Government of South Australia

Submission to the Productivity Commission Issues Paper: Market mechanisms for recovering water in the Murray-Darling Basin

Executive Summary

The Government of South Australia has made the following key points in this submission:

Impediments to new and established water purchase mechanisms

It is essential that market distortions be removed to facilitate the movement of water to the highest value use, be that environmental, irrigation, industrial or critical human and stock needs.

In particular, the interim four per cent limit on trade in entitlements must be removed as soon as possible.

Mechanisms that could be used to diversify the range of options to purchase water entitlements

Purchases of water for environmental purposes must take into account the short and long-term environmental objectives to be achieved.

If these objectives were better clarified in the Restoring the Balance program, the choice of market mechanism for recovering water would align with environmental asset watering needs, leading to maximum value for money.

It is important that the program does not attempt to address structural adjustment issues while also trying to address environmental objectives. Different, but complementary, instruments are required to address environmental needs and structural adjustment. South Australia supports the continuation of the Small Block Irrigators Exit Grant, subject to modifications to reduce complexity, improve timeliness and address inefficient land use consequences.

It is necessary to ensure appropriate sequencing of investments in irrigation infrastructure to avoid potential adverse consequences.

Environmental water recovery

There is an urgent need to purchase significant quantities of water to address critical immediate environmental priorities.

In order to meet the spectrum of environmental watering needs and to give the Commonwealth Government the maximum amount of flexibility over entitlement use, the Commission is encouraged to consider how the allocation of storage capacity rights may increase the efficiency of water use, not just for the environment but for all users.

1. Introduction

South Australia acknowledges the efforts being undertaken by the Commonwealth to address overallocation in the Murray-Darling Basin (MDB) on a 'no regrets' basis in advance of the Basin Plan.

However, there are nationally significant environmental assets in South Australia that are at immediate risk of being devalued or lost. In the short-term, the Commonwealth can play a critical role by providing the financial means to obtain water to preserve these assets.

In the longer-term, the Basin Plan can ensure that:

- environmental water needs are specifically catered for;
- environmental use is balanced against alternative water uses according to value; and
- environmental water use across the Basin is prioritised according to environmental value.

South Australia supports the scope of the Commission's study. It is evident that any examination of the effectiveness and efficiency of water purchases must consider any current distortions to the market mechanism and how these should be resolved to realise the most efficient acquisition of water. The market is currently distorted by the four percent limit on the trade in entitlements out of an irrigation area.

The Government of South Australia's submission is structured in line with the issues in Section 4 of the Issues Paper.

2. Issues

2.1. Why water is being recovered for the environment

South Australia strongly supports the Commonwealth Government's action to initiate the recovery of water for the environment.

Until now, water property rights generally have been assigned only to irrigators, industrial users and governments with the mandate of meeting critical human and stock needs. The environment has been provided with a statutory right to water, typically through rules or provisions established in water allocation plans. Less commonly, water is provided for the environment through dedicated environmental water licences.

In the MDB, insufficient water has been provided to meet environmental needs. When there are water shortages, as with the current drought, this situation is exacerbated. Without allocating sufficient water to the environmental assets within the MDB, these assets will be lost, as is demonstrated by the rapidly deteriorating condition of the Lower Lakes.

Governments and the community recognise the value of the environmental assets along the MDB and so action to allocate property rights to the environment is justified.

The program's purchases of water entitlements seem to be targeting longer-term re-distribution of water between consumptive and environmental requirements. However, given the extremely low water yield of entitlements at present, the extreme stress the MDB environment is experiencing, and the potential longer-term costs of not taking remedial action now, South Australia supports immediate purchases of significant quantities of water allocations to address critical environmental priorities.

2.2. What are the objectives of the Restoring the Balance program?

Specific objectives and environmental targets

The goal of the program is '...to acquire water entitlements from willing sellers that represent value for money, and use the water allocated to them for the environment.'

Consistent with the Commission's position, South Australia believes the primary purpose of the program is to acquire water in the most cost-effective manner for the environment. However, this goal is so broad it will be difficult to implement effectively.

The program is apparently aiming to reconcile:

the current water requirements of at-risk environmental assets; the allocation of water to environmental assets on a longer-term basis; the overallocation of water within the MDB (via entitlement purchases); and

the provision of structural adjustment assistance to non-financial irrigators.

The first Basin Plan for the integrated and sustainable management of water resources in the MDB is due to commence in 2011. The Restoring the Balance program is necessarily being implemented before the Basin Plan is completed. However, the program could be informed by the development of the Basin Plan.

It is imperative that the environment is the focus of the program. There are three things that need to be done now to achieve effective and efficient water purchases for the environment:

define the environmental assets and their water needs; prioritise the environmental assets according to value (eg adopt the approach used in The Living Murray program to identify and manage icon sites);

purchase appropriate water instruments (eg options, leases, allocations, entitlements and carryover or capacity storage rights) or contract environmental management services up to the point where the marginal value of environmental water is greater than or equal to the marginal value of water in an alternative use (eg irrigation, industry or critical need).

Different environments have differing requirements with respect to water in terms of flow, temperature and timing. There needs to be a stronger link between entitlement purchases and the desired changes to environmental attributes within specific environments.

A high-level purchasing decision framework has been established for the program. However, no specific Commonwealth environmental objectives or targets are defined and it is unclear if there is commitment to a process to establish objectives or targets to guide purchasing decisions. With this in mind, and also considering climate change projections for the MDB, South Australia is concerned that the portfolio of products being purchased may not necessarily result in the best outcome for the environment. This should be addressed given the scale of the program.

Focus on acquiring entitlements

There are two aspects to this question:

whether the focus should be on acquiring entitlements through the market or investment in water savings as distinct from administrative redistribution between environment and consumption; and

whether the focus on entitlements should be limited to acquiring water access entitlements, or whether other types of water instruments should also be included.

In considering how best to achieve the environment's needs, the benefits of rules-based provisions provided through statutory plans versus exclusive environmental entitlements should be assessed. Rules-based entitlements or provisions are generally established on the basis of hydrological modelling and understanding of environmental requirements. Rules-based provisions are not tradeable entitlements, but do establish requirements such as base flows, timing of flows and minimum passing flows. Exclusive environmental entitlements are akin to those issued for consumptive use and specify a volume or share of the resource for environmental purposes. They may be tradeable, allowing the possibility of counter-cyclical trade, but they are vulnerable to changes in resource availability. It is essential that the merits of each type of provision be considered in order to determine whether recovery of water should occur through a planned (administrative) or market-based redistribution between environmental and consumptive needs.

The current approach is to buy any available entitlements (and restrict the purchases to entitlements only) until the Basin Plan is finalised. This approach has a number of shortcomings.

Entitlement purchase fails to consider and address the immediate environmental demands across the Basin from both spatial and volumetric viewpoints. A portion of the program's funds should be devoted to immediate allocation purchase to save at-risk environmental assets. This requires definition and prioritisation of environmental needs. Significant work has already been undertaken in this area and could be used to inform immediate water recovery needs.

From a longer-term perspective, entitlements may provide the greatest flexibility in terms of developing a range of delivery mechanisms to match the different watering needs of the environmental assets. For example, annual allocations may be stored through carryover or capacity storage rights to enable flood simulation or the topping up of an inundation to simulate a flood. Where only periodic allocations are required, allocations may be sold in the years in which they are not required. However, this assumes sufficient entitlement purchases are made to cover all requirements, which may not be the best value for money. For example, a portfolio of instruments (including entitlements for accruing carryover water volumes, options on entitlements to deliver water on an ad hoc needs basis, or leases of entitlements to secure water for regular, periodic watering) may offer better value for money. Such a determination is dependent upon defining the environmental assets and their watering needs.

The narrow focus on acquisition of entitlements has consequences that may prove detrimental to the environment, or at the very least undermine the value of the purchases. For example, keeping environmental water in storage (and not using it) could change the frequency of unregulated flows and could affect the reliability of water entitlements. South Australia would welcome an investigation by the Commission into the impact of storage rules on entitlement reliabilities.

'No regrets' presumption

There are two elements that need to be considered in this context: the geographical location of purchases relative to deployment of the allocations arising from the entitlements; and the class (or security) of the entitlements purchased.

A 'no regrets' presumption relies upon having an understanding of the overallocation position, both on an intra-regional basis (between irrigators, critical human and stock needs, and the environment) and on an inter-regional basis (regions upstream versus downstream, informed by physical barriers preventing inter-regional trade). Until this understanding has been developed, it is difficult to know whether purchases can be made on a 'no regrets' presumption or at what point this becomes the case.

It also assumes that the class of water entitlements being bought is the optimal instrument to meet the watering needs of the environmental asset. Without an assessment of the environmental asset's needs, it is unclear that a 'no regrets' presumption can be assumed.

The 'no regrets' presumption is unlikely to lead to an optimal outcome for the purchasing strategy, and becomes increasingly risky as more water is purchased, especially in areas where the flexibility to transfer water is limited or non-existent.

If some acquisitions do not provide value for money, the Commonwealth Environmental Water Holder (CEWH) would be able to dispose of entitlements and use the sale proceeds to fund more appropriate acquisitions. However,

while this ensures an appropriate match between environmental asset needs and the entitlements held by CEWH, it does not avoid unnecessary impacts on communities affected by the initial acquisitions that subsequently turned out to be unnecessary.

Value for money

Based on purchases made to date by the Commonwealth, the price paid for some entitlements does not appear to reflect the lower security of those entitlements. Also, until it is evident how the Basin Plan will address the current overallocation, it is unclear whether purchasing entitlements is a sound business investment.

Allocation of environmental water

South Australia advocates a Basin-wide approach to the allocation of environmental water, based on the draft Framework for Determining Commonwealth Environmental Watering Actions being developed by the Commonwealth in consultation with Basin States. This Framework will include agreed ecological watering objectives under different water resource availability scenarios. Under a reduced water availability environment where full environmental needs cannot be met, states should continue to nominate watering actions on an annual or 'as needs' basis, consistent with the requirements of the Framework.

However, a key concern is whether the water purchased will be able to reach the specific environment that it is intended for. The availability of conveyance water is a key consideration in this respect. For example, a purchase of supplementary access water in the northern part of the Basin is unlikely to contribute to changes in environmental attributes in the Lower Lakes.

Continuing the buyback after the Basin Plan is implemented
This issue is largely dependant on the content of the Basin Plan, and how extractions will be reduced.

There is considerable uncertainty surrounding the possible impacts of the Basin Plan, both in terms of magnitude of reductions and timeframes for making reductions necessary to achieve the new sustainable diversion limits. This is particularly so given the commitment in the Memorandum of Understanding on Murray-Darling Basin Reform (March 2008), in which the Commonwealth agreed to honour all existing water resource plans in all jurisdictions, including Victoria's plans that continue until 2019.

It seems unlikely that the new sustainable diversion limits would be achieved on adoption of the Basin Plan in 2011. Given the provision that the Basin Plan may contain temporary diversion limits (in excess of, and to assist the transition to, the sustainable diversion limits), it seems more probable that adoption of the Basin Plan would, at best, establish clear pathways to achieve reductions. However, Basin States are responsible for giving effect to sustainable diversion limits through state water resource plans, and it may be that firm pathways are only established through those plans, some of which may not reflect the Basin Plan until 2019.

It is unclear how a buyback scheme should operate in the context of a firm pathway to achieve the new sustainable diversion limits. The purchase of entitlements represents a temporary re-allocation of water between environmental and consumptive needs rather than a permanent redistribution. Given the need to achieve a better balance as quickly as possible and the risk that commencing the pathways to new sustainable diversion limits may not occur for several years, there is an argument to continue the buyback program after adoption of the Basin Plan and before planned reductions are fully realised. Again, there is a strong case for purchasing allocations, or other short-term instruments such as leases.

Entitlement holders are finding it difficult to decide whether or not to sell water because of uncertainty about the Basin Plan. For example, knowing that there may be possible cuts to entitlements as a result of the Basin Plan may result in reluctance to sell a currently unused portion of entitlement. However, the same holder may be willing to sell a portion of their annual allocation. The key point here is that including the purchase of allocation in the program is likely to significantly increase the volume acquired in any year and enable certain more immediate environmental outcomes (such as flow peak enhancements) to be achieved.

Structural adjustment

It is important that the program does not attempt to address structural adjustment issues while also trying to address environmental objectives. While the environmental objective is to preserve environmental asset value, the objective of structural adjustment is to capture the productivity gains associated with moving water to higher value use. These objectives should not attempt to be addressed using the same policy instrument.

Clearly, the different policies should be complementary. One of the issues raised by the program is the uncertainty that has been created for irrigators around water availability. The sooner there is a credible and robust Basin Plan, the sooner irrigators will have greater investment certainty.

2.3. The market for water

The price of water entitlements

The Commonwealth has been reasonably successful in maintaining prices it pays within the Southern Connected Murray-Darling Basin at the price that prevailed prior to its entry to the market.

The prices prevailing over the past three years or so are largely reflective of a substantial price increase in the second half of 2006, in part due to the onset of serious drought and water shortages in the Southern Murray-Darling Basin at a time when the Government of South Australia had withdrawn from the market, and prior to the entry of the Commonwealth. Over that period, the price for South Australian entitlements rose from around \$1.4million/GL to over \$2million/GL.

It is uncertain whether the current prices would have been maintained had the Commonwealth not been in the market, particularly following the collapse of significant purchasers over several years

The recent rejection of some 400 offers submitted to the Commonwealth has resulted in SA Water being approached with offers to sell entitlements. Consequently, the Government of South Australia announced on 16 September 2009 that it would purchase permanent water entitlements from South Australian irrigators who missed out on selling to the Commonwealth under the latest round of its buyback program.

Further, the current price relativity between the various largely interchangeable entitlements across the Southern Murray-Darling Basin (eg NSW, Victorian and SA High Security, and NSW and Victorian General or low reliability entitlements) do not seem to reflect the wide variability in the allocations each has received in the past three years, something the Commission could examine in the context of providing the Commonwealth with some guidance on its 'value for money' criteria.

This work should be combined with work on assessing the longer-term outlook on a likely allocation regime, taking into account available climate change modeling, and the likely outcomes of the Basin Plan to provide a realistic long-term assessment of water availability arising from the entitlements purchase. The current Commonwealth estimates utilise the Long Term Cap Equivalent to estimate water availability. However, these were developed in the mid 1990's and their future relevance is questionable.

Feedback from our market contacts has consistently focused on three features of the Commonwealth program that have disrupted markets and hindered orderly attempts by irrigators to participate in the Commonwealth purchase program:

The stop-start nature of the program: there has been a series of tenders, each of which is open for several months. For each tender, there are several rounds of evaluations, acceptances, refusals and offers to resubmit.

The time taken by the Commonwealth to respond to tender submissions and having accepted a tendered submission, the time taken to complete a transaction.

An inability to make personal contact with those managing the purchases in order to discuss, clarify, and enquire on progress.

It is recommended that the Commission obtain feedback from irrigators and use this to inform advice to the Department of the Environment, Water, Heritage and the Arts (DEWHA) on improvements to the tender process.

Publishing average prices paid for entitlements

Publishing prices is likely to result in more realistic tenders and a greater success rate for those submitting a tender. A major complaint from vendors regarding sale of water to the Commonwealth is the length of the tender and settlement process. The time taken to complete the tender cycle is too long

relative to the fluctuations in market prices. Streamlining the process and including market mechanisms that result in more timely settlement would improve the system. Note that at present, the Commonwealth is the only significant buyer in the market for entitlements.

During the period that the Commonwealth has been in the water market, the price of South Australian River Murray entitlements has remained steady. The drought and uncertainty about the likely impact of the Basin Plan has had more impact than the Commonwealth's entry into the market.

2.4. What market mechanisms should be considered?

Advantages and disadvantages of different market mechanisms

The pros and cons of different market mechanisms to acquire water for the environment have been well documented as part of The Living Murray program and by ABARE. This work has collectively demonstrated that different market mechanisms suit different circumstances. The choice of a particular mechanism should be based upon the current situation and the

South Australia notes that ABARE advised the Commonwealth on two main options (purchasing water entitlements in the open market versus various forms of auctions). ABARE concluded that the former was likely to be the most cost-effective mechanism. However, DEWHA chose to build the \$3.1 billion program on the other option (ie a discriminatory rolling tender process).

Other mechanisms

outcomes that are sought.

As highlighted elsewhere in this submission, the Government of South Australia supports purchasing seasonal allocations to enable immediate priorities to be met and avoid the loss or further deterioration of critical environmental assets.

Mechanisms outside the market process should also be considered. The most obvious mechanism (administrative redistribution through the water planning process) will be addressed through implementation of the Basin Plan. Accreditation and compliance against efficiency measures based on a district code of practice could also be considered.

Rights to Storage Capacity

In order to realise inter-temporal efficiencies in using water, rights to storage capacity need to be tradeable. For environmental purposes, this would secure the ability to accumulate water to simulate flooding conditions.

It would be helpful if the Commission would make a finding in relation to the mechanisms for storage such as capacity sharing.

2.5. Do we need a portfolio of mechanisms and water products?

Relying solely on buyback and acquiring only entitlements is too limiting to meet the varied environmental needs of the Basin. To address the

environmental needs of the Basin, partner governments must address the issue of variability of environmental flow rather than solely focussing on acquiring a certain volume.

Effective management of certain locations or endangered species will not be possible under one water regime. For example, river red gums require periodic inundation, while a constant flow is necessary to provide fish refuge. South Australia advocates the adoption of solutions that achieve identified objectives rather than the current broad-brush approach.

2.6. Other examples of market mechanisms for purchasing water entitlements or other similar property rights

Exit grant package for small block irrigators

South Australia supported the Small Block Irrigators Exit Grant (SBIEG) package that ended on 30 June 2009. Growers operating at the margins were given the opportunity to leave the industry. Due to the ongoing drought, we believe there is strong case for extending the program until 30 June 2010.

Bearing in mind our support for the program, there are a number of issues we would like to raise that would significantly improve the outcomes of any future program.

SBIEG Issue 1 – complexity and timeliness

The Government of South Australia has received reports that the process has been complex and confusing for irrigators. For example, in one case an applicant received approval for the sale of water rights in April 2009 and was promised payment by July 2009. This did not eventuate. Verbal advice subsequently received indicates that settlement will not take place until at least October 2009. The process should be streamlined and applicants should be kept informed.

SBIEG Issue 2 – value for money

The package acquired a small amount of water at a very high administrative cost. Outcomes were also suboptimal because the singular focus on the exiting requirement explicitly prevented any possible industry or regional restructuring.

SBIEG Issue 3 – Irrigation infrastructure

The structure of the package could lead to perverse outcomes in the context of the overall goals of the Commonwealth Government programs for the MDB. In particular, proposed major investment in upgrading irrigation infrastructure to improve efficiencies could be compromised.

For example, there is a requirement that the irrigated property is removed from irrigation for a minimum of five years and that all plantings and irrigation infrastructure be removed. In South Australia, virtually all small blocks are in irrigation areas where government and the private sector have invested substantial funds over the past fifteen years or so upgrading irrigation and drainage infrastructure to a standard of high efficiency with piped pressure

delivery and drainage systems replacing inefficient open systems. Under the terms of the package, the land in question would be excluded from access to the upgraded infrastructure.

It is understandable that mechanisms be put in place to ensure that grants are not abused. However, allowance should also be made for the land and associated infrastructure to be put to productive use under a different business model rather than not at all. Whether an irrigation block is profitable depends on a range of interacting factors such as the resource condition of the land, the size of the block, the ability of the manager, the market for the produce, and the layout and condition of the irrigation infrastructure.

It is suggested the Commission consider approaches that could enhance the Small Block Irrigators Exit Grant package while avoiding taking efficient irrigation infrastructure out of use.

The Living Murray program

The Government of South Australia recently reviewed its component of The Living Murray program. The review was informed by research that focussed on the government's purchase of permanent water entitlements from willing sellers.

Between 2006 and 2009, South Australia purchased approximately 19.5GL of high security SA River Murray water entitlements from willing sellers. 98% of vendors interviewed by the researchers were using their water entitlement for irrigation purposes prior to sale. Less than half those selling their water entitlements as part of this program remained in the irrigation business following the sale. Over two-thirds of those interviewed were members of irrigation trusts and of those, almost a half indicated that being a member of a trust increased the complexity of the sale.

Of those interviewed, 82% were satisfied or very satisfied with the contracting process. Nonetheless, there were a range of suggestions to improve the process including better communication, avoidance of delays and a preference for a set market price.

<u>Purchases of water by the Government of South Australia through SA Water</u> The government has been active in water markets of the Southern Murray-Darling Basin since 2003. It has purchased both entitlements (permanent water) and allocations for a range of urban and environmental purposes.

Its purchasing 'modus operandi' differs significantly from that of the Commonwealth in a number of ways and involves:

Direct engagement with the market and negotiation with vendors on a transaction-by-transaction basis, (involving over 300 entitlement transactions) and preparedness to talk through with individual vendors their specific circumstances and the purchasing arrangements. All contact with the market and prospective vendors was handled through one individual, primarily through personal contact and phone.

Conducting due diligence but with an emphasis on vendor declarations, embedded as vendor warranties in purchase contracts. The key risk mitigation strategy was reliance on the primary obligation of the relevant jurisdiction's statutory authority responsible for approval of transfers to undertake due diligence on vendor bona fides and registered interests, and not bearing an obligation to pay out any funds until such time as the authority had approved and transferred the entitlement.

Use of Crown Law to draft contracts and attend to all settlement matters, including those relating to registered interests.

The primary reason for choosing this avenue was recognition that a decision by a vendor to sell an entitlement was a major business and personal decision, not simply a commodity sale.

The Commission is invited to become familiar with the approach taken by South Australia, its detail and rationale, as a potential alternative model for the Commonwealth. The Commission should also consider undertaking an assessment of the extent to which the statutory obligation on jurisdictions to undertake due diligence, establish vendor bona fides and registered interests obviates or mitigates the need for the Commonwealth to undertake separate extensive and time-consuming due diligence.

2.7. Upgrading infrastructure

South Australia supports a strategic approach to infrastructure upgrade and water purchasing that recognises the benefits of:

government having clear policy objectives and that any government involvement in infrastructure upgrades and water purchasing is aligned with those policy objectives; and

irrigators' and irrigation water providers' insights being brought to bear on water trade and infrastructure decisions.

Irrigated agriculture is dealing with considerable uncertainty from a number of fronts including: product market outlooks (eg wine grapes); unprecedented water restrictions and the poor short-term water outlook in the MDB; uncertainty of longer-term water availability; and a range of water market reforms in train and under review. There is clearly significant uncertainty regarding the potential market returns and desirability of irrigation-related infrastructure upgrades.

The unintended long-term consequences to irrigation firms and regional communities of locking-in major infrastructure upgrades could be significant, setting aside the direct cost of an investment with little or no returns. This uncertainty and the potentially adverse consequences of poor choices in infrastructure upgrades are likely to be significantly reduced through the information that would be revealed from the relevant markets. Implementation of water market reforms, the Basin Plan's sustainable diversion limits, further water buybacks and some irrigation adjustment will also assist. The Government of South Australia supports consideration of the sequencing of

infrastructure upgrades after more information is revealed on the longer-term returns of irrigation-related infrastructure.

That said, some immediate environmental and drought-related infrastructure investments could be considered to be 'no regrets' investments.

For example, pipelines installed in the Lower Lakes region have assisted immediate drinking water concerns for regional communities. The pipelines have also provided a long-term pathway for irrigated and dryland agricultural enterprises to coexist with environmental water management in the Coorong, Lower Lakes and Murray Mouth (CLLMM). Similarly, some immediate infrastructure investments are required that directly target environmental outcomes in the Riverine and CLLMM recovery projects.

2.8. Impediments to use of particular market mechanisms

The market is currently distorted by the four percent limit on the trade in entitlements out of an irrigation area.

Even before the ballot process to ration applications to sell entitlements had been completed, Frontier Economics¹ (2009) found that the interim four per cent limit had already been reached in the Murray Valley and Torrumbarry Irrigation Areas in 2009/10. In the 2008/09 year, they reported that eight of the ten irrigation areas reached the interim four percent threshold limit, implying that trade was blocked from regions holding 94.5% of Victoria's high-reliability water shares. In detailing the purchases made by the Commonwealth Government under their initial \$50 million tender for entitlements held in 2007/08, Senator the Hon Penny Wong informed the Senate Standing Committee on Environment, Communications and the Arts on 21 October 2008 that some offers were not approved due to the four per cent rule (Goesch et al 2009, p.15 in reference to Commonwealth of Australia 2008, Official Committee Hansard, Senate, Standing Committee on Environment, Communications and the Arts, Estimates, p. 7, Canberra, 21 October)². This potentially leads to more expensive entitlements being purchased than would otherwise be the case.

These trade restrictions have the effect of reducing the supply of entitlements into the market. In turn, this restricted supply would be expected to increase the price paid for entitlements. This restriction of supply and increase in price implies that the government has to pay more for water for the environment than would be paid in an unrestricted market.

¹ Frontier Economics 2009, 'Volumetric restrictions on water entitlement trade: A report prepared for the ACCC', August 2009 (http://www.accc.gov.au/content/index.phtml/itemId/862714)

² Goesch, T., Hafi, A., Thorpe, S., Gooday, P. and Sanders, O. 2009, 'Climate change, irrigation and risk management', *Issues and Insights*, March 2009 (http://www.abareconomics.com/publications html/ins/insights 09/a3.pdf)

It is likely that refused sellers of entitlements sell their seasonal allocations on the market, distorting their (and potential entitlement buyer's) investment decisions, leading to inefficiencies, because water is not directed to its highest valued use.

South Australia believes these distortions and their impacts should be explored and quantified by the Commission. It would be particularly helpful if the Commission made a finding in relation to these market restrictions.

South Australia notes that the arrangement agreed between Victoria and the Commonwealth in relation to the interim four per cent limit to allow up to 300GL over the next five years to be exempt from the limit. While this is a positive step forward in terms of the overall recovery effort, given Victoria's right to determine which water is available under the 300GL limit on the basis of factors not related to overallocation and environmental needs, the exemption may not enable recovery of water entitlements in the appropriate locations and in appropriate form to meet environmental objectives and targets.

On 10 September 2009, the Australian Competition and Consumer Commission (ACCC) released its position paper³ on the development of water trading rules advice to the Murray-Darling Basin Authority (MDBA). In section 4 (page 97), the ACCC describes its preliminary position on the interim four percent limit:

'Overall the ACCC considers that the 4 per cent limit provides a significant barrier to trade and prevents water from reaching its highest value use, with resulting efficiency impacts on the operation of water markets.

Price signals are distorted away from the market value for water, with resulting effects on the investment signals that are given by the movement of water. The effects of the 4 per cent limit are, in particular, long-term dynamic efficiency impacts. There are also resulting effects on individual irrigators, government water purchasing and the general function of the market. Given these negative effects, the ACCC's general view is that the 4 per cent limit should be removed.'

South Australia agrees with the ACCC. The interim four per cent limit should be removed as soon as possible.

³ http://www.accc.gov.au/content/index.phtml/itemId/892367