



Upper South East

Dryland Salinity and Flood Management

**PROJECT UPDATE
October 2003**

\$49.3 million for environmental action in the Upper South East

The Upper South East is now poised to benefit from a very significant investment from the National Action Plan for Salinity and Water Quality (NAP). More than \$38 million from the Australian and State Governments, along with landholder contributions will have a huge impact on salinity and flood management in the region.

The South Australian Environment and Conservation Minister, John Hill and the Agriculture, Food & Fisheries Minister, Paul Holloway, along with their Federal counterparts Senator Ian Macdonald, (Acting Agriculture Minister) and Dr David Kemp (Environment Australia), have jointly announced the funding under the NAP's *Upper South East Dryland Salinity and Flood Management Program*.



The Hon Paul Holloway, Minister for Agriculture, Food & Fisheries

"The Upper South East region has by far the State's largest, most severe and most costly case of dryland salinity," said Mr Holloway. "The National Land and Water Resources Audit revealed 250,000 hectares of salinity induced by clearance in the USE. The area at risk becomes 410,000 ha by 2050 if nothing is done to arrest it.

"Investing in the USE Dryland Salinity and Flood Management Program (USE DS&FMP) contributes to the goals of the National Action Plan, as it provides incentives for significant changes in land use and land management practices."

The USE Program was developed in the 1990s to address community concerns about dryland salinity, waterlogging and ecosystem fragmentation and degradation. Measures to address these concerns include drainage, saltland agronomy, revegetation and wetland management.

To date, 255 km of drains have been completed, 6,560 ha of native vegetation fenced and 2,650 ha of wetland protected.

The latest funding extends the program until 2008, enabling completion of the drainage system,

establishment of an environmental management system for the drains and wetlands, along with environmental enhancement and sustainable production components.

"This will allow a further 410 km of drainage works, wetlands management and restoration, and improved management of 64,000 ha of remnant vegetation and wetland habitat," he said.

Mr Hill said the funding combines cash contributions from the Australian and South Australian Governments along with a further \$11 million in-kind or cash contribution from landholders.

"Proposed activities under the USE Program will help the local community combat the impacts of dryland salinity and waterlogging on internationally significant wetlands and remnant vegetation in the region.

"The swamps and lagoons in the Upper South East are some of the most significant wetlands remaining in the region, providing habitat for at least 79 waterbird species.

"The Coorong's southern lagoon and the ephemeral lakes have a unique environment and are significant water and shorebird habitats - ensuring the long-term protection of all these eco-systems will be a valuable outcome.

"This is a great example of governments joining forces with the community to address natural resources and environmental issues," he said.

Mr Holloway said the program will allow landholders an opportunity to contribute by making in-kind biodiversity contributions instead of facing a cash levy towards the cost.



The Hon John Hill, Minister for Environment and Conservation

“Landholders will be able to make environmental off-sets such as protecting and enhancing areas of native vegetation and setting aside vegetation corridors, fencing and weed and feral animal control,” he said.

“We will be happy to negotiate equitable and transparent management agreements with landholders who wish to protect native vegetation as an alternative to paying a levy for the works.”

The regional body, the South East Natural Resource Consultative Committee (SENRCC) is to be engaged in the management of the Program.

*Further details from Andrew Johnson, Program Director;
Ph (08) 8303 9532*

Partners coming together

The announcement that Government funding has been secured is further encouragement to the Program Management Team as they continue to consult with SENRCC, the Upper South East Program Landholder Consultative Committee (USEPLCC) and other landholder groups. Together the partners are exploring ways in which in-kind contributions to biodiversity conservation can be off-set against levy payments.

“We are confident that we can put together a package that will suit most landholders”, said Andrew Johnson, Program Director. “The landholders have also been very positive about these initiatives.

“The proposed program provides an effective and equitable drainage system to regional landholders and the best cost-benefit outcomes for dryland salinity, flood management and regional biodiversity”, said Mr Johnson. “This will be an Australian ‘first’ providing a flexible range of options to off-set cash for conservation.

Photo: B Furby



“The concept has received consistent support from regional reference groups as the preferred model and has been applauded by both the environmental lobby and key rural industry representatives. It is seen as an innovative approach to promoting sustainable rural industry and biodiversity stewardship across the landscape.

“It is important to understand that the Government is not proposing to buy land or vegetation. What it is prepared to pay incentives for, on behalf of the South Australian community, is the application of management skills and services of landholders to improve the protection and enhancement of biodiversity on their properties.”

*Further details from Andrew Johnson, Program Director;
Ph (08) 8303 9532*

I remember when

We seem to have had so many ‘dry’ years recently that some people might wonder why we need such an extensive drainage program. But memories don’t have to go too far back to appreciate the devastation that flooding can bring to the USE.

Seldom does a single issue prompt large scale changes to how we manage the land. Usually many issues combine and this is certainly the case in the USE. Salinity might be the issue that people talk about, but we should not lose sight of the fact that the real villain is the elevated watertable that brought the salt to the surface.

Large scale clearing of native vegetation in this region began in the 1950s, but much of this was quickly replaced by as much as 300,000 hectares of lucerne that kept the watertable reasonably stable.

In 1978 aphids decimated almost the entire lucerne crop –our single defence against excessive groundwater recharge. 1981 was a very wet year leading to massive flooding. As the floodwaters retreated they left behind the salt,



Photo: K Fisher

Greg Fisher standing by the drain on his property ‘Clover Ridge’ near Marcollat



concentrated during the 1982 drought. Further wet years in 1988 and 1992 just added to the problem.

We have learned a lot from these bitter experiences. We now better appreciate the value of biodiversity – we cannot afford to have all our eggs in one basket. We also know that large bodies of water can pond for months on our level landscape, recharging the groundwater, unless we can drain it away.

These events and our understanding of them all contributed to the development and acceptance by the community of drainage and vegetation management as integral components of the solution to flooding and dryland salinity.

Since the Government approved the USE DS&FM Plan in 1995 the USE has experienced a series of winters with generally below average rainfall. Darren Willis, Environmental Manager commented: “Over this time many properties in the USE have changed hands and the new owners are largely unaware of just how damaging a wet winter can be. Because of this there is some feeling among the local community that a drainage scheme is not required, or at least that the proposed drainage scheme is not worth the estimated cost.

“In some areas the dry winters and the absence of extended periods of ponding have resulted in a lowering of water tables,” said Mr Willis. “Under these conditions, landholders can renovate pastures

with confidence. However, it would require only one wet winter to see water tables return to near the surface, bringing with them more salt, and with pastures inundated for extended periods.

“The drainage scheme is still essential for managing dryland salinity and flooding problems. It is also necessary to ensure that landholders can invest in pasture improvement without the threat of having their whole investment wasted through flooding and prolonged inundation.”

Further details from Darren Willis, Environmental Manager; phone (08) 8303 9572

Getting down to action

The June *Project Update* showed that Northern Catchment landholder negotiations, drain design, native vegetation and heritage authorisations have now been completed. Further pre-construction processes include:

- Appointment of a construction supervisor to oversee the Northern Catchment drain construction contract. This will take about 6 weeks.
- Calling tenders for the Northern Catchment drain construction, taking a further 6 weeks.
- Internal Government acquittals to obtain specific clearances for the drain construction components, including an economic evaluation for the Department of Treasury and Finance, consultation with the Government Acquittals Committee, a further submission to Cabinet and a submission to the Public Works Committee.
- An Aboriginal Heritage survey.

These processes are essential for good risk management, public accountability, value for money in spending public funds, transparency of process and fairness and equity in contracts. This means that drain construction works will commence in about three months time.

The design of the Central Catchment drains will commence soon, with substantial works on these to begin sometime in 2004.

There is also much preparation work needed before the environmental program can get underway. A major task is of course to develop the biodiversity trading values for levy off-sets.



This will involve a complex process of negotiation along with the application of good science to the assessment of biodiversity values. The environmental trading framework and the administrative tools will be developed with community representatives, and communicated in community forums. This will be worked out over the next twelve months, during which time there will not be any drainage levy.

Wetland restoration and rehabilitation work will continue with interim funds, but at the same time we need to consolidate our knowledge of various wetland complexes and develop specific management plans before all restoration works can be implemented. This work will be linked to the biodiversity trading exercise.

Further details from Michael Pierce, Manager Business and Communications, DWLBC; Ph (08) 8303 9439

Involving the community

The community is an essential player in the USE DS&FMP and their willingness to participate is critical to its success. This is why the Government is keen to communicate clearly with the community and actively involve them in the planning and in the decision making.

As part of this process, the USE Program Director, Andrew Johnson and Environmental Manager, Darren Willis met with the community in a forum at Keith on Wednesday September 17th. There they outlined details of the Northern Catchment Construction Program and discussed the proposed Drainage Levy / Biodiversity Offset Scheme.

Some 90 regional landholders attended this meeting, hosted by the Keith Branch of the South Australian Farmers' Federation (SAFF). The program also featured

presentations by John Ratcliff, chairperson of the USE Drainage Action Group, a regional working group of SAFF and Kent Martin, Chairperson of SAFF's Natural Resources Committee.

A panel session followed these presentations, during which the speakers fielded a variety of landholder questions ranging from the design features and construction timelines of the drainage scheme, to the practical application of the Levy Offset arrangements.

Uncertainty is always a threat to major programs such as this, and landholders indicated that they certainly valued the information provided at Keith, particularly as it clarified issues of concern and dispelled a number of misconceptions. In turn, the Program team appreciated the positive feedback from the meeting.

Further regional forums will be scheduled over the next four to six weeks.

The USE Program Team would like to thank the Keith Branch of the South Australian Farmers' Federation for their support of this forum.

Further details from Darren Willis, Environmental Manager; Ph (08) 8303 9572

Grant Funding For Landholders To Continue In 2004

Funding opportunities for revegetation and vegetation management have been extended out to 2004. The South East Natural Resource Consultative Committee is

now encouraging applications from Upper South East landholders who need financial assistance to carry out any of the following activities on their farms in 2004:

- Fencing wetlands or native vegetation for stock protection
- Native revegetation
- Establishing farm forestry
- Establishing fodder shrubs

The funding opportunity is offered through the USE Community Support for Recharge Control Program (USE CSRC Program). This program allocated \$1.15 million in 2003 for a variety of natural resource management works on farms, just short of its \$1.38 million target.

The remainder of the funding - sourced from the National Action Plan for Salinity and Water Quality - is now available for activities that will be completed in 2004.

The USE CSRC Program funding is independent of any potential assistance that will be introduced through a 'biodiversity trading' program and is expected to cease once that program is operational.

For further information or application forms please contact Zita Stokes, Rural Solutions SA Struan Office on 8762 9180 or Ainsley Forrest at the Keith Office on 8755 3166

New to the wetlands
Carolyn Vivian is the recently



Summary of project components

<p>Drain construction Completion of 410 km of drains incorporated into a regional drainage network. The network aims to control and manage surface water flows and remove saline groundwater where possible.</p>	\$20.9M
<p>Threshold criteria for the management of the Southern Lagoon of the Coorong Maintain the ecological values of the Southern Lagoon of the Coorong using baseline criteria derived from coring, modelling and monitoring.</p>	\$1.235M
<p>Watercourse restoration Provide wetland habitat for aquatic species, wetland refuge for waterbirds, and protect and regenerate riparian vegetation. Includes weed control and improved water quality.</p>	\$2.84M
<p>Biodiversity conservation and enhancement Protect and improve habitat to achieve biodiversity outcomes whilst complementing the water-use objectives of the USE Program. Activities include: protecting and enhancing native remnant vegetation greater than 10 ha and establishing strategic wildlife corridors.</p>	\$17.15M
<p>Regional targets for revegetation and vegetation enhancement Identify appropriate regional targets for revegetation and vegetation enhancement, and determine priority areas for revegetation to maximise recharge interception and enhance regional biodiversity values.</p>	\$100k
<p>Reclaiming the productive potential of the Upper South East Extend information from salinity and agronomy research into and within the farming community through field trials and investigations, education and awareness, on-ground works, new initiatives and evaluation and monitoring.</p>	\$396k
<p>Integrated environmental management and monitoring Environmental approval for the USE Program requires an environmental management strategy and monitoring program, incorporating a regional water management plan.</p>	\$2.99M
<p>Tilley Swamp risk management, land acquisition and management Assess the risk of using Tilley Swamp as a buffer and providing complementary wetland management to the USE wetland complex and the southern lagoon of the Coorong.</p>	\$1.84M
<p>Upper South East communication strategy Communicate project achievements, objectives and other developments to stakeholders, the local community and wider public; set agendas with the media; eliminate misconceptions and misinformation particularly among the local community.</p>	\$360k
<p>Upper South East Program support Manage and administer the USE Program at the highest level. Includes: implementing and managing the Program legislation; facilitating the work of the Program Board; providing management expertise; ensuring that the Program is delivered on time, on budget and in accord with its work plans.</p>	\$1.472M

Project Contact: Andrew Johnson, Program Director, Department for Water, Land and Biodiversity Conservation (South Australia); Ph (08) 8303 9532

appointed Wetland Project Officer for the South East Region. Carolyn's role is to provide technical advice and support in the management of wetlands (big and small) in the region, with particular regard to their water requirements. She is based in the Department for Environment and Heritage office in the SGIC building in Mount Gambier and can be contacted on 8735 1081 or mobile 0428 841 260.

The Department is grateful for Roger's dedicated commitment and for the valuable service he provided to the USE Program. We wish him well in his new position at Tonkin Consulting.

The job vacated by Roger has been advertised and we expect to fill it soon.

Photo: L. Shearing

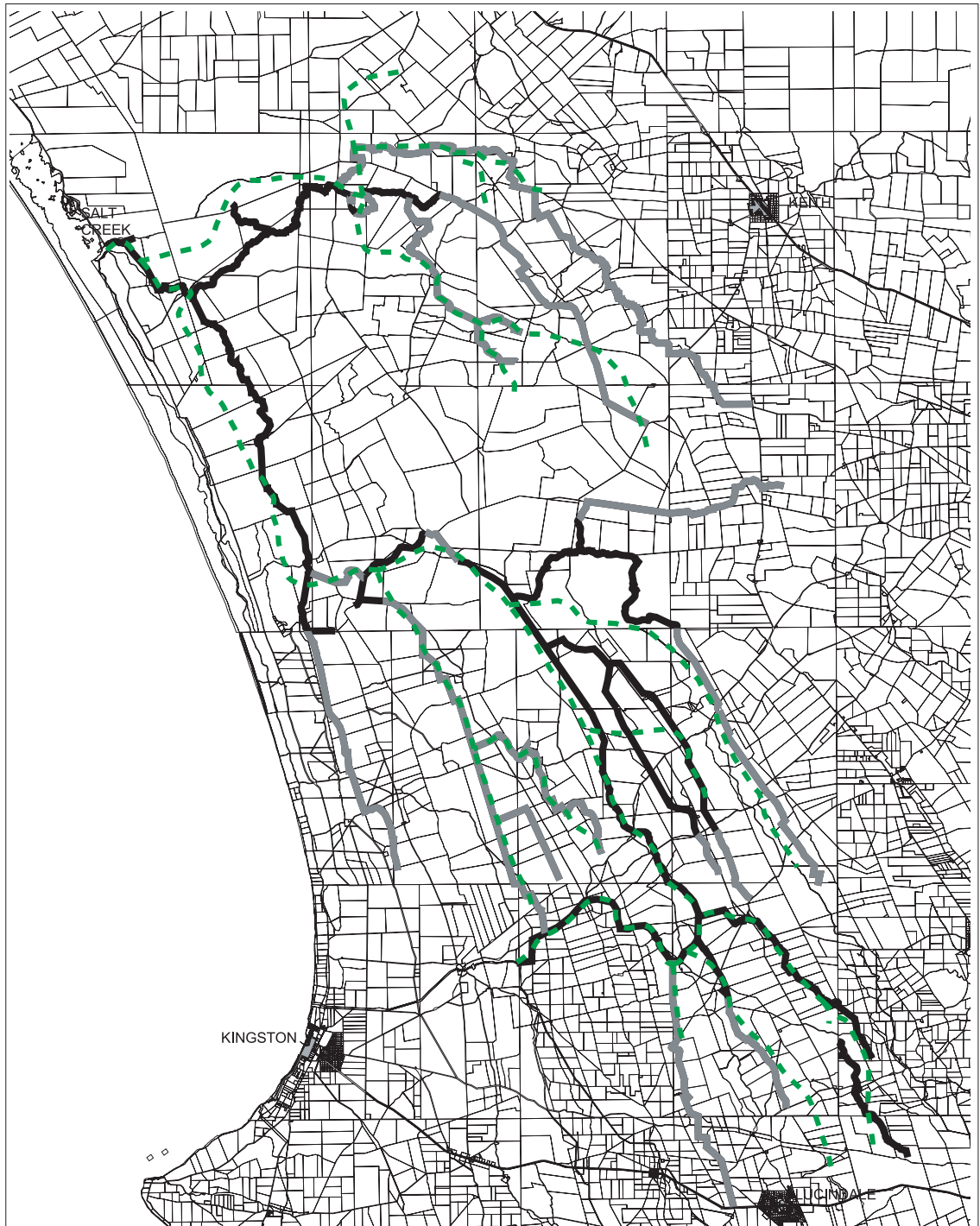





Former Project Manager,
Roger Ebsary

Leaving the drain

After eight years as Project Manager, Construction and Operations, **Roger Ebsary** resigned from DWLBC in late July.

Roger was the manager responsible for the planning, design and construction of those USE Program drainage works that have been completed to date – a huge task that literally broke new ground for civil engineering in Australia. Not only did Roger oversee some outstanding engineering in the USE, he also became well known and respected by many landholders and other stakeholders throughout the region.



-  1995 proposed alignments
-  Completed drains to April 2003
-  All proposed drains

0 10 20 30 40 Kilometers



Upper South East Drainage Alignments