographe Catchment Council (GeoCatch)

> and Fellowships) or by calling Chris Louis on (02) 62636003. Applications close 19 October 2001.

■ The National Dryland Salinity Program (NDSP) has published an *investment profile* for the period 1998 to 2003. The profile contains a list of past and current research, development and extension projects funded by the NDSP, including contact details for the project managers. Copies of the investment profile are available from the NDSP's WA Communication Co-ordinator, Georgina Wilson on phone (08) 9368 3889. Over the years, farmers in South Tammin have implemented a holistic land management strategy which includes minimum tillage, saltbush and alley farming, liming acid soils, gypsum treatment for difficult clay soils, revegetation of streamlines, contour working for cropping, surface water management and linking remnant vegetation for biodiversity protection.

The group has already seen positive results from their work, with many of the monitoring bores around the catchment showing a distinct downward trend and water quality improving in many creek lines.

Recipients of two other State Landcare Awards also hail from the Shire of Tammin.

Fay Chatfield, a farmer in Tammin, was named Individual Landcarer of the Year for her efforts on her own farm and in the formation of Landcare Vision, a program that organises visits to catchments so other groups could learn from the farmers' experiences.

The Tammin Alcoa Landcare Education Centre won the Westpac Landcare Education Award for its work in providing hands-on landcare learning experiences to teachers and students from across the State.

BHP Billiton Landcare Research Award: Greg Hamilton, Department of Agriculture

APN Outdoor Media Landcare Local Government Award: Shire of Jerramungup

SIGMA Landcare Media Award: Western Wildlife newsletter

■ The Institution of Engineers, Australia (IEAust) has announced a new **prize for engineering solutions** to salinity. IEAust is providing \$10,000 towards the salinity prize, and is seeking further sponsorship partners. The overall prize value will be announced at the end of September, and the closing date for entries is 3 December 2001. More information about the salinity prize, including entry details, can be found on the IEAust website at www.ieaust.org.au.

OIL MALLEES OPEN UP

Professor Syd Shea, the Chairman of the Oil Mallee Company (OMC), has released an Offer and Information Statement on behalf of the company, which seeks to raise five million dollars for research and development.

Professor Shea said that the additional funding was required to ensure that the industry could achieve its objective of establishing two million hectares of commercial mallee tree crops on cleared farmland in the agricultural region.

Farmers initiated the planting of Mallee Eucalypts more than 12 years ago because they recognised that the area of planting required to stabilise salinity would only be achieved if the trees planted provided a commercial return.

Already the investment in the industry has exceeded \$20m, including funding from

CALM and through Commonwealth Government grants.

Some 8000 hectares of mallees have been planted throughout the wheatbelt by 900 farmers and the company has developed unique mallee harvesting and distillation systems.

However it will not be possible for farmers to fund all of the research, development and plantings needed to have a significant impact on salinity.

"This capital raising initiative provides an opportunity for metropolitan residents and

country businesses to help farmers and the environment," Professor Shea said.

"We are also very keen to increase the farmer shareholding in the company and to reward the enterprise shown by growers by providing one million shares at a discount price to existing mallee growers," Professor Shea said.

Applications must be made on the forms contained in the OMC Offer Information Statement which is available on the company web site (www.oilmallee.com.au) or by contacting the OMC office on (08) 9478 0340.

BP Lifts Maritime Pine Investment

BP has increased its investment in the Forest Products Commission's maritime pine project by increasing the annual establishment rate from 300 hectare to 350 hectare, the first time the rate has increased since the project started in 1999.

The 10-year project, centred on cleared farm land around Katanning and Lake Toolibin, involves establishing plantations on farm land in partnership with landowners.

The project is designed to address land degradation by mitigating the effects of salinisation and also sequesters carbon dioxide to offset emissions from BP's Kwinana Refinery

The project is believed to have been the first tree planting program in Australia with these twin goals.

For the 2001 season, landowners planting with BP were given a range of up-front payments and a 30 percent share in the harvest revenues from each of three thinnings and the final harvest.

To date, the FPC has established on BP's behalf more than 1150 hectare of maritime pine, 19 hectare of sandalwood and 63 hectare of other native species, mainly in the Katanning area.

The acquisition of land for the 2002 planting year will commence shortly.

19 month old pines planted as part of BP's investment in the FPC's maritime pines project.

Enquiries can be directed to Neil Worrell at the FPC's Albany office on (08) 9842 4530.

SOCIAL IMPACTS OF SALINITY PROJECT UNDERWAY

A statewide project on the social impacts of salinity was begun by the Department of Agriculture on 1 July 2001.

The Social Impacts of Salinity (SIS) project is about empowering rural communities with capacity to manage changes and the ability to adopt new technologies when addressing salinity issues.

The project, through its association with the Rapid Catchment Appraisal process, also aims to look at how implementing salinity management options affects the way of life of landholders and whole communities.

The SIS team can provide the following services:

Follow-up support to rapid catchment appraisal and other groups through sign posting regionally relevant information and resources

- Engaging thoughts on the social impacts of salinity and how to facilitate a more targeted delivery of support
- Extension of community funding information to groups to save time and effort in locating information and resources from a vast array of sources
- Facilitating 'getting more out of your group' workshops and followon support to increase group effectiveness and efficiency which leads to increased capacity for implementation and change
- Developing and collating a statewide database of salinity management success stories.

For further information contact Emma Scotney from the Department of Agriculture on (08) 9651 1302.

Inland Saline Aquaculture Research Facility Established in Northam

An Inland Saline Aquaculture Research Facility has been established at Springfield Waters in Northam by the Aquaculture Development Unit (ADU) of Challenger TAFE and Murdoch University, creating a facility at the frontier of inland aquaculture research and development.

Springfield Waters is a fish farm with 20,000 square metres of surface area, created to provide recreational angling opportunities in the region.

Today, Springfield Waters supports in excess of 10,000 black bream, an estuarine species which is highly regarded for its eating and angling qualities and capable of living in waters which range in salinity from near fresh to several times that of full strength sea water.

Construction of the research facility, situated adjacent to Springfield Waters, commenced in September 1999 to facilitate a research project, funded by the Fisheries Research and Development Corporation, to investigate the factors required for the successful aquaculture of black bream in inland water bodies.

The facility has since been improved and expanded with ongoing financial support from Springfield Waters Aquaculture and today has 18 replicated research ponds of 100 square metres each and two water storage sumps with a combined capacity of over 2.5 million litres.

In addition to black bream, snapper cultured at the ADU have also been stocked into



Aerial photo of Springfield Waters with the 18 research ponds on the right.

ponds at Springfield Waters and in a large saline soak at Watheroo.

The preliminary assessment of the potential of snapper for culture in inland saline waters at Northam and Watheroo has been promising. Apart from good survival and growth in inland regions, trials conducted at the ADU show that snapper tolerate salinities from around one quarter of sea water levels to one and a half times sea water.

A commercial-scale pilot operation for the grow-out of snapper is now intended at Springfield Waters.

Economic impact of townsite salinity

An insight of the future costs of salinity in country towns was revealed recently by an economic impact

study undertaken for the Rural Towns Program by consultants URS.

A computer-based decision support tool Called the 'Urban Salinity Economic Assessment Package' or USEAP was also developed which is available for use with other towns for which groundwater modelling information is available.

Modelling of groundwater movement in the case-study towns (Brookton, Corrigin, Cranbrook, Katanning, Merredin and Morawa) indicated that in the absence of measures to slow its rise, groundwater is:

- Already in equilibrium and close to the surface over a large part of the Katanning townsite
- Rising beneath Brookton, Corrigin, Cranbrook and Merredin
- · Perched on shallow bedrock in Morawa.

Infrastructure affected by rising groundwater includes roads, residential buildings, public and commercial buildings, parks, gardens and sporting fields.

On average, the cost of extra repair for roads was estimated to have the greatest financial impact and comprise three-quarters of the damage control bill.

Rural Towns Program Manager Mark Pridham said likely costs varied enormously, with some towns facing immediate problems while others had a considerable breathing space in which to rally their defences.

In general there are three options to control groundwater rise:

• Reducing the amount of imported water available to enter the groundwater

- Intercepting water before it can contribute to recharge (improved stormwater treatment and growing more trees)
- Removal of groundwater below the town from most vulnerable areas.
- For more information contact Mark Pridham at the Department of Agriculture on (08) 9368 3835 or Don Burnside at URS on (08) 9221 1630.



A Vision in Merredin

A "shared vision for the future" was considered at the Dealing with Salinity in Wheatbelt Valleys -

conference, held in Merredin from 30 July to I August and presented by the State Salinity Council and

the Avon Working Group.

Over 150 people attended the 'visionmaking' workshop held on day three of the event, which also included a field trip and a day of presentations by salinity management experts attended by 223 people.

Conference convener and Chair of the State Salinity Council's Research and Development Technical Committee, Don McFarlane, was very pleased with the general feeling throughout the event, and the sense of 'looking for areas of agreement rather than dispute' that developed.

"The conference provided the first opportunity in over ten years for experts and interested people from all areas of salinity management to come together and share their passions and their vision for the future of our Wheatbelt," Dr McFarlane said.

"The conference organising committee has received very positive feedback from participants about the calibre of the presentations and the opportunities the event provided to network and share ideas."

"Before and after surveys showed that the opinions of farmers and agency groups had come closer together as a result of the conference".

The shared vision and other comments discussed in groups during the day-long workshop facilitated by futurist Ann Macbeth (Annimac) will be used to guide



Conference delegates at Alan & Eva Cole's farm, first stop on the day one field trip.



Farmer Kevin Lyon and Dr Richard George from the Department of Agriculture discussing catchment water management on the field trip.

policy and funding decisions by the State Salinity Council, the Salinity Taskforce and the Advisory Committee overseeing the Engineering Evaluation funding.

"The Council is very pleased to have had the opportunity to collect the wisdom, ideas and passions of the people who are dealing with salinity every day – the farmers, land managers, catchment groups, researchers and agency officers," said State Salinity Council Chairman, Alex Campbell.

"We can now use this information to guide our discussions and recommendations, confident that we have a balanced picture of where the Wheatbelt community wants to be in twenty years time."

Output from the Conference has been forwarded to delegates, and the State Salinity Council and Avon Working Group are developing further actions and responses.

Copies of the conference papers, a list of comments made by workshop participants and a summary of the conference outcomes are available on the conference website: www.avonicm.org.au/avonicm/wbeltvalleys

Bound copies of the papers presented at the conference (\$20 including postage) can be ordered through the Water and Rivers Commission.

DRAINAGE MOVES INTO GEAR

Work in the drainage area is stepping up pace following a successful meeting on 30 August in Narrogin between Department of Agriculture representatives and 19 drainage contractors.

The meeting was chaired by Brian Beetson, who has recently taken over as the department's drainage coordinator.

- Priorities agreed at the meeting were to: • make paperwork connected with drainage
- applications simpler and more efficient; • jointly develop accreditation and training
- systems;
 improve education of farmers and advisers to increase knowledge of the range of successful water management systems; and
- develop region-specific design criteria and structures to improve work being done.

Two working groups were formed including contractors Stuart Tohl, Ian Small, Kevin Lyons, Monty Miles and Peter Hunter.

It was agreed that drainage was just one of many engineering approaches to manage salinity, and many earthworks had been poorly designed and constructed because of a lack of experience and shared knowledge.

"The meeting was a success, with contractors and the department agreeing to work more closely to improve the quality work being done and services offered to farmers," Brian Beetson said.

A new Drainwise website was launched at the Dowerin Field Days and provides ready access to current water management and drainage information. It covers management options, legal responsibilities and many other issues. Drainwise can be accessed at http://www.agric.wa.gov.au/environment/land /drainwise/

Further information is available from Brian Beetson, Department of Agriculture, on 9368 3778.

The Government has also recently announced the allocation of \$4 million over four years for developing engineering options. A community based advisory committee for this Engineering Evaluation Initiative is currently being established with support from the Water & Rivers Commission.

Further details will be supplied as the initiative develops.

Blackwood wins gold in International Riverprize

The Blackwood Basin Group has won the 2001 Thiess Services International Riverprize, worth \$100,000, becoming the first Australian organisation to win one of the world's most prestigious environmental awards.

Brisbane Lord Mayor Jim Soorley, who presented the award at Brisbane's annual Riverfestival, said it proved that Australian river managers have developed world-class scientific, planning and management expertise that other countries could learn from.

"Having an Australian river management group so highly regarded by the international judging panel speaks volumes for the quality of working being undertaken in the Blackwood catchment," he said.

"It has a strong strategic focus and a well developed philosophy and approach to sustainability that reflects a maturity well beyond its relatively short history"

The Natural Heritage Trust-funded Blackwood Basin Group beat three other finalists for the award: Canada's Toronto and Region Conservation Authority; New Zealand's Christchurch City Council; and the Alexander River Restoration Administration, Israel.

The win recognised community efforts to rehabilitate a landscape devastated by clearing



28 September – 6 October 2001 Perth Royal Show – visit the biggest Landcare pavilion ever, showcasing south-west projects as examples of the themes of land, water, biodiversity and people.

October 2001

Understandin	g Oil Mallee Economics
free half-day	workshops
8 October	Moora
9 October	Geraldton
15 October	Merredin
22 October	Narrogin
Contact Kim	Brooksbank,
ph (08) 9881	9222

September 2002

Productive Use and Rehabilitation of Saline Lands (PURSL) conference, Albany. Contact Bill Porter, ph (08) 9690 2104.



A delegation from the Blackwood Basin Group accepts the Riverprize trophy. From left Nick Dodson, Chairman David Chadwick, Program Manager Saan Ecker and Melissa Campbell from WA Plantation Resources.

for agriculture and human settlement over the last 100 years, according to Blackwood Basin Group Chairman David Chadwick.

"People throughout the Blackwood are determined to turn things around and are working to preserve the natural resources we have left and to manage the land more sustainably," Mr Chadwick said. The Blackwood Basin Group is seeking community input on how to best use the \$100,000.

They are also keen to use the award to promote the fact that community action can make a difference, and to encourage community members to get involved.

Stakeholders get the lowdown on Collie salinity

A major scientific study involving the Collie Recovery Catchment is nearing completion and stakeholders are being briefed on the various options to help reduce salinity in the catchment.

The Salinity Situation Statement is part of the Collie Recovery Catchment's goal to restore water in the Collie River and Wellington Dam to drinking quality by the year 2015.

The extensive report – put together by Water and Rivers Commission researchers – includes modelling which looks at the effects of:

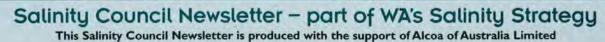
- Plantation planting of blue gums and/or other trees;
- · Groundwater pumping;
- Salt water diversion; and
- Trees with groundwater pumping.

Over the past month or so, stakeholders from State and local government, local industries (especially power production), community groups and others have been briefed on what's involved.

South West Salinity Recovery Catchment Manager John Platt has been conducting many of the briefings, with the help of Water and Rivers Commission colleagues.

The aim of the exercise is to gain the understanding and support of stakeholders – to give them the facts, tell them about the options, the constraints and the decision making process, and to seek their commitment in carrying out whatever is needed to reclaim Wellington Dam as a potable water source.

The Salinity Situation Statement for the Collie Recovery Catchment is due to be released later this year.



Agriculture



ALCOA

For more information please contact: Liz Yuncken Communications Officer, State Salinity Council PO Box Y3455, East St Georges Terrace VA 6832 Telephone: (08) 9325 0031 Facsimile: (08) 9225 4970 email eyuncken@agric.wa.gov.au Encounter salinity online at **www.salinity.org.au**

