

June 2001



# STATE SALINITY COUNCIL

Newsletter of the Western Australian State Salinity Council

June 2001



## Salinity Audit Preliminary Results

**The State Salinity Council has commissioned an independent external audit of the impact and effectiveness of the 1996 State Salinity Action Plan and subsequent 2000 Salinity Strategy and associated projects.**

The audit, conducted by URS Australia, considered ten key projects under the Plan and evaluated how effective they have been in achieving the Plan's objectives.

The Project Reference Group chose ten salinity projects to be reviewed:

- woody perennials
- increased water use by crops and pastures
- drainage
- focus catchments (leading to the Rapid Catchment Appraisal process)
- potable water resource catchments
- key wetlands and natural diversity catchments
- biological survey
- rural infrastructure assets
- monitoring and evaluation
- land monitor

URS interviewed key community and agency people about their experiences with the projects and the Salinity Action Plan and gathered comments about the projects' effectiveness.

The results of the review have been divided into four areas:

1. CHANGES THAT OCCURRED IN THE COMMUNITY AND ON THE GROUND AS A RESULT OF THE 1996 SALINITY ACTION PLAN:
  - community and government appreciation of the salinity situation has increased;
  - community, government and R&D management structures have improved; and
  - sound research and development programs are in place.

2. PROJECT EFFECTIVENESS AND VALUE FOR MONEY  
All projects have added value in respect of the aims of the 1996 plan, though the lack of meaningful milestone targets has made it difficult to measure progress towards the overall aims.

3. EXPENDITURE IN THE SALINITY ACTION PLAN  
In line with budgeted plans, the Government has doubled its commitment to salinity management through the four NRM agencies (AGWEST, CALM, DEP and the Water and Rivers Commission) over the life of the 1996 plan.

4. GAPS AND INADEQUACIES IN THE 1996 PLAN  
Many recommended improvements to the 1996 Plan have already been addressed by the 2000 Salinity Strategy or by subsequent decisions made by the State Salinity Council. Some that remain to be addressed include:

- a better understanding of the need for a greater level of intervention to make a difference;
- social issues;
- the diversity of situations at shire and catchment scale;
- the communication of planned outcomes, the purpose of government investment and community expectations of landholder behaviour;
- the lack of meaningful targets; and
- low focus on the commercial realities and drivers for change.

Final results of the review will be available on the new State Salinity Council website: [www.salinity.org.au](http://www.salinity.org.au)

The screenshot shows the Salinity.org.au website with a navigation menu including: INTRODUCTION TO SALINITY, SALINITY MANAGEMENT, NEWS, LINKS, FUNDING, GETTING INVOLVED, EDUCATIONAL MATERIAL, THE COUNCIL, CONTACT US. It features a search bar, a mailing list sign-up form, and sections for Management (State Salinity Strategy, On the ground, Who's Involved?, Funding, Research & Development, Getting Involved) and Funding (State Government Funding, Commercial Funding, Other Funding). A 'Latest News' section contains placeholder text, and a 'Useful Salinity Links' section lists: Agriculture Western Australia, CALM, Department of Environmental Protection, and Forest Products Commission.

# Salinity invades Cyberspace

Full story inside...



STATE  
SALINITY  
COUNCIL

# Minister announces Salinity Review

The State Government recently announced the establishment of a short-term taskforce to recommend future strategies to combat salinity.

Minister with Special Responsibility for Salinity, Dr Judy Edwards, said the four member taskforce was necessary to provide a more targeted and cohesive response to Western Australia's salinity threat.

"The taskforce will evaluate current state salinity programs, recommend key improvements and consider whether the level of response is appropriate to the scale of the problem," Dr Edwards said.

"It will also recommend how we can better use salinity funds, to ensure programs are delivered to high priority areas."

See the terms of reference for the review below.

The four members of the taskforce are – rural sociologist Dr Fionnula Frost (Chair); Associate Professor at UWA's Department of Agriculture and Resource Economics, Dr David Pannell; Lake Grace farmer and Landcare volunteer Mr Michael Lloyd; and environmental management consultant Dr Bruce Hamilton.

"This team brings to the review a wealth of knowledge and expertise from a wide range of backgrounds," Dr Edwards said.

"Together they will contribute social, environmental, economic, and on-the-ground perspectives to the issue of salinity."

The taskforce's work will be assisted by data being collected by a State Salinity Council audit (see article this edition) which is currently reviewing ten specific salinity projects.

State Salinity Council Chairman Alex Campbell expressed his support for the review.

"The Council sees this as an opportunity to improve and strengthen the strategic management of salinity in the State," Mr Campbell said.

"We agree with community views that the large financial resources being directed at salinity management should be used wisely and we welcome this chance as another opportunity to refocus directions and actions aimed at addressing salinity issues."

The Taskforce has called for submissions, which can be sent by fax to (08) 9222 9509, by email to [salinitytaskforce@mpc.wa.gov.au](mailto:salinitytaskforce@mpc.wa.gov.au) or by post to:

Salinity Taskforce  
Ministry of the Premier and Cabinet  
15th floor, 197 St George's Tce  
Perth WA 6000

Submissions must be received by Friday 6 July 2001; the taskforce is expected to report back to the Minister in August.

## SALINITY TASKFORCE TERMS OF REFERENCE

- Review the strategies and actions of the State Salinity Action Plan and Strategy, and their implementation, paying special attention to:
  - Community support and capacity building;
  - Progress in assessing the feasibility of engineering options;
  - Integration of actions across government at ministerial, agency and regional level;
  - The potential role of industry and research and development groups in salinity management;
  - Progress in the development of new solutions, including the level of support to development programs;
  - The relationship to and the congruence with regional Natural Resource Management strategies;
  - Mechanisms to encourage adoption of improvements in land management practices and to discourage continuation of inappropriate land management practices; and
- Mechanisms to support biodiversity protection.
- In a strategic context, advise on the adequacy of the State's Salinity Program, paying special attention to:
  - Funding gaps i.e. actions which are not funded in the current program; and
  - Whether the level of response is appropriate for the scale of the problem.
- Review the statewide structures that support a whole of government and community partnership approach to the implementation of the State Salinity Strategy and Action Plan.
- Review the processes through which these statewide structures report and are accountable to government and the community.
- Taking into consideration the development of the Inter-Governmental and Bilateral Agreements for the National Action Plan for Salinity and Water
- Quality and other national, state and regional funding programs, review the process for prioritising the future expenditure of funds to combat salinity.
- Review existing monitoring and evaluation arrangements and processes to:
  - Advise on appropriate social, economic and biophysical goals and targets;
  - Advise on how to determine whether strategies and projects are contributing to the targets and outcomes required;
  - Advise on how to ensure salinity funds are achieving positive change in priority areas on-the-ground; and
  - Ensure monitoring arrangements are adequate as the basis for annual and five yearly reviews of the effectiveness of the Strategy in delivering relevant environmental and social outcomes.

# SALINITY INVADES CYBERSPACE

Salinity in WA is going on-line. From July 2001 the world will be able to read about WA's salinity issues and our pro-active management at the State Salinity Council website – [www.salinity.org.au](http://www.salinity.org.au).

The brand new site provides a 'one-stop' source of information about salinity management around WA, making it easy for interested visitors to access the wealth of information provided on a wide variety of other websites.

Included on the site will be:

- an introduction to salinity – its causes, effects and other aspects of the problem
- a brief outline of some of the salinity management tools being used in Western Australia, with links to the organisations doing the work 'on the ground' who can provide more detailed information
- information about funding programs for salinity management
- information about the State Salinity Council and its links to the

Government and to the natural resource management agencies in WA

- educational resource material for students and teachers
- links to other organisations involved in salinity management in WA and around the country

The State Salinity Strategy and State Salinity Council newsletters will be available to download from the site, and the 'news' section and events calendar will be regularly updated to ensure that important information is quickly available.

State Salinity Council Chairman Alex Campbell is excited about the new site.

"We look forward to seeing our website become the primary salinity site in Western Australia, through which anyone can access the latest information about salinity at any time," Mr Campbell said.

## More news from Cyberspace I – Oil Mallee industry website

The Oil Mallee Association of WA and the Oil Mallee Company have launched a new website.

The oil mallee website covers an array of different subject matter including what the industry is aiming to achieve, who is involved, what species of trees are used and how they are planted. The website also has a photo gallery, including a short video clip of the company's prototype harvester in action.

Promotions Manager of the oil mallee industry, Jason Menzies, spoke about the website's thrust.

"The website has initially been designed to be of most benefit to farmers, students and interested members of the public, with the site offering, amongst other things, details of what to plant, where to plant it, how to manage the planting, and who to contact etc," Mr Menzies said.

"Those searching for details on the more technical aspects of the oil mallee industry, such as harvester development, eucalyptus oil distillation and its properties, carbon credits, and the concept of Integrated Wood Processing and the products produced, will also find them on our site."

With the website also containing a 'latest industry news' page containing recent media releases and breaking news, visitors to the site can expect to be kept up to date and well informed of ongoing developments in this new, 'growing' industry.

Those wishing to know more about oil mallees, or who are keen to place an order, should visit the industry's new website at [www.oilmallee.com.au](http://www.oilmallee.com.au)

## More news from Cyberspace II – NRM training website

A new one-stop website with information about landcare training courses was launched by Agriculture Minister Kim Chance in May.

The Natural Resource Management and Extension Training Opportunities in WA website provides an easy way to find out about a range of training courses, workshops, degrees and certificates across the State.

The website was developed with funds from Agriculture Western Australia and the Natural Heritage Trust.

Mr Chance said the new website was a valuable means of promoting landcare and sustainable resource management throughout the community.

"It is important for the whole community to become more aware of the importance of managing our land and water resources, whether it be a property in the wheatbelt or a local catchment in the metropolitan area," he said.

"Education and ongoing learning is an essential part of that growing awareness and appreciation of landcare and sustainable resource management."

The website includes up-to-date, accurate information on more than 180 courses, including a Certificate in Landcare, a Bachelor of Science in Natural Resource Management, Swan River Restoration workshops, farm forestry courses and Global Information Systems (GIS) mapping training.

The *Natural Resource Management and Extension Training Opportunities in WA* website address is <http://www.agric.wa.gov.au:7000/register>

## salty bits

**Wally Cox to leave CALM.** CALM CEO Wally Cox will retire on 13 July to become Executive Dean of the Faculty of Business and Public Management at Edith Cowan University. Dr Cox's replacement is yet to be named.

Dr Cox has had a distinguished career in the WA public service; his wise counsel and practical good sense will be missed by all who worked with him.

**New AGWEST publications.** AGWEST is in the process of producing a substantial stack of new Farmnotes (fact

sheets) about salinity issues and management. Copies can be found on AGWEST's Salinity homepage (<http://www.agric.wa.gov.au/environment/land/salinity/index.htm>) or can be obtained through any AGWEST office. Other AGWEST publications now available include Resource Management Technical Reports on groundwater studies of Carnamah, Pingelly, Quairading and Piawaning, the first of 23 related to the Community Bores Project undertaken as part of the Rural Towns Program last year.

**Shell on board.** Shell has announced its intention to sponsor the Teaching about Salinity project, one of 20 projects funded through the State Salinity Council's Community Support Scheme. A copy of the Education Kit developed through the project will be distributed free to all schools in Western Australia later this year, and complementary professional development will be offered to interested teachers. More information about the project from Gael Bell at AGWEST, phone 9892 8420.

# Governor Briefed on Salinity and NRM

Western Australia's Governor, His Excellency Lieutenant General John Sanderson AC, was briefed recently on natural resource management (NRM) and salinity issues.

The Governor approached State Salinity Council Chairman Alex Campbell to request an informal briefing on salinity and NRM issues during a visit to Albany for ANZAC Day events.

The Governor visited Alex Campbell's property in Narrikup and was briefed by Carolyn Daniel (Community Landcare Coordinator in Jerramungup) on local catchment issues, John Simpson (Regional Chair, South Coast Regional Initiative Planning Team) on regional catchment issues and by Alex Campbell on State level issues including the State Salinity Strategy.

The Governor demonstrated a considerable understanding of and interest in natural resource management, and has requested further involvement in the issues through either formal attendance at State Salinity Council meetings or appropriate field trips.

This involvement will begin in August when the Governor has agreed to meet the State Salinity Council Executive at their meeting.

Mr Campbell was pleased with the outcome of the meeting. "The advocacy role of the Governor can't be underestimated," Mr Campbell said.

"For the Governor in his position to be well-informed will be of huge benefit to natural resource management in Western Australia."



(L-R) Alex Campbell, His Excellency Governor John Sanderson, Carolyn Daniel and John Simpson at the Campbell property in Narrikup.

## Surge in on-ground works in Kent/Denmark

Thirty farmers in the Kent/Denmark Recovery Catchment have received funding assistance to implement salinity management works on their properties.

They've been working overtime to establish 170 ha of lucerne, 40 ha of kikuyu, 30 ha of summer forage, 37 ha of native vegetation, 39 ha of saltland vegetation and 130 000 tree seedlings.

Water & Rivers Commission South Coast

salinity coordinator Brett Ward said that "the farmers have also protected more than 1400 ha of remnant vegetation with 53 km of fencing, fenced 44 km of waterway, constructed 50 km of surface water management drains and seven stock crossings."

"We're very pleased with this level of activity, especially as most of the farmers are only in the first year of implementing their property plans," Mr Ward said.

"WRC has contributed \$300,000 towards the cost of these works and we know that farmers have spent at least the same amount of their money.

"The encouraging thing is that this is only the beginning. We're expecting the amount of work on salinity to increase as others come on board and these farmers fully implement their plans over the next five years or so."

## Heads together on Investment Framework

A large percentage of the 'movers and shakers' in the salinity management world got together in May to consider the State Salinity Council's draft document *Setting Priorities for Salinity Investment:*

*A Framework for Decisions on Investment of Public Funds in Salinity Management in WA.*

The framework, described in the last edition of the State Salinity Council Newsletter, had reached a draft stage but the working group developing the framework recommended that it be 'tested' in a workshop against real scenarios.

Over 50 workshop participants considered the framework's effectiveness in developing investment priorities in five case studies:

- Lake Chinocup Catchment
- Lake Warden Catchment
- Yarra Yarra Catchment

- The proposed \$40 million funding per annum from the National Action Plan and State Government
- Engineering options and demonstration catchments.

During the workshop, participants developed suggestions to improve the framework, including:

- assets at risk should be assessed through a cycle of enquiry into priority assets, risks and values;
- goals should be made explicit;

- groups who are deciding on priorities should search for options, assess their feasibility as well as their costs and benefits and should integrate their decisions into a long-term strategy; and
- all levels of scale should use a similar (but adapted) planning process but interaction between levels should be set up.

These recommendations will be incorporated into the final version of the framework, which will be available to the public later this year.

## Wheatbelt Valleys conference revving up

Minister with Special Responsibility for Salinity, Dr Judy Edwards, will open the *Dealing with Salinity in Wheatbelt Valleys* field tour/ workshop/ conference being held in Merredin from 30 July to 1 August.

Other highlights of the program include:

- a field trip on day one of the conference, taking in sites of interest between Perth and Merredin. Buses will leave from Perth, Merredin and Northam
- guest speaker Ann Macbeth discussing marketing new opportunities for rural communities into a globalised society
- case studies of achievements in salinity management
- conference dinner speaker Kevin Goss from the Murray Darling Basin Commission
- a workshop session on the third day to consider real, practical options for the future of wheatbelt valleys.

More information, including the full program, can be found on the conference website at [www.avonimc.org.au/avonimc/wbeltvalleys](http://www.avonimc.org.au/avonimc/wbeltvalleys).

The conference is being organised by the State Salinity Council's Research and Development Technical Committee. The conference is presented by the State Salinity Council and the Avon Working Group, and supported by the Water and Rivers Commission, AGWEST, CSIRO, the Grains Research and Development Corporation, the National Dryland Salinity Program and CALM.

Places are limited, so early bookings are advised. Contact Monica Durcan for registration, poster displays and accommodation details. Phone/Fax 08 9291 8249.

## LEAKAGE CALCULATOR TAKES SHAPE

A new leakage calculator that indicates the levels of recharge entering the watertable is getting an enthusiastic response from grower groups.

The calculator was developed as part of the *Million Hectares for the Future* project, funded by the National Dryland Salinity Program, and being undertaken by Agriculture Western Australia.

Dr Bill Porter from Northam said the leakage calculator should lead to better management options in the fight against salinity. Seven farmer groups are now testing it prior to its wider release next year.

"Most farmers understand that dryland salinity is caused by leakage of water into the ground past the roots of their crops and pastures, contributing to rising watertables," Dr Porter said.

"The calculator provides a tool to estimate how different soil types, crops, pastures and other changes in land use affect leakage. As a result, farmers will be in a better position to manage water recharge across the whole farm system."

Using the calculator on one wheatbelt property indicated a leakage of 25 millimetres across 600 hectares. This is equivalent to 130 good-sized farm dams (2000 cubic metres each) added to watertables each year.

Dr Porter said such examples gave farmers a readily understandable measure of the magnitude of the problem for the first time, and the effect of changing land uses.

The calculator is based on a computer program called AgET which is linked with rainfall records, broad soil types and common land uses.

Farmer groups interested in future phases of testing and use of the calculator can contact team members Richard O'Donnell or Tom Sweeney on telephone 9690 2000.

## TOWNS TO GAIN FUNDING

Seven WA towns will receive funds totalling nearly \$240,000 from Rural Towns Program grants approved in May.

The largest grant of \$97,020 to Pingelly will fund a town water management scheme. This aims to remove surface water from the town catchment, preventing it from recharging the local groundwater system and adding to the townsite salinity problem. The proposed Pingelly surface water management system includes drains, a diversion bank and revegetation.

Successful applicants are listed below:

Rural Towns Program manager Mark Pridham checks the water level in a monitoring bore in Morawa with URS consultant Dr Don Burnside and AGWEST hydrologist Marcus Deshon.



The Rural Towns Program management committee meets regularly to assess applications for funding to manage salinity. Rural Towns Program funds must be matched by cash or in-kind funding from the shire or local community.

The next round of applications will be considered in July. More details can be obtained from the website on [www.agric.wa.gov.au/Rural\\_Towns](http://www.agric.wa.gov.au/Rural_Towns).

Shire	\$	Purpose
Corrigin	32,000	Waterwise education program in Corrigin and pump test production bores for Bullaring
Katanning	39,060	Second production bore and pumping equipment to lower watertables
Morawa	18,450	Installation of a pilot 'point well dewatering' system
Mount Marshall	8,000	Development of a Salinity Management Strategy for the Beacon townsite
Perenjori	5,000	Study of groundwater monitoring data and its likely impact on salinity
Pingelly	97,020	Town surface water management scheme
Wagin	37,800	Implementation of Waterwise education program
<b>TOTAL</b>	<b>237,336</b>	

# Pumping Starts At Bodallin

The Bodallin Catchment Group has finished installing eight groundwater pumps across five farms in the lower catchment as part of a salinity management project partly funded by the State Salinity Council's Community Support Scheme 2000.

Ten years of investigation and monitoring by the Group have revealed that the groundwater is now less than 1.5 m from the surface in some areas and has risen alarmingly over the past few years.

Project Co-ordinator Derek Carew-Hopkins said that the groundwater is approximately as saline as sea water and is having a devastating impact on agricultural soils and infrastructure in the area.

"The project will permanently remove accumulated saline groundwater from problem areas in the lower half of the catchment, and should remove over four million kilograms of salt each year from the groundwater system," he said.

The pumps, five of which are solar powered, are a poly piston design with no metal parts so are longer-lasting in the high acid, salt and iron environment.

The series of pumping wells is connected to evaporation basins constructed on heavy clay soils in cleared farmland.



Ken Hodgkiss, Farm Manager for Toll, monitors a bore at 6.15am before the solar pump starts. The bore is 12 m deep, 125 mm casing and is fitted with a 8.5 cm poly piston pump to pump saline water into an evaporation basin. The pump yields 0.67 L/s under full sun.

The Bodallin Catchment Group is proactive in implementing agronomic change and is undertaking major projects in floodplain management, warm season cropping and remnant vegetation protection and revegetation.

"Our Group is highly focused on taking preventative measures to manage salinity rather than wait until remnant vegetation starts dying and soils becomes salt encrusted," Mr Carew-Hopkins said.

## WHAT'S ON

**On demand** Funding Submission Workshop – how to successfully apply for funding. Contact Anne Jennings, Ph (08) 9726 9221

**4-5 July** Acacia Symposium – the Conservation and Utilisation Potential of Australian Dryland Acacias. Dalwallinu. Ph (08) 9661 1001, website [www.dalwallinu.wa.gov.au](http://www.dalwallinu.wa.gov.au).

**17-19 July** Geospatial Information and Agriculture: Information for Better Production and Environmental Management. Australian Technology Park, Sydney. Ph (02) 9262 2277, fax (02) 9262 3135

**17-19 July** National Local Government Salinity Summit, Echuca-Moama, Victoria. Ph (08) 8226 0582, email [lbroster@chariot.net.au](mailto:lbroster@chariot.net.au)

**29 July – 1 August** Dealing with Salinity in Wheatbelt Valleys: processes, prospects and practical options. Field tour/workshop/conference, Merredin. Ph (08) 9291 8249, website [www.avonicm.org.au/avonicm/wbeltvalleys](http://www.avonicm.org.au/avonicm/wbeltvalleys)

**29 July – 1 August** Australian National Committee on Irrigation and Drainage National Conference, Bunbury, WA. Ph (08) 9727 3066, email [ancid2001@peppermint.com.au](mailto:ancid2001@peppermint.com.au)

**27-29 August** Third Australian Stream Management Conference, Brisbane. Ph (07) 3896 9537, fax (07) 3896 9546, email [stream.conference@dnr.qld.gov.au](mailto:stream.conference@dnr.qld.gov.au), website [www.catchment.crc.org.au/streamconference](http://www.catchment.crc.org.au/streamconference)

**10-11 September** State Landcare Youth Forum, Fairbridge Farm, Pinjarra. Ph (08) 9382 3799, fax (08) 9380 4006, [keynote@ca.com.au](mailto:keynote@ca.com.au)

**11-14 September** State Landcare Conference, Mandurah. Ph (08) 9382 3799, fax (08) 9380 4006, [keynote@ca.com.au](mailto:keynote@ca.com.au)

**18 September** WANTFA annual field day, Meckering. Ph (08) 9690 2181, fax (08) 9622 1902, email [tpiper@agric.wa.gov.au](mailto:tpiper@agric.wa.gov.au)

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

**2002**

**24-26 September** Productive Use and Rehabilitation of Saline Lands (PURSL) conference, Perth. Contact Bill Porter, ph (08) 9690 2104.

## Salinity Council Newsletter – part of WA's Salinity Strategy

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