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The Renmark Irrigation Trust





Constituted by a Statute of the Parliament of South Australia, 1893

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TRUST REFERENCE: BRS/PJD 20/12/2010

YOUR REFERENCE:

To: The House of Representatives Standing Committee on Regional Australia

RE: The MDBA Guide to the proposed Basin Plan

The Renmark Irrigation Trust (RIT) founded in 1893 is a community owned irrigation service provider supplying irrigation water pumped from the Murray River. Water is delivered through fully piped infrastructure (since 1972) to over 600 properties producing various fruit crops on over 4,500 Hectares of horticultural land.

RIT has been operating in this role as an integral part of the Renmark community and has been largely instrumental in the growth of the district for 117 years. Renmark is recognised as the first irrigation settlement in Australia founded by the Chaffey Brothers. RIT holds water licence No.1 in South Australia which had an initial irrigation entitlement of 46.7 GL. The current licence held for irrigation is 44.1 GL.

RIT recognises the need for healthy rivers to provide ecosystems that underpin the essential facets of good water quality, high biodiversity, healthy and sustainable food production, resilient land values, and to generate river linked tourism, that will support river communities such as Renmark.

Rewarding good irrigation delivery and on-farm practices

RIT believes that the proposed cuts to water allocations in the Guide will unfairly punish the good irrigation practices of its members shown over the last 40 years through the use of efficient delivery infrastructure systems and efficient on-farm irrigation use, monitoring, and management techniques. The substantial investment funding required for this has been provided in the main by the members of RIT.

A Hotspots assessment carried out by the International Centre for Water (Charles Sturt University) on the RIT delivery system found it to be 97% efficient. A report by Central Irrigation Trust (CIT) to the DWLBC (now SA Department for Water) on water use efficiency demonstrated that irrigators in the rest of our region are on average 96% efficient when applying water to their crops.

These results show that there is very little room for improvement and very little additional water savings possible through infrastructure upgrades. Neither do they provide any room to adjust to the proposed large reductions to water entitlements for South Australia without a considerable negative impact on production.

Cuts in water availability WILL lead to productivity and profitability losses and render the investment in efficient water use as dollars lost.

Basin water use - SA not responsible for over allocation

The Guide clearly shows that over allocation is the primary cause of decline in the health of the river and associated ecosystems. Also clearly shown in Fig 3.2 of the Guide is that South Australia has NOT contributed to the over allocation but rather has been allocating and using water responsibly for many years.

South Australia:

- capped further licence distribution way back in 1968,
- has not used water beyond its cap,
- has only 7% of the total MDB allocation

The Guide's proposed SDLs penalise the early actions of a State that has established communities on viable, sustainable, responsible and limited water use.

RIT recommends that SDLs be set in the proposed plan so as to recognise and reward innovation or early adoption of water use technology.

Socio-economic impacts

To justify the previous infrastructure investments, paid for by the members of RIT in partnership with SA Government, certain high levels of production are required, meaning that irrigators must maximise use of their water allocations to achieve sufficient return on investment. Infrastructure investments loans are still being paid for by the members of RIT. The required high levels of horticultural production required to pay for this investment by SA irrigators are clearly demonstrated in Table 7.1 of the Guide.

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This investment was only justifiable because of South Australia's high water security and historical 100% allocations. Any reduction in water entitlements will directly cause an equivalent negative impact on production, much lower return on investment, and most likely result in irrigators leaving the industry. This will in turn lead to escalating costs for remaining irrigators, something already experienced as a result of the Small Block Irrigator's Exit Grants.

Also clearly demonstrated in Table 7.1 of the Guide is the effect of removing water from land in SA where gross value of agricultural production will drop from \$9,176/Ha to \$79/Ha. This difference in productive return (a multiple of over 116 times) has not been matched in any other area of the Murray Darling Basin and is only achieved through the investment in efficient delivery systems and on-farm irrigation techniques coupled with high levels of management expertise.

The Irrigation Modernisation Project Plan conducted in 2009 by the RIT, with funding from the Federal Government's 'Water for the Future' program, indicated that should the RIT follow the 'do nothing' scenario (which did not take into account SDLs or reductions in water allocations) would result in an industry decline leading to the loss of over 200 full-time jobs in Renmark alone.

RIT is currently conducting social research in partnership with University of South Australia and the Australian Research Council, over a 3 year period, to determine the effects of the drought, water restrictions and commodity market variations on irrigator's intentions for the future. Initial results show that many irrigators feel they are 'on the edge' of business failure. Loss of further water entitlements in the district will no doubt result in greater effects and job losses than that expected for the 'do-nothing' scenario.

Recently completed by RIT, with State Government funding, is a five (5) year business plan conducted by consultants Hudson-Howells. Included in the business plan are twenty two (22) recommendations to modernize, streamline and diversify RIT operations to face the many challenges brought about by drought conditions, water trading, new government legislation and the associated massive increase in administration costs. Highlighted in the business plan is the high level of risk to the RIT business as a result of reduced water entitlements, and the likelihood of irrigators leaving the industry due to high costs of purchasing water (on top of low commodity prices) making their businesses unviable.

The Marsden Jacobs and Associates 2010 report into the impacts of delivering the Basin Plan, states for the Riverland community "5 medium sized towns are all highly dependent upon horticulture and its secondary processing industries. The region has a high vulnerability and dependence on water. The community has a low ability to cope with a reduction in water allocation. Perennial plantings have no capacity to vary planted area with changed water availability.

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There is very little scope for transformation to dry land farming given the small property size and the regions very low rainfall."

The Basin Plan as described in the guide has a high probability of creating an unsustainable future for our communities as the lack of critical mass provided by irrigated agriculture will result in the loss of knowledge and expertise in critical industries, loss of viable support services and significant concern that our major processors such as wineries, packers or beverage manufactures will leave!.

This has been well demonstrated during the recent period of low water availability within the Basin. Renmark's irrigated agriculture incurred significant and unsustainable increases in debt levels, while diminishing equity ratios have occurred to meet the relentless pressure of maintaining permanent plantings through the purchase of water, often from interstate.

Renmark irrigators spent just over \$8.25 million in the financial years 2007/08 – 2009/10 to lease in water (nearly \$1000 for every man, woman and child in the Renmark town district) borne by around 500 irrigators. Obviously, this is not a financially viable medium or long term strategy, rather a means to maintain and protect infrastructure investment with a medium to long term life and projected earnings against which loans were secured.

In light of these studies and as expressed at many of the MDBA community consultation meetings, the socio-economic impacts predicted in the Guide are simply not believed by those it purports to report on.

RIT recommends that the socio-economic studies conducted in the Riverland region are used as a basis for much more detailed studies initiated by the Federal government.

Managing the environmental allocation

The Guide does not give any indication as to how environmental water use will be monitored or what procedures will be put in place to manage it.

Several projects in the basin such as Lindsay Island in Victoria and Chowilla creek near Renmark in South Australia have indicated that using infrastructure can substantially reduce the amount of water required for equivalent environmental outcomes. This is a WIN-WIN situation as the environmental outcomes are achieved and irrigators who have invested their money for future 'Return on Investment' (ROI) are not penalised. Theoretically there would be more water available for the conveyance/dilution flows and even improved water security to enable investor confidence to return.

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RIT recommends that the MDB Plan include procedures for monitoring and managing environmental watering across the basin. Additionally the government should instruct the MDBA to identify environment infrastructure projects that will reduce water needs and use the savings to increase SDLs across the basin.

Reliability of the science and data in the Guide

Throughout the Guide it refers to the 'uncertainty' in the science and only 'moderate' reliability of data. Even more unknown is the benefits to the health of the river resulting from the additional environmental flows. There are times when "the best available" is not good enough and these high levels of science uncertainty cannot possibly justify the decimation of whole river communities through huge SDL reductions when even the outcomes for the environment cannot be reliably determined.

The Sustainable Rivers Audit conducted by CSIRO and referenced in the Guide was performed during the worst drought ever recorded. Such timing of the audit, in the midst of a natural disaster, gives a skewed view of ecological health akin to examining the environment after a tropical cyclone, volcanic eruption or earthquake.

Other examples of questionable science or data in the Guide include:

- The current diversion limit for SA Murray of 665 GL does not agree with any of the volumes indicated in the SA Water Allocation Plan or other listings of entitlements.
- Increased Flooding some of the volumes suggested for environmental targets are equivalent to major flood events causing millions of dollars of damage in some regions.
- The amount of water required for the environment there is very little supporting evidence for the amounts stated in the Guide.
- Metering of river flows and extractions many measuring points do not exist, are inaccurate, or do not take into account bypass flows during flooding
- Assumptions made for computer models small assumptions can make a
 big difference to outcomes in complex models (this can be demonstrated
 in computer hydraulic models for pipeline systems which are generally
 very accurate).

RIT recommends that the MDB Plan take a slow, graduated and precautionary approach to reducing SDLs so that environmental water use and the resulting effects can be properly monitored, measured and managed to obtain more realistic and achievable SDLs.

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High security status of entitlements

The high security status of water entitlements as opposed to general security has no apparent consideration in the Guide. Permanent plantings in Renmark rely heavily on what was high security water and all investment decisions have been based on this historical fact.

Reductions in high security water entitlements will have higher impacts than those of general security and therefore should be treated differently when determining SDLs as investment in high level, permanent infrastructure requires far greater continuity and certainty to ensure Return on Investment.

Conversely it would appear that the historical use for General/Low security water has been for annual crops in an opportunistic manner, this implies that there is no or little exposure to cost risks that are incurred with permanent plantings or expensive infrastructure. South Australia has possibly been the beneficiary of an open market as provided by the National Water Initiative (NWI); however irrigators have been purchasing water to maintain their businesses under the assumption that things would be improved by the MDBA Plan. Clearly this is not the case.

This investment, still being paid for, has occurred in Renmark dating back 40 years when RIT converted from concrete lined channels to a fully closed pipe system.

There are NO open channel systems in the Riverland.

Sharing the water savings of infrastructure upgrades

The investments by RIT members in irrigation infrastructure have already been mentioned. South Australian irrigators and the State and Federal government have invested in highly efficient water delivery infrastructure and on-farm irrigation systems throughout South Australia. Infrastructure upgrades have provided water recovery of up to 30% in the RIT district, and this has been replicated in other systems such as Moorook which is also in the Riverland region of South Australia.

The benefits of these upgrades are the increased flows enjoyed by all river users, particularly those of the lower reaches and the Murray mouth.

There is clear potential for large water savings in other regions of the Basin from infrastructure upgrades. The savings from infrastructure upgrades should be used to offset portions of the total volume of water to be recovered. A "Basin with no Borders" approach would mean that making these savings 'upstream' would improve the ecological health of the lower reaches and along the way.

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In this way, South Australia and RIT would not be disadvantaged for having previously invested in infrastructure, whilst other regions would see their infrastructure upgraded to modern standards (with Federal funding) and the entire Basin will share in the savings created.

South Australia already has very high levels of infrastructure so there is absolutely minimal opportunity for further improvement of infrastructure. This is well known and possibly even understood by SEWPC(previously DEWHA) after nearly THREE years of "consultation" resulting in projects of ONLY \$3 million of the \$110million budgeted for infrastructure renewal (negotiated at COAG 2008).

This means SA will effectively be 'isolated' from the \$5.9 Billion to be spent on infrastructure upgrades, which we would fully support if the "savings" elsewhere are shared equally across the basin.

Timing/Transition of change

The Guide proposes five (5) years as a transition period. Entitlement reductions of this magnitude will necessitate much more time for communities to adapt to the major changes required.

Wholesale crop changes may be required (once they have been identified along with viable markets!) with large turnaround times, in turn requiring infrastructure changes to irrigation and delivery systems. New business plans will be required, banks will revisit investments. And, and, and...

RIT recommends that the transitional period is more gradual so our communities can adjust to a new future at a reasonable pace rather than a five (5) year rapid adjustment. The Federal Government should set up transition programs and investments to assist irrigators and communities to adapt to the changes that will occur with less water.

Critical Human Needs Requirements

The Guide suggests that critical human needs water (CHNW) should be extracted from the SDLs for each region. This puts South Australian irrigators at a distinct disadvantage with the proposed CHNW volumes remaining close to current levels. This means that irrigators will have to bear the brunt of all cuts to diversion limits as shown in the following table.

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Using scenario 1, 2 and 3 from the Guide will give the following:

| MDBA Guide | Scenario 1 | Scenario 2 | Scenario 3 |
|---------------------|---------------|------------|------------|
| | water volumes | water | water |
| | | volumes | volumes |
| Reduced diversion | 492 GL | 462 GL | 433 GL |
| limit | | | |
| Less CHN | 194 GL | 194 GL | 194 GL |
| requirements | | | |
| Remaining Non-CHN | 298 GL | 268 GL | 239 GL |
| diversion limit | | | |
| Current Non-CHN | 592 GL | 592 GL | 592 GL |
| diversion limit | | | |
| % Reduction to Non- | 50% | 55% | 60 % |
| CHN diversion limit | | | |

Obviously, these kinds of reductions in entitlements of South Australian irrigators will wipe out the irrigation industry and the communities around them. No Federal Government can entertain the idea of destroying the most efficient operators in Australia and not expect a backlash, particularly while they are subsidising other areas with taxpayers money to the tune of \$5.9 billion to enable them to achieve *better efficiencies* by lining some channels!

South Australian irrigators now have the unenviable situation of being in greater conflict with our State Government as a result of this "Draft Plan" and the wedge it drives between Urban and Rural water users. History shows that the greatest number of voters will always win, so it is a forgone conclusion that Adelaide's interests will always be attended to before Rural communities.

RIT recommends that the MDB Plan use a "whole of basin" approach to critical human needs water by separating and setting aside the required CHN water volume collectively and have it provided for before SDLs are calculated for in each region.

Support for the submission by SARC

Rit would like to bring attention to and highlight its support for the submission presented by South Australian River Communities (SARC). RIT is a member of this organisation and feels that the detail included in the submission encompasses the major concerns RIT has in relation to the Guide with respect to the whole Riverland region.

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Conclusion

The Renmark Irrigation Trust urges the House of Representatives Standing Committee to consider the differing but always substantial impacts of the Plan and SDLs on basin communities and use every avenue possible to lift the limits to realistic levels where communities can survive and better yet, flourish.

Renmark already has a vibrant tourism industry involving fishing, houseboats, water sports (including a World Championship wakeboarding competition), camping, ecotourism, and many other recreational activities. RIT fully supports the further growth and enhancements that will be provided by a healthy river, however, this will not fully offset the losses experienced by irrigators. It is expected that this growth will be gradual, incremental and will require entirely different business skills, training and investment.

A balanced MDB Plan should result in a better environment but RIT is not sure how many of our community will remain to enjoy it.

Questions or discussions on this submission should be directed to the Presiding Member of the Renmark Irrigation Trust – Peter Duggin

or to the Chief Operations Officer – Barry Schier

Yours Faithfully

Barry Schier

Chief Operations Officer
The Renmark Irrigation Trust

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