



**Natural Resources**  
SA Murray-Darling Basin

PO Box 2343  
MURRAY BRIDGE SA 5253

Tel: (08) 8532 9100  
Fax: (08) 8531 1843

Email: [samdbenquiries@sa.gov.au](mailto:samdbenquiries@sa.gov.au)  
Website: [www.naturalresources/samurraydarlingbasin](http://www.naturalresources/samurraydarlingbasin)

Wednesday, 17 December 2014

Agricultural Competitiveness Taskforce  
Department of the Prime Minister and Cabinet  
PO Box 6500  
Canberra ACT 2600

Dear Sir/Madam,

**RE: SA Murray-Darling Basin NRM Board response to the Agricultural Competitiveness Green Paper**

The South Australian Murray-Darling Basin Natural Resources Management Board (the Board) welcomes the opportunity to comment on the Agricultural Competitiveness Green Paper.

The Board is the key statutory authority for the management of natural resources in the SA Murray-Darling Basin region. Our region has many environmental, economic and social attributes that are extremely valuable to South Australia's and Australia's agricultural sector, being the state's premier horticultural region, increasing intensive livestock industries and home to the Mallee grain belt.

The Board operates under the auspices of the *Natural Resources Management Act 2004* (The Act) and is a major investor in innovative agricultural production, natural resources management and community engagement programs that build the skills, knowledge and confidence of our region's farmers and land managers. From a natural resource management perspective, the Board supports farmers to navigate the complex operating environment in which they do business. Our role is to build partnerships and other collaborative arrangements to support farmers in Australian agriculture. The Board works closely with the primary producers within the South Australian Murray-Darling Basin and sees the Green Paper as an important step towards ensuring a long term, prosperous and resilient agricultural sector. We are well positioned to assist the government in implementing its final White Paper policies, particularly in the areas of collaboration and knowledge management.



**Government of  
South Australia**



The Board recognises that the agricultural sector is facing many challenges that impact on its ability to remain viable, competitive and sustainable. However a vibrant agricultural sector cannot remain competitive in the global market without the contribution of a region's natural resource capital (healthy soils, good quality water and healthy bush) as a key component of competitive and productive agriculture. We are also increasingly aware that Australian producers need to compete through well-marketed quality produce and our programs aim to ensure our natural assets support the marketing of 'clean and green' Australian agriculture across the globe.

The Board has contributed to and supports the submission of NRM Regions Australia to the Green Paper. It addresses the risks to our region's agriculture that would result from poor natural resources management practices, variable and extreme climate events, and community perceptions of the agricultural sector's level of social responsibility. The Board has been active in mitigating the challenges to Australian agriculture through various projects, including those that best utilise rainfall and maximise production for every drop of irrigation water by promoting no till farming practices and providing on-farm irrigation efficiency support. Similarly, our work in soils research and rehabilitation is important, not only for on-going productivity, but also drought preparedness and bushfire recovery and has been particularly evident over recent times. Two examples of the Board's work, in partnership with others are outlined below.

### **Irrigation Efficiency**

The On Farm Irrigation Efficiency Program is an Australian Government funded program enabling irrigators Murray-Darling Basin wide to modernise their existing irrigation infrastructure and ensure the longevity of irrigating communities. The project is currently in its fourth stage and once finalised, a water saving of 37 gigalitres will be made, including a 15 gigalitre return to the Commonwealth Environmental Water Holder to be used to improve the environmental health of the River Murray.

The program has delivered \$95 million of investment in irrigation upgrades and has enabled 480 projects that improve on farm irrigation practices. This in turn has supported participating irrigators be more competitive in global commodity markets.

The types of works that are funded under the program include conversion from sprinklers to drip irrigation, modernising existing drip irrigation, laser levelling of paddocks, converting to centre pivot irrigation systems, and installation of on-farm automation, monitoring and control technologies.

The team not only coordinates the delivery of projects in South Australia, they are also coordinating projects as far across the border as Wagga in Victoria. The program is allowing landholders to value add and many have made the decision to expand their farming practices, something they may not have had the opportunity to do without this initiative.



## Bushfire Recovery

Our Bushfire Recovery programme was developed following devastating bushfires across the SA Murray-Darling Basin in January 2014. It created a strong focus on land management at a time of crisis, and in particular the regeneration of bush, rehabilitation of pastures and the stabilization of soils with an aim of enabling farmers to resume farm production with minimal delay.

Post-fire soils and landscapes are particularly fragile and farmers were feeling the economic push to restock properties as soon as possible. We connected with the impacted farmers and supported them to come up with ways of protecting land which are economically viable, i.e. containment feeding, longer term agistments, trash cropping and pasture regeneration and environmentally wise, such as allowing natural regeneration and making sure threats such as rabbits and foxes are well under control. We brought land managers together through BBQ events, field days, pasture walks, evening meetings, and sponsoring places at the Rural Land Management Course and by coordinating neighbourhood land management projects such as integrated pest control, sand dune stabilization trials.

Tellingly, although 240,000 hectares of land was burnt we have very little erosion and soil loss through either wind or water. This is due to good seasonal conditions but also good land management from our farmers, which has been supported through our programme of building farmers' skills, capacity and providing small recovery grants to kick start projects.



The Board encourages the use of bold policy to address these risks and to promote the long term resilience, and therefore productive capacity, of our natural resources. This future-thinking approach is key to the Board's own delivery of agricultural policy, developed with strong community collaboration, ensuring a healthy region for long term productivity and profitability.

The Board particularly supports the policy ideas proposed by the NRM Regions Australia response and examples of how we are currently doing so is outlined below:

- Enhancing communications

The Board invests in communications to build resilient communities and sustain agricultural business and related services. We listen to what the community wants to support their



operations and we ask them to assist us to prioritise our investment. We invest in tools and mediums to connect farmers through development of software and use of social media.

- State government deregulation

The Board is working closely with State Government in relation to the administration of native vegetation legislation, supporting the move to localise native vegetation management. With a good understanding of the needs of farmers, our communities and the ecosystems in the regions, we will be undertaking assessments for native vegetation clearance in our region into the future, improving services for our community and the results of those services.

- Farm Business Improvement

The Sustainable Focus Farm Project is increasing the confidence of growers in the Southern Mallee using precision agriculture, through the use of historical biomass satellite imagery to improve decision making. The project is working with farmers to demonstrate the potential of satellite imagery to identify different management zones within a paddock. The farmers have received detailed pictures of their farms using historic satellite imagery, showing variation across paddocks. Integrating spatial information with local knowledge can assist in developing management plans specific for each paddock

- Strengthening agricultural education

The Board runs Teacher Professional Development sessions to provide our schools and the greater community with knowledge on environmental topics. We provide guest speakers at sessions for Upper and Lower Murray schools and help teachers learn about the importance of soil, soil types and land management. The sessions allow teachers to experience soil testing activities they can use in the classroom and how to create soil for nutritious gardens. Feedback is that presentations are practical, informative and easily applicable in the classroom.

- Increasing drought preparedness

The Board operates an automatic weather station (AWS) network within the SAMDB region which extends from Burra, in the north of the SAMDB region, to Currency Creek, in the south, and consists of 34 automatic weather stations and seven stand-alone rainfall monitoring sites. The network helps growers receive seasonal and location-specific weather data, with climatic data such as air temperature, humidity, soil temperature, evapo-transpiration (ETo) and wind speed. A chill calculator has also recently been added to the website. This data is updated hourly to assist with irrigation management and encourage the adoption of adaptive management practices. Data from the network assists with decisions on issues ranging from frost protection activities and irrigation rates, for example ETo data can be used to determine





when to irrigate and how much water to apply. Dryland farmers through the Mallee also use the data to choose optimal seeding times and to assist with spraying activities – knowing when to start and when to stop spraying. Selected sites in the Mid Murray region calculate Growing Degree Days to assist with branched broomrape control.

- Natural resource management initiatives

The Board has worked over time with the Mantung Maggea Land Management Group, which formed when 13 environmentally minded landholders came together, initially with the aim to protect the local population of Mallee fowl. It began with biannual fox baiting programs on the private properties to reduce predation on Mallee Fowl and their young. The program has grown to now include public land in the area and control of other pest species. The coordinated and consistent effort has resulted in the decrease of fox and rabbit numbers and an overall improvement in the condition of the landscape including an increase in ground cover, higher lambing percentages, improved stock health, reduced crop losses and also more active Mallee fowl nests. The camaraderie of the community and their common goal has contributed to the success of the program along with the consistent dedication of Board staff to facilitate and assist the group in their land management objectives. Based on extensive work with farmers, it is the Board's firm view that the health of our natural resources are a fundamental underpinning for a diverse agricultural economy and critical in sustaining a resilient and innovative community.

- Strengthening the RD&E system

The Board works directly with regional farmers on many trial activities. Some on farm trials have included assessing different nitrogen rates and trace element responses across soil types, across different management zones at sowing and across different zones post emergence.

The South Australian Murray-Darling Basin Natural Resources Management Board is pleased to have had the opportunity to provide comment on the Green Paper and to provide suggestions of where the Board, as a regional and well-known existing organisation, can continue to support and encourage the agricultural sector. Should you have any further queries on these comments from the Board please feel free to contact Mr Hugo Hopton, Regional Manager, Natural Resources SAMDB on (08) 8532 9100.

Yours sincerely,

**Sharon Starick**

Presiding Member

*South Australian Murray-Darling Basin Natural Resources Management Board*

