

Response to Productivity Commission Discussion Draft

Rural Water Use and the Environment: The Role of Market Mechanisms

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1 Introduction

The Ricegrowers' Association of Australia Inc (RGA) welcomes the opportunity to comment on the Productivity Commission's Discussion Draft on Rural Water Use and the Environment: The Role of Market Mechanisms.

Overall, the Productivity Commission's Discussion Draft is balanced and considers both the benefits and costs and the advantages and disadvantages of the various options discussed and considered. RGA will accept the discussion draft where it is in agreement to the Productivity Commission discussion and findings.

Notwithstanding this, there are a number of areas which RGA will make specific comment and RGA will also comment in brief where there is a divergence of opinion from the Productivity Commission's Discussion Draft or to correct perceived omissions or errors.

2 The Australian Rice Industry

The rice industry encompasses the Murray Valley of NSW and Victoria and the Murrumbidgee Valley of NSW. Typically, around 150,000 – 160,000 hectares are sown to rice in October of each year across this region producing an average of around 1.2 million tonnes of rice annually. The industry has a farm gate value of around \$350 million and total value (export earnings, value-added) of over \$800 million. Including flow-on effects, it is estimated that the industry generates over \$4 billion annually to regional communities and the Australian economy.

Rice growers have individually invested over \$2.5 billion in land, water, plant and equipment and collectively invested around \$400 million in mill storage and infrastructure through the Ricegrowers' Cooperative Limited (SunRice) and the Rice Marketing Board of NSW (RMB). The industry is the backbone for our regional communities generating around 21% of total regional income and 18% of total regional employment1.

The rice industry has also invested significantly in environmental improvement and impact reduction as part of its efforts towards better natural resource management and environmental stewardship. The Rice Environmental Program's flagship is the Environmental Champions Program (ECP) which has received over \$1.8 M in funding from the Department of Agriculture, Fisheries & Forestry to implement a pilot program and roll out of the ECP.

3 RGA

The RGA is the collective voice of rice growers in Australia. RGA represents over 1600 voluntary members in NSW and Victoria on a wide range of issues.

As much of the Riverina region has been built upon rice, and rice is still the mainstay of many towns today, it is important that RGA members have strong and effective representation. RGA fulfils this role by representing and leading growers on issues affecting the viability of their businesses and communities. Importantly, the RGA also looks to lead its members through a process of improved environmental management.

4 Improving existing entitlements and allocation regimes

RGA urges some caution about the simplification of the specification and types of entitlements as this provides a level of diversity with which all water users, including the environment, may utilise to maximise the various objectives.

4.1 Delivery Capacity Share and Stranded Assets

RGA disagrees with commentary (p. 15-16) that the provision of a tradeable delivery capacity share would help to manage concerns over stranded assets if a charge is place on the delivery share. This refers, of course, to those irrigation delivery assets and infrastructure held within Irrigation Corporation's area of operations. The provision of a tradeable delivery capacity share may not provide this result.

¹ Leslie, D.G., Keyworth, S.W., Lynn, F.L., Magill, A.F. 1992, *Rice 2000 Project*.

If there were insufficient water being used, particularly on small channel spurs, the Irrigation Corporation is likely to consider not delivering water to those remaining irrigators. This will be for two reasons, firstly because the costs of delivering this water would be cost prohibitive to these irrigators (where no postage stamp delivery charges apply) or increase the cost of business for all shareholders (where a postage stamp delivery charge applies). Secondly, the physical losses incurred for the water delivered will inherently increase leading to much lower physical water efficiency. The Australian public has placed pressure on channels as being inefficient and to continue such deliveries would undoubtedly ensure that this pressure is "well placed".

Delivery constraints are currently well managed in the southern NSW Irrigation Corporations. Shareholders are aware of the rules and manage their business accordingly.

Currently, there are no internal Irrigation Corporation delivery capacity shares, although RGA acknowledges that Murrumbidgee Irrigation is investigating the feasibility of such a scheme. It is likely that this will be introduced, but the Corporation not the irrigator will own the delivery capacity share. This scheme is more designed around ensuring no third part impacts occur from water being traded into channels which are now at or above capacity. In other words, future permanent trade into any particular channel may only be activated annually on the basis that there is surplus delivery capacity in the channel.

The other concern is that any such market is non-existent. To establish any new market takes considerable time. A good comparison is the permanent and seasonal trades. The former is a thin market with few trades whilst the latter has been in existence since the early 1980s and is consequently very fluid and functioning efficiently.

In the context of the entire discussion draft, care must be taken that it will take considerable time for any market to establish and become effective, efficient and functioning.

4.2 Delivery Entitlements

In terms of this discussion, RGA assumes that the Productivity Commission is referred to river systems delivery capacity shares, rather than those within Irrigation Corporations.

Whilst the discussion draft notes the ability for these to manage congestion, the discussion draft assumes that an irrigator will maintain part of his delivery share for peak times, and sell the remainder for delivery at non peak times. Care should be taken that this is not seen as Governments picking winners and losers.

It is generally acknowledged that the peak delivery time in the southern Murray-Darling Basin Valleys is December to February and March. This is because rice is approaching its most water intensive period and this coincides with the highest requirements for horticultural and particularly permanent plantings. Any irrigation at the fringes of the non-peak delivery limits the ability for irrigators to choose higher returning crops. Non-peak delivery is generally spring and autumn. The only commodities irrigated at this point in time are pastures and pre watering of winter cereals or spring watering of winter cereals. The latter two are only required where the cereals are not drilling in rice stubble (with available soil moisture) or when the weather means that there is insufficient soil moisture to establish the crop or finish the crop. If well managed, this can be profitable but in some seasons water logging can occur.

There is a body of literature acknowledging that irrigation farming is the most profitable farming in Australia. Transferring water use to non-peak irrigation times can lock in irrigators to lower value commodities and reduce flexibility for managing their water entitlements. This is another example of irrigators are best placed to judge what is best for their farm businesses.

The main examples of delivery constraints revolve around the physical chokes within a river, e.g. Barmah and Tumut Chokes. In the Murrumbidgee Valley, this has been managed by the pre- and post-February delivery portions of their water entitlements. Irrigators can take most of their entitlement pre-February but some proportion cannot be used until post-February. In the latter scenario, this water is used to finish rice or pre-water winter crops.

In the Murray Valley, the delivery capacity constraints are more an issue between Victoria and NSW rather than individual irrigators. In this situation, there is a temporary agreement that any delivery constraints, when these occur, will be shared 70% Victoria and 30% NSW (upstream the constraint is shared 50:50 acknowledging similar water requirements for each state). This acknowledges that a large proportion of Victoria development is downstream of the choke. Development in NSW has been constrained by legislative and regulatory constraints on development in Western Lands Lease areas. In all cases, water being transferred to South Australia (either as over border flows or to store in Lake Victoria takes precedence).

4.3 Improving the management of groundwater and surface water linkages

Whilst RGA acknowledges the linkages between groundwater and surface water, care should be taken in this discussion.

In NSW, groundwater water sharing plans are being established where groundwater entitlements (note not usage) is restricted to the estimated sustainable yield. As a result, groundwater irrigators will have their entitlements cut back and will receive some structural adjustment funds² in return.

Care should also be taken by Governments in developing a postage stamp type policy. Whilst there are linkages between groundwater and surface water, there may be real perverse outcomes of including groundwater as part of the MDBC Cap. RGA does not support the inclusion of groundwater per se but would support a groundwater Cap or a reconfiguring of the current MDBC cap, i.e. increased to account for groundwater usage.

There must also be consideration of where groundwater use reduces stream flows and how this is currently accounted for. Any stream flow usage is deemed as transmission losses, and this is accounted for as part of the current resource assessment process. Increased transmission losses due to groundwater usage ARE reflected and accounted for as a transmission loss that consequently reduces the yield on particularly general security irrigation entitlements. If there is to be an adjustment because of groundwater usage, this will need to be reflected in the resource assessment and consequently improving the allocation of resources between consumptive uses as required under gazetted Water Sharing Plans.

Where systems savings are made through management, this water is used to increase the available water for allocation to irrigators (mainly general security as high security take precedence in the resource assessment process). Any moves to transfer this use to an environmental allocation or as a groundwater use is a transfer which will have unintended impacts on the yield on irrigation entitlements and will considerably reduced the flexibility of the water utility as transmission losses vary from year to year.

RGA rejects any proposal to include groundwater usage under the existing MDB Cap, however, supports options exploring capping allocations and use at current levels (this is underway in NSW), expanding the existing MDB Cap by the sustainable yield of groundwater or maintaining separate groundwater and surface water cap (akin to the first options of freezing allocations and use).

In summary, in the implementation of the MDBC Cap for surface, there were significant transfers of wealth. This occurred because usage was the basis for valley Caps but this was not applied at a licence level. The NSW Government chose to only acknowledge licensed entitlement due to legal action fears. Therefore, those whose water use determined the level of the Valley Cap were restricted to less than full use of their entitlement, whilst those whose use did not contribute were able to fully develop or sell unused allocations.

There would be a high degree of concern, that in changing the current MDB Cap, that there would again be a redistribution of wealth. This would be difficult to for surface water and groundwater irrigators to accept.

RGA rejects any attempts to include existing groundwater use under the existing MDB Cap.

² Such structural adjustment funds are to be classed as taxable income which will limit the ability for those irrigators with a high history of use from using trade to claw back their entitlement – a necessary activity where on farm infrastructure has had a high capital expenditure. At present the Prime Minister has directed the relevant bureaucrats to seek a resolution to this egregious issue. In addition, the funds received by groundwater irrigators do not recompense the market value (although RGA acknowledges that the groundwater trading market is non-existent in places).

4.4 Accounting for return flows

In reference to comments quoted by Young & McColl (p. 24), RGA contends that water entitlements (or licences) were issued for regional and state development objectives. The fact that administrators relied on under use in allocating increased <u>seasonal</u> allocations for a number of years should not be confused with issuing licences per se.

The Productivity Commission should not be advocating any change from "gross" to "net" entitlements as a method to account for reduced return flows. Government policy has driven irrigators to reduce any returns from irrigation into streams and has actively sought to promote and fund such activities on the guise of improved physical water use efficiency driven by the demands of society. To now investigate any reversal of the current status quo must be looked at on a case by case basis. This has the potential to impact on twenty years of irrigation development, will provide no incentive for irrigators to be more efficient, return flows will be highly variable in and between seasons, will reduce asset values, increase water charges and begs the questions of who will pay for delivery charges. Any such decision will have unintended consequences and must be fully analysed in the light of all contributing factors.

RGA rejects any specification of entitlements in terms of net entitlements or including return flows.

4.5 Carry Over

RGA brings to the attention of the Productivity Commission that this discussion draft excludes the compulsory carry over undertaken by the Victoria Government on behalf of all irrigators. In many discussions this is rejected as a form of carry over but in fact the compulsory carry over works by not allocating sales water until the majority of next year's entitlement has been stored. This carry over policy supports the higher reliability required by Victoria's irrigation industry which is mainly based on permanent plantings and dairy. RGA understands that the Victoria Government is about to review whether or not to provide individual carry over and the compulsory carry over policy.

It must be acknowledged that carry over is also used to reduce water use and to allow MDB Cap compliance. In order to carry over, an individual farmer must choose whether to purchase water to carry over (i.e. similar to an insurance risk product) or whether to reduce water use in the current year for use in the following year. If resources improve above the level of carry over so that carry over plus allocation reaches 100%, the irrigator has then effectively ceded all carry over and reduced use. Along with this reduced water use is foregone economic opportunity to produce from water when it was available.

The majority of irrigation districts are looking at the issues involved in carry over and the trade off between benefits to individual irrigators and the impacts on other irrigators. This should be done on a region by region approach bases on the objectives of the irrigation communities.

4.6 Capacity Sharing

RGA, while supportive of capacity sharing as an option, questions whether the success of the St George model would be reflected in a system which has winter/spring dominant rainfall – the opposite of the St George area. In summer dominant areas, it would be expected that the majority of storage would have occurred prior to the commencement of the irrigation season, with little inflows into storage after this time. A winter/spring dominant rainfall occurs at a similar time to the commencement of irrigation, thus requiring frequent updates on allocation availability.

The storage and transmission losses in the St George system are equally shared. However, in the Murray Valley, storage losses are shared according to the volume in storage and transmission losses are shared equally except transmission losses from tributary inflows are shared in proportion to the State's ownership, i.e. for Victorian tributaries Victoria only wears these transmission losses. This model may provide some better options for providing irrigators with appropriate indicators.

4.7 Risk Assignment

The RGA would reject any moves by Governments to unilaterally reduce access to water entitlements (i.e. via compulsory acquisition without payment or via reducing the consumptive pool for policy reasons). Irrigators strongly support the risk assignment model included in the National Water Initiative (NWI) as this provides the security required by irrigators to continue to invest in their farm businesses.

An observation is that there will be a differing review of water sharing plans between different states. Whilst this is of little concern to most valleys, it may be a consideration in the Murray Valley. Specifically, NSW Murray Water Sharing Plan will be reviewed three times each thirty years (plus mid term review) whereas Victoria's plans will be reviewed twice. A possible consequence is that the more these plans are reviewed, the greater the opportunity to apply options to reduce water use by irrigators, where these are deemed to be outside the risk assignment model. This will undermine the security required by irrigators for long term planning.

4.8 Uncertainty over Seasonal Allocations

RGA supports comments to improve the announcements of seasonal allocations. However, RGA contends that this does not go far enough. Whilst the current system is sufficient, irrigators require that Governments move to real time allocation announcements. Any number of road blocks have been erected by Governments to not move down this path, including meters have to be read (and this requires someone to drive to the meter and read it), inflows cannot be accurately determined on a daily basis, and for the Murray modelling on which resource assessments are based are monthly (not daily) and requires to approval of the States before being made to irrigators. With today's technology, this is clearly insufficient.

5 Reducing Constraints on Water Trade

5.1 Restrictions on Who Can Participate

It should be noted, that in NSW within a Water Sharing Plan area, seasonal water trading occurs from towns to irrigators (not the reverse), and this can only occur when towns have approved drought plans in place. This ensures that towns do not sell off water required for human use below where supplies are threatened.

It is a significant issue that currently in NSW, any towns (urban) who do not have sufficient water for future use, can apply to the Minister for approval to increase their entitlement. The egregious aspect of this if approved, is that this impacts on the yield on general security licences. Whilst this could be deemed a small impact, this is a principle that if Governments (including Local Government) wish to take water from irrigators, this must be paid for.

Irrigators have long fought for a hierarchy of water recovery and to which Governments have agreed. In addition, the principle of those who invest in water savings keep the water savings in proportion to their funding levels applies. Whilst RGA generally support relaxing restrictions, there should be acknowledgement that Governments via The Living Murray Initiative have made an undertaking to the community to undertake a hierarchy for water recovery, including that every effort would be made not to enter the water market. These commitments must be honoured.

RGA has long contended that environmental managers (e.g. Murray Wetlands Working Group) must pay for all the charges for water delivery and natural resource management, particularly where environmental water can be identified via a licence. Environmental water (except for unregulated flows) is stored and delivered using dams and other infrastructure. Hence, environmental water also creates an impact by the nature of how it is being used (i.e. stored). Therefore, RGA contends that environmental licence managers must be required to pay the fixed and variable water delivery and natural resource management charges which apply to other water users. The only question is whether this water should be deemed high or general security. If the former, a premium should apply where water is stored for more than one year (i.e. a form of continuous carry over).

Unless such charges apply, if and when environmental managers enter either the entitlement or seasonal water market, distortions will apply as other users do not have the same economic parameters and a market distortion will occur.

Entry by urban water users into the irrigation water market should only occur as prescribed in the NWI, i.e. where all and every effort has been made to explore alternative options and where systems are connected.

Comments surrounding the cheaper option of environmental managers purchasing seasonal allocations can be misleading. Conversely, environmental managers selling seasonal allocations to irrigators in low resource years can also potentially affect the water market. This has occurred in the Murray Valley during the current drought. Whilst irrigators (mainly dairy farmers) purchased the water, there was ongoing criticism due to the perceived profiteering at irrigators' expense and the reluctance or refusal by environmental managers to even pay the variable water delivery charges (which were miniscule in comparison to revenue received). On the other hand, such revenue is being used to invest in infrastructure such as fish ladders – but the downside is that irrigators will be required to pay any future refurbishment and repairs and maintenance.

Notwithstanding these concerns RGA strongly encourages that environmental water is made available to consumptive use in dry years via the water market.

RGA requires that Governments honour the hierarchy of water recovery agreed to, and that environmental managers are required to pay the full costs of water delivery and natural resource management charges that apply.

5.2 Fees and approval times for seasonal allocations

The Productivity Commission's discussion draft discusses fees that apply for trade within one region only. This can be misleading, although RGA acknowledges the high cost of trade in South Australia. It should be noted that IPART (in NSW) are currently considering a 300% increase in seasonal fees to a fixed charge of \$25 plus \$1/ML up to a maximum of \$275. The cost of a seasonal trade has nothing to do with the volume traded and the State Water Corporation (SWC) proposal is most egregious. In the example in Box 3.1, the NSW Government fee would comprise of 6.7% as an ad valorem equivalent (AVE).

Conversely, Irrigation Corporations do not charge for seasonal transfers within their area of operations. Surely this must send appropriate signals that the current charges applied by Governments are derived from an inefficient monopoly system.

For inter-regional trades e.g. from South Australia to NSW, the NSW irrigator is also required to pay \$300 to South Australia. In addition brokerage charges often include the cost of the broker driving from Adelaide to Deniliquin to undertake the transfer – many of which take over one month.

Governments are still targeting the temporary trade with charges but there are still antiquated systems imposed. There must be movement to a full towards electronic transfers away from the current inefficient paper transfers. There should be serious consideration given to tendering of services in the seasonal trading systems where these services are not undertaken on a cost effective and timely manner. Charges in excess of \$600/ML are proposed for inter-valley seasonal allocation trades between South Australia and NSW.

5.3 Constraints to Trade out of an Irrigation District

The Productivity Commission's discussion draft coveys the impression that the NWI requirement to free up water trade. There is an inference that this is only 4% until 2014. However, in reality, the requirement is 4% per year cumulative and free trade from 2014.

In the discussion on exit fees, the Productivity Commission has assumed that the exit fee will be deducted from the sale price. However, there is nothing to say that the exit fee won't be added to the sale price greatly increasing the cost. In addition, there is an assumption that the seller will pay this – but perhaps this could in fact come from the buyer. In reality, the exit fee should apply regardless of who actually pays the fee.

RGA agrees that those purchasing an entitlement for import into a region should have a "refund" of exit fee to allow an economic mechanism to ensure the best return. In other words, the exiting irrigation region receives revenue for ongoing infrastructure, whiles the importing region provides an incentive to the irrigator for reducing its infrastructure costs.

While RGA agrees that exit fees may constrain trade, RGA believes that there are significant equity issues that exit fees address. These particularly relate to stranded assets. It is clearly inequitable for the remaining members of an irrigation scheme to bear the burden of other party's decisions to quit the scheme. To suggest that these issues can be dealt with by generic social policies is not a sufficient response to the

problem. Any decision to remove exit fees can only be considered with a clear commitment by Government to take full responsibility for the equity issues that would result.

Tagged entitlements are strongly supported by irrigators as this is the only option which minimises third party Cap and other impacts. Tagged entitlements and exit fees are part of the agreement Irrigation Corporations abided by as the trade off to open permanent trading under the NWI. To now remove part of this agreement is most egregious and also inequitable as the Irrigation Corporations were required to offer a mechanism to those buyers wishing to exit the scheme.

The implementation of exit fees will undoubtedly lead to irrigators (and other buyers) focussing their attention on obtaining entitlements from individual pumpers (i.e. those irrigators outside group schemes). Any negative impacts this may have will be offset by an expectation of higher prices likely to be received, perhaps somewhere between the value of the licence today and the value of the irrigation scheme licence plus the exit fee. There may also be lower transaction costs.

RGA rejects that exit are considered a constraint of trade.

5.4 Fees and charges for entitlement trades

RGA notes that the discussion does not include the costs of conveyancing, e.g. solicitor's costs and does not include any discussion of the costs involved in inter-regional trade.

RGA fully support and believe that there is a major role for Governments to move towards improved the full conveyancing regime for water entitlements. It should be practical on all systems to cost effectively trade small volumes of water entitlements. There is a role for Governments and the National Water Commission to facilitate this.

5.5 Constraints specific to trading groundwater

RGA reiterates previous comments regarding the inclusion of groundwater in the current MDB Cap, i.e. this should not occur. In lieu, a separate groundwater Cap or and extended MDB Cap are preferred options.

6 Other Factors Affecting Farmers' Decisions on Water Use and Trade

6.1 Water Use Decisions

The Productivity Commission recognises in Chapter 4 and Appendix C that irrigators are well and truly best placed to make decision about their farm businesses. In the main, this is due to the numerous and complex decisions and trade offs affecting the use of farm resources, including water. The decisions include assessing climate, soils, water entitlements, commodity markets, competing on farm uses for capital and labour personal.

A recently released report by GRDC³ concurs but goes further. The report investigated the factors influencing irrigation farm productivity in southern NSW and specifically sought to identify the barriers to adoption of more efficient farm layouts and irrigation design. The report found:

"The major factors influencing decision making and investment...include political and seasonal uncertainty of water availability, farm physical and natural features, farm labour units, access to markets and personal enterprise preferences" (p.2).

Interestingly, the choices about irrigation methods and enterprises showed participant's philosophies on water management. Rice was given a top priority for water use due to soil suitability, income from rice finances other farm enterprises and the farm business (profitability "floor") and the consistent stable marketing i.e. growers did not need to spend time seeking buyers for their rice unlike other commodities.

Participants expressed concern about the future in terms of increased input costs, availability of water and that society does not value agriculture.

³ Glyde, S. & Dunn, T 2006, Layouts, Enterprises & Rotations: a Snapshot of Irrigation Farming in Southern NSW: a report of the broader factors influencing irrigation farm productivity in southern NSW, Irrigated Cropping Forum.

Irrigators felt pressured to provide high quality products at least cost (moves to increase the costs via market and other mechanisms cannot be passed on to consumers as farmers are price takers!), to be highly accountable for its production and the impact of environmental lobbyists on future water availability. There were specific comments about the mixed messages coming from Governments.

The report identified similar results to the Productivity Commission's discussion draft, i.e.

"that there is considerable understanding amongst the farming community about the options for change, farm design and layouts..[but] decisions...are influenced by....political and seasonal uncertainty of water supply, natural and physical features and labour."

Many farmers are continuing to irrigate based on information that supports their choice of enterprise mix and farming and personal goals and objectives. Many felt that their current operation was at or near full capacity indicating a view of optimal physical and economic efficiency.

A risk aversion does apply to employing more labour driven by current stringent and cost intensive OHS requirements as much as a labour shortage.

The report serves to reinforce the Productivity Commission's discussion draft views that farmers, faced with complex and competing decisions, are best placed to make decision about the best use of their available resources, including capital, labour and inputs such as water. Any decision will weigh up the merits of the various options based on farm business and personal objectives.

There is a movement from the community to target specific commodities as appropriate or inappropriate to the Australian economy and environment, e.g. rice and cotton. Just as water should not be attached to the land, water should definitely not be attached to any specific crop usage – this role of the usage licence. Farmers are and continue to be best placed to make rational and flexible choices about the most profitable use of the water their entitlements yield.

6.2 The Efficiency of Rural Water Supply

Where water utilities improve water delivery efficiency, there should be no capability for them to sell this water. RGA contends that these savings are already allocated within the resource assessment. This means that if water is not used for any of the losses, this water is allocated to build the resource available for consumptive use. From this, the hierarchy of water use is deducted, i.e. urban, environmental allocations and high security irrigators. Thereafter, general security irrigators are provided with the remaining water as a seasonal allocation (Appendix 1 shows the current resource for the Murrumbidgee Valley and portrays this in more detail). Such action is also reflected in the actions of Irrigators located within their area of operations.

RGA advises that it is unjustifiable for Governments to siphon off the water delivery savings for the environment. Any savings must be distributed according to the resource assessment process.

6.3 Taxation Arrangements

Regarding Managed Investment Schemes, RGA contends that these will inherently result in market failure, as can be seen at present with the grape (wine) industry. MIS will distort water markets and create arbitrage between MIS and other water market participants due to the taxation benefits of the MIS.

7 Market Mechanisms for Altered River Flows

7.1 Environmental changes and externalities associated with altered river flows

Many of the comments in this discussion draft discuss winter flows that are intercepted for storage, amongst other things. It is important to note, that does not necessarily mean winter flows. For example, in the southern Murray-Darling Basin, in fact both winter and spring flows are stored but in winter the river systems are returned to their natural state (as much as possible) in terms of flow volume/height and consequently flow variability.

7.2 Investing in off-farm infrastructure

RGA strongly support that Governments invest in off farm infrastructure to find water savings and accepts that such savings must be real and auditable. RGA reiterates comments above regarding attempts to "reconfigure" system losses to deliver environmental objectives. The NSW Government is now targeting such water as a means of delivering on their commitments under The Living Murray Initiative. The NSW Government proposes to identify system savings from better management of delivering water (i.e. not undertaking infrastructure investment) and allocating this to the environment. As previously stated, in a resource assessment framework, such actions would reduce the yield on irrigation licences as traditionally any water saved via better management forms part of the resources available to irrigators.

RGA are concerned that the current focus on environmental flows is disregarding the intent of The Living Murray Initiative, which is to see what the significant ecological assets (SEAs) require and use the flows delivered under the Initiative to improve these assets. Current public debate is has now re-focussed not on ecological outcomes but on delivering flow volumes of exactly 500 GL. What the Australian community is forgetting is that 500 GL must be delivered in terms of long term MDB Cap equivalent at the stem of the Murray River. Therefore, the entitlement volumes delivered and to be used for the environment by this Initiative if 500 GL is delivered, is far in excess of 500 GL. As an example, NSW is required to deliver 214 GL under the Business Plan. If this water is recovered from NSW Murray General Security Entitlements, the actual entitlement volume recovered is 261 GL.

The disappointing aspect is that State Ministers are not abiding by The Living Murray Intergovernmental Agreement (IGA) or the Business Plan. The IGA requires the Minister's to deliver on spending the \$500 million. The Business Plan puts in place a process to spend those funds to deliver on 500 GL (or as much as the funding allows – 500 GL exactly in not the original intent of the Ministerial Council but "up to" 500 GL). The MDBC process, by its very nature, ensures a very lengthy process with projects requiring feasibility, design before being eligible for listing on the development register. This last point is the time when Governments can either accept or reject financing particular projects. It is likely that the Initiative will extend beyond the five years because most projects will take 2-3 years to develop to developmental register stage.

RGA are concerned about the potential for third party impacts from changing the characteristics of existing water to environmental water. In NSW, this has happened on a number of occasions. For example, the Barmah-Millewa Forest allocation was initially 50 GL of general security water. Somewhere the decision was made to make this high security water – but no conversion factor was applied (at the time this should have delivered 25 GL of high security water). This water is also now capable of being carried over for up to six years. In NSW, high security water is expressly excluded from being carried over. In addition, in the Murray and Murrumbidgee Water Sharing Plans some water has been ceded from high security users (3% and 5% respectively). As stated before, high security water cannot be carried over, but this environmental water is now carried over. Whilst the latter volumes are small, the Barmah-Millewa Forest example has created impacts to other water users, particularly general security irrigators. RGA contends that water that is delivered to the environment, through whatever mechanism, must retain its original characteristics otherwise substantial third party impacts will occur to the yield of general security entitlement holders.

7.3 Providing on-farm incentives, purchasing water entitlements and water products portfolios

RGA notes the comments in the discussion draft regarding high transactions costs associated with negotiating with farmers. RGA acknowledges the difficulties for Governments to undertake such negotiations. However, RGA has proposed and received feasibility funding under The Living Murray Initiative, to undertake such a project. A facilitator will be employed to liaise directly with farmers, to "bulk up" a number of projects into one project for assessment by The Living Murray Project Board. The project will serve a number of purposes, including distilling information about the availability of projects on farms.

The first downside of the project is that for farmers, any future productivity gains will be limited as they will undertake on-farm efficiency improvements on farm and there will be no ability to increase the consumptive pool in the future. Thereby, the only way to increase levels of irrigation will be via the entitlement and seasonal water market.

The other downside is that farmers will essentially be exchanging a depreciating asset (the infrastructure, with a limited asset life) with an appreciating asset (water with no asset life). There must be appropriate recognition of this in the monetary exchange for assets.

Irrigators strongly support the principle of Governments funding any water to be returned to the environment (e.g. Snowy and Murray Rivers). However, there continues to be concerns about Governments and Environmental managers entering the water market in which irrigators operate. The main concern is the ability of such purchasers to influence both the price and volume of water available for irrigated agriculture, particularly when irrigators are told by Governments that the only way to counteract the inequitable implementation of the MDB cap on a licence level is to enter the water market.

For Governments and environmental managers to enter to existing water market, will inevitably also lead to a lack of transparency with regard to such trades, for example RiverBank in NSW is entering the existing water market to purchase water for wetlands, however there has been no undertaking to make the information (dates, volumes, prices) on these purchases available to the market. RGA suggests that the best option is for Governments and environmental managers to operate in other markets, e.g. the Federal Governments proposed tender for The Living Murray is one such option. Thus RGA rejects comments by the NSW Cabinet Office that such actions do not compromise the rights of existing users.

At present, agricultural water users operate in a transparent seasonal market that they understand. Any entry by new market players, whether urban or environment, are coming from a position where there is no market information about their requirements for water. This has the potential to create major market distortion and major consequences for the agricultural sector that rely on the seasonal market to underpin their seasonal cropping decisions.

7.4 Water Markets – Entitlements & Seasonal

RGA will accept carry over for environmental water but only on the basis that this was part of the original characteristic of the water entitlement. In NSW, this means general security water only and it is expressly excluded in Victoria and South Australia at this point in time.

7.5 Markets in Forward Allocations

RGA notes the discussion in Box 6.6 but would express some concerns about such a policy. If irrigators trade a seasonal allocation before it is actually received and the environmental manager uses this non-existent water, the water used by the environmental manager will in fact belong to another water user, such as general security irrigators who have carried over water. Such a situation would create individualised third party impacts. This would be an untenable situation and one which RGA would find most egregious.

The only situation where such a suggestion would work would be if there was an explicit clause in the contract that states that the environmental manager can only call on this water if it is actually allocated at the time it is called upon. In the Murray, allocations may not occur when an environmental manager wishes to use it.

7.6 River Capacity

RGA expresses concern about the ability for environmental managers to use river capacity shares to control the height of rivers. This would most likely to be called upon at peak summer flows (when the river is full and pre-development would have had little flows) and would create significant economic impacts to irrigated agriculture, regional communities, tourism and recreational users. RGA would argue that the river managers are best placed to make such decisions, in the light of all factors and competing uses. To use such a tool at an inopportune time would be most egregious.

Any suggestion to reduce the channel capacity of rivers for environmental reasons, there must be a comprehensive investigation of the full gamut of options. For example, unwanted summer incursions into forests can be addressed by engineering solutions.

RGA suggests that today current management of rivers such as the Murray uses water delivery tools to ensure environmental outcomes are delivered. The Productivity Commission's discussion draft has noted this elsewhere in the discussion draft and must be considered in this discussion.

7.7 Volumetric tax

Irrigators totally oppose volumetric taxes as a transfer of wealth from the rural communities to Governments.

Furthermore, in NSW irrigators pay for natural resource management charges as part of their bulk water pricing. IPART considers this to be a payment to address externalities made by all water users. The charges comprise of fixed and variable charges, set to recovery such costs which are shared between Government and users based on previously agreed sharing principles. It would most offensive to apply a further tax as an incentive to address externalities when this is already occurring by way of NRM charges.

RGA rejects any moves to introduce volumetric taxes.

8 Market Mechanisms to Manage Salinity

The Productivity Commission's discussion draft discusses salinity in some depth. Whilst there is acknowledgement that most salinity is the result of dryland, the discussion still concentrates on how to develop a market mechanism to deal with irrigation salinity.

To put in context, it is acknowledged that most salinity affecting the Murray River is a result of upper catchment dryland salinity and in the Victorian and South Australian mallee. The current impacts of irrigation salinity occur from "ribbon" development of irrigation along the Murray River. These are mainly horticulture plantings, and as discussed in the discussion draft now zoned in Victoria and South Australia.

RGA contends that it is totally inequitable to create any scheme to address salinity externalities unless the broadacre dryland salinity issue is addressed.

RGA rejects the statement that most dryland salinity is localised. Airborne mapping has shown significant salt slugs entering waterways in the upper catchments, contributing to most salinity from the river sources. In addition, there is a major slow moving salt slug in the Victorian and South Australian mallee heading towards the Murray River. The data provided in the MDBC Salinity Audit also supports these statements.

Most irrigation occurring in NSW and Victoria is upstream of the levels at which salinity is a major issue. Furthermore, when the MDBC Salinity and Drainage Strategy was implemented, those pre-1988 developments which put significant quantities of salinity into the river were expressly excluded, e.g. Barr Creek. An option to consider is requiring such developments to be included as part of the Salinity Register A under the Salinity and Drainage Strategy, and requiring corrective action.

Most irrigation is in the mid-catchments, well above where much of the salinity impacts are occurring. Within the Irrigation Corporations, irrigation salinity is being well managed. Implementation of the Land & Water Management Plans has improved the level of the water tables, aided by a dry decade. Irrigation Corporations, in the new age of water efficiency, manage their systems to prevent return flows entering waterways. In addition, the Irrigation Corporations area of operation act as a salt sink – there is a net import of salt. The Irrigation Corporations Environmental Reports further evidence this trend.

8.1 Salinity Interception Schemes (SIS)

The discussion draft did not include any comments about the benefits of salt interception, including mining salt and salt water fisheries (i.e. the Wakool Evaporation Basin operated by Murray Irrigation Ltd).

Regarding mining salt, the discussion draft fails to mention that the NSW Governments receives royalties and other payments for the salt mined from SIS evaporation basins along the Murray River. These funds are delivered to General Revenue. Due to the expense of operating the SIS, it would be beneficial for these funds to be provided to the operators of the schemes to offset the costs of the scheme and reducing its overall costs.

8.2 Temporal & Spatial Issues

RGA notes that not all marginal land should be retired. This must be treated on a case by case basis. In some cases, land can be rehabilitated and well managed as farms within the Wakool area can testify.

8.3 Subsiding land management change

RGA notes that there may need to be regionalised agreements between those providing the funding and offsets. Any large variation in distance would be ameliorated by other factors. An example where this may be successful is the South Australian Lower Murray or Lakes irrigators and Mallee broadacre dryland farmers.

8.4 Disposing of salt

RGA notes that the suggestion of flushing of salt might occur in winter. RGA contends that winter is usually a period of reasonably low flow. The most likely time of higher flows (particularly for unregulated tributary flood events) would be Spring which will coincide with other competing uses, e.g. storage to improve irrigation allocations and in some case irrigation.

9 Conclusion

Overall, RGA supports much of the discussion in the Productivity Commission's discussion draft. However, there are areas of concern to irrigators, in particular those that have the capacity to further attenuate the entitlements of irrigators, such as changing the characteristics of existing water products and exit fees.

RGA urges the Productivity Commission to ensure that the recommendations made in this discussion draft are feasible, practical and do not have unintended consequences.

RGA strongly supports a proactive to providing water for the environment as can be demonstrated by the RGA On Farm Water Efficiency Project currently undergoing Feasibility under The Living Murray Project. RGA urges Governments accept the hierarchy of water recovery for the environment and do not pre-empt that by prematurely entering the water market as concerns about the speed of water recovery does not respect the process agreed by the Murray-Darling Basin Ministerial Council.

RGA also urges the Productivity Commission to respect the decision by Irrigation Corporations to implement exit fees as the "opt out" mechanism for tagged entitlements as part of the agreement to implement Clauses under the National Water Initiative to open up entitlement trade. To reverse part of this agreement now would be most egregious.

RGA welcomes the opportunity to discuss this submission with the Productivity Commission in further detail, should this be required.

Appendix 1: Water Resource Assessment

MURRUMBIDGEE VALLEY ASSESSMENT ANNOUNCED 1 JULY 2006

All volumes are Gigalitres						
DAM LEVELS @ 1 JULY 2006						
1500						
500						
	1					
Blowering Burrinjuck						
Volume III Air Space						
RESOURCES						
CURRENT RESOURCES						
Burrinjuck	343					
Blowering	839					
Allocation debited to date	0					
Useable volume in downstream storages	6					
Useable flow in transit	25					
Total Current Resources		1213				
FUTURE RESOURCES		667				
TOTAL RESOURCES		1880.0				
WATER NOT SUBJECT TO ALLOCATION Total required in	Currently					
ACCOUNTING season	Available					
Carryover (equivalent to 12.6% of entitlement)	258					
Storage Reserve	50					
Total Non Accounting Volume		-308				
LOSSES						
	52					
	333					
Operation	22					
Imgation Corporation Loss Entitlements:	150					
Coloambally 120	102					
Total Losses	113	672				
SUPPI FMFNTARY		-072				
	0					
Total Supplementary	<u> </u>	Λ				
ENVIRONMENT		C C				
End of system target	91					
Replenishments	25					
Banked translucency	60					
Total Environment		-176				
HIGH SECURITY LICENCES						
High Security Access Licences	342					
Total High Security Licences		-342				
RESOURCES AVAILABLE FOR GENERAL SECURITY		382				

GENERAL SECURITY ENTITLEMENT

ALLOCATION AVAILABLE			18%
		Full Year	
High Security Announced Allocation		95%	
General Security Announced Allocation		18%	
CHANCES OF IMPROVEMENT			
	Inflow conditions		Allocations by
	%		End of Nov
9 chances in 10	90 (very dry)		31%
3 chances in 4	75 (dry)		41%
1 chance in 2	50 (average)		62%