Productivity Commission – Issue Paper

Market Mechanisms
for recovering water in the Murray Darling Basin

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Southern Riverina Irrigators (SRI) is a representative body of Four Landholder Associations located within the Murray Irrigation Region of Southern NSW.

As a member of NSW Irrigators Council, SRI supports the NSW Irrigator Council submission to the Productivity Commission. This submission seeks to add regionally specific information that should be viewed in conjunction with the NSW Irrigator Council’s submission.

Preamble

Australia landscapes have historically experienced wet and dry cycles. These cycles can be short term or long term. There is growing recognition that such cycles vary, in 50 year scenarios, decades or in individual years.

In NSW, regulated surface water systems have entitlements approved under Water Sharing Plans. Such entitlements have announced allocations that reflect water availability.

Under this system, the issue of drought or wetter or dryer periods, can be effectively managed through normal allocation announcement. The Southern Riverina has predominantly General Security water entitlements and as such, the allocation against entitlements, is an accepted management tool to address climatic variances and water availability.

The National Water Initiative (NWI), sought to deliver beneficial water policies to Australia, however it also created the expectation that water trade could effectively resolve Australia’s long term water needs. Reliance on the NWI principles would not see increasing water storages as mechanisms for securing future water. Perhaps the issue of Trade has effectively masked the real long term issue for Australia’s growing population demands – the supply of fresh water.4

As Australia’s population growth continues to dominate the Eastern zone of Australia, there is still no Government planning for increased storages. In Victoria for example, the North South pipeline demonstrates the growing demand on Murray Darling Basin river systems from urban areas.

Australia’s future water requirements, may need major infrastructure investments in new storages and delivery systems.

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NWI policies that promoted separation of water entitlements from land, has led to the activation of water entitlements across all States. Prior to the separation of land & water, many entitlements or licenses, were termed ‘inactive’ or ‘sleepers or dozers’.

In conjunction with Land & Water separation policies, the imaginary concept of ‘high value crops’ which led to a concentration of permanent plantings, further changed the notion of water security and availability. A foundation principle of the NWI was to encourage the more ‘efficient’ and ‘better use’ of water, in effect, to encourage water use via trade, from low value crops to high value crops. However this concept of a ‘high value’ crop is flawed. Australia’s Agricultural robustness, stems primarily, from its diversity and lack of reliance on one enterprise. Domestic and International Markets, World trade issues, Climatic events and Government policies, all combine to ensure that a ‘high value crop one day, will be a low value crop another’.

It essence, Australia may well be more suited to a balance of both permanent and non permanent plantings and the mix may better reflect water supplies currently and into the future.

The combined scenario of increasing water demand of cities, activation of all water entitlements through trade and the prolonged dry period that has occurred this decade, has all led to Government policies that now demand that the ‘environment’ obtain a greater portion of available water.

However, the concept of Water for the Environment may need to viewed from a range of perspectives:

- Natural climate variances
- Activation of all entitlements through separation of land & water & resulting increased trade
- Lack of planned storages for urban water
- Prolonged dry period of 2000’s similar to the Federation drought
- Climate change modeling
- Existing Environmental flows (share) through regulated river supply

While it is often assumed that the environment does not have access to water in regulated river systems, policy makers need to recognize the multiple benefits for irrigation, towns and the environment, that regularly occur, in the provision of regulated water.

Without regulated river systems and the investments in the Snowy Hydro Scheme, Hume and Dartmouth dam, and smaller dam storages on the Darling system, many rivers and creeks would have ceased to flow in this current drought period.

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Therefore in assessing the ‘actual’ needs of the environment, SRI encourages Government to develop an Environmental Master Plan that clearly and transparently identifies the goals and strategies, to effectively determine environmental needs.

Such a plan would ensure greater understanding of the end goals, give greater certainty to regional communities and would maximize the efficient expenditure of Government dollars, in addressing water meeting the needs of the environment.

**Overview**

Riverina and Murray Regional Organization of Councils (RAMROC) have identified that food production in the Murray, Murrumbidgee, Lachlan Valley and Lower Murray Darling Basin, directly employs around 30,000 people. These levels of employment are estimated to be six times the national average for agriculture. An additional 17,000 people are employed in agricultural productions and service delivery, linked to agriculture.1

Recovering water for the environment in the Murray Darling Basin, without appropriate planning, will have profound economic and social impacts on regional communities in the RAMROC region.

A recent RAMROC report identifies that for every 10 percent reduction in water availability, the value of agricultural production declines by $220 million and direct employment declines by 4700.1

NSW Irrigators Council refer to NSW Government research (WSPs), that shows for every 270 megalitres of water removed from irrigation production, one direct job loss would result.1 5

RAMROC includes the Southern Irrigation region of NSW, encompassing the Shires of Murray, Conargo, Jerilderie, Berrigan, Moulamein and Wakool. A key supply of water in the region is via a private irrigation company, Murray Irrigation Limited (MIL).

MIL supplies irrigation and stock and domestic water to over 2400 properties and covers an area of 748,000 ha of land extending North of the Murray River, to Mulwala in the East, to Moulamein in the West. Water is delivered by the main Mulwala Canal from an offtake from the Murray river below Yarrawonga.2

This region was developed by the NSW Government as Australia’s largest irrigation network between 1933 and 1964. The NSW Water Conservation and Irrigation Commission was responsible for the construction and operation of the irrigation district.

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1 RAMROC
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The control of the region then went to the NSW Water Resources Commission and then a further department change, created the Department of Water Resources. The supply of water was then privatized in 1995 and came under the control of Murray Irrigation Limited.2

General Security water supply in the Murray Irrigation region has had a history of strong regulation. Metering and monitoring occurs both at the Mulwala Canal offtake at Mulwala and on individual farms.

The Southern Riverina Region of NSW is influenced by the main body of the Murray River, with water sourced from the Hume and Dartmouth Dam. Private water diversions from floodplain flows or floodplain harvesting, does not occur on Southern River systems and therefore is not applicable to Southern Riverina Water Supply issues.

**Business Investment**

Irrigated agriculture in the Southern Riverina region has a long history dating back to initial developments in 1933. The highly regulated system has enabled strong business development, directly on farm and in regional towns. Irrigated agriculture producing food for Australia and overseas, was underpinned by Government policies that saw major investment in securing water for the future. The major dams and Snowy Hydro Mountain water primarily was for irrigation purposes, with smaller amounts delegated to supply industries and towns. The city of Adelaide was also designated supply.2

Underpinning that investment, the Federal, NSW and Local Governments collaborated with industry and communities, to develop major sustainability programs. First initiated by irrigators in the 1980s, the resulting Murray Land & Water Management Plans (LWMP) were a 30 year natural resource strategy, developed in collaboration at all levels. Federal, State and Local Government funding was designed over 15 year. Landholders funded a major component of the plans through levies on their water and through on farm investments. Direct Government investment to date is approximately $68 million with landholder contributions of approximately $347 million.2

The Southern Riverina region has already been exposed to Government Water reduction initiatives, in particular, water reductions such as the Murray CAP announcements. An Interim cap was introduced in June 1995 and then the Permanent Cap introduced in June 1997. Then, an inter-governmental agreement led to restoration flows to the Snowy River (20% of average annual natural flows), plus the commitment to provide 70,000 megalitres to the Murray. In addition to this, The Living Murray Program saw another 500,000 megalitres allocated to the environment by 2010.2

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2 MIL

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Further contributions to the environment were made from the Southern Riverina region with investments in channel upgrades. This includes 30,000ML which forms part of the adaptive environmental water in the NSW Murray Lower Darling Water Sharing Plan. In addition, the investments in infrastructure in the NSW Lower Murray Darling Water Sharing Plan, includes the creation of a permanent water entitlement of 100,000 ML for the Barmah Millewa Forest (Murray River Icon site) (50,000ML NSW/50,000ML VIC) A further 50,000 megalitres (25,000ML NSW/25,000ML VIC) can be accessed under certain conditions. This forests entitlement is delivered as a result of Government/community plans developed to deliver ecological benefits for the forest and its environs.3 2

With the Southern Riverina Region experiencing significant changing water conditions, businesses have had to make the necessary adjustments and most have continued to invest for the future. Despite the changes, agricultural related businesses in regional towns had strong confidence in the future and continued to invest and provide services for irrigated agriculture.

The onset of the current prolonged drought and now significant new changes to Federal Government Water Policies has, however, set a new direction for businesses in this region. Business confidence is at an all time low and the long term ramifications are not specific to irrigated agriculture, but extend also to the economies and support networks in regional towns.

Investment certainty and confidence is needed to maintain future productivity and to effectively manage production in the future. This will sustain the communities in the region and encourage continued investment in regional businesses at all levels.

Murray Irrigation was established in 1995. The change from a Government operated system to a private company introduces a range of business sustainability and operational issues, both in the short and long term.

The future of Water Management in the Murray Darling Basin, impacts not only on the confidence of individual farmers and associated businesses, but also again on farmers as shareholders of Murray Irrigation Limited. The ongoing operational viability of Murray Irrigation and the network of its operations is intrinsically linked to individual’s aspirations and personal business investments.

There is growing concern that removal of large parcels of water for the environment from the areas of operation of Murray Irrigation, will place additional cost burden on to those remaining in the system.

On average, current water charges may range from $20,000 to $50,000. Another proportion would pay significantly higher costs. Charges are a mix of NSW State Water, 3 MDBC 2 MIL

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Murray Irrigation Limited and regional sustainability programs. Removing water entitlements from the region, will result in increased charges being placed on those remaining in the system. Operational efficiencies issues and/or stranded assets may result.

Farmers in the Murray Irrigation region of operation have already faced major change and adapted to changing conditions. However, externally it may be possible to form the view that farmers will continue to adapt and show resilience to change. There is however a level of operational costs that underpin business viability. There is growing uncertainty in this region. The flow on effects of this uncertainty, are not confined to a farm level.

While rationalisation of farm businesses has occurred previously and farm sizes grew to maximize efficiencies in production and investment, further scenarios of water availability into the future, are a serious threat to business viability and prospects of expansion.

The Southern Riverina region’s commitment to irrigated food production is evident by collaborative investment by all levels of Government, individuals and the community, to ensure sustainability in to the future. The areas produces a range of agricultural products ranging from fat lambs, irrigated cereals, dairy, tomatoes, rice and a smaller proportion of permanent plantings such as fruit trees. In broad terms agricultural production is diverse and matches the general security nature of water entitlements. The region has not followed pathways to notional ‘high value’ crops which have led to boom and bust cycles as currently evident in other areas of Australia.

High value crops can often be a term that is applied on a temporary basis and is subject to normal market fluctuations and variabilities. An example of a sustained high value crop in the Southern Riverina has been rice production and the resulting development of a vertically integrate food export company, Sunrice.

The long term trend has been for diversification of agricultural production which to date, has resulted in long term economic sustainability for the region.

**Murray Darling Basin – Recovering Water for the Environment**

Southern Riverina Irrigators recognize that water recovery for the environment is a key policy platform of the Federal Government.

Recovering water for the environment will however have long term implications on regional communities. Therefore, it is essential that communities have confidence in the process.

A mechanism to achieve such confidence and support, is by ensuring that the Federal Government recognize that water purchases within a region are recognized in the future sustainable cap that is being developed in the Murray Darling Basin plan. In addition, the provision of clearly defined environmental goals for the Murray Darling Basin, identifying
areas of concern and developing transparent management strategies to deliver environmental benefits, should increase confidence in the process.

In assessing environmental requirements, there must also be a clear delineation between natural drought sequences and modeled prediction of climate change. Modeled scenarios of climate change will continue to pose risks to all irrigated agriculture, however equally important, is understanding the natural flooding and drought cycles of Australian landscapes.

During prolonged periods of drought, the history of previous flood events can be lost. In this region, as recently as the 1990s decade, saw 4 significant flood events. It is important therefore, that assumptions aren’t made that flood events in the bottom end of the Murray, (South Australia) are the key environmental determiner of river health.

Flood events in South Australia, cannot be solely linked to water flows from the Hume and Dartmouth Dams and contributing tributaries. Major flood events in South Australia generally occur when high flows down the Darling system join high river events in the main body of the Murray River.

It is incorrect to assume, that it is possible to deliver major environmental flows down the main body of the Murray river and that this will deliver flood results in South Australia. South Australia itself has a series of locks and weirs. More importantly though, a natural geographic constraint in NSW, the Barmah choke will limit the delivery of environmental flows.

In future environmental water planning, it is important to recognize third party risks that may result from the delivery of additional environmental flows in normal or higher river flow periods.

Since river regulation, major flood events in the Deniliquin region with significant economic impacts occurred in 1956, 1974, 1990, 1992, 1993, 1996 and 1981. Smaller floods or higher than average river events, have also occurred.

An example of a major flood event is in October 1993 where the town of Wangaratta (Victoria), faced significant flood consequences. While floods deliver welcome environmental benefits, floods can also deliver major economic consequences. Impacts on private land, shire council roads and infrastructure are a constant issue for regional areas.

There is growing concern that while debate has centered on recovering water for the environment, the placement, delivery and use of the environmental water has not been adequately assessed.

This highlights that it will be important in future environmental planning, that Governments continue to invest in infrastructure and look for opportunities through such investments, to identify mechanism to deliver environmental water in the most cost effective and efficient manner.

There is danger that over simplification of the issue of environmental water, will result in lost opportunities and significant unintended flood consequences.
It is often argued that Murray river health should be determined at the bottom of the system, notably the Murray Mouth. This however, ignores the complexities of determining environmental river health for whole 2225 km of the Murray River Channel and Darling River systems, by measuring at only one point.3

The resulting risks is that large scale social and economic impacts on Australia’s food production and regional communities will occur, when river health is measured at the significantly modified environment of the South Australian Lower Lakes. This system of lakes was created by construction of a series of 5 barrages in 1939. The previous tidal estuarine system was converted into permanent fresh water lakes of Alexandrina and Albert.

Prior to the onset of prolonged drought and activation of water trade through NWI principles, South Australia benefited from additional flows over the border well in excess of its 1850 base gigalitre entitlement. Sometimes these additional flows in wetter years, were closer to 4000 gigalitres. In dryer periods such as now, South Australia has the flexibility under current rules, to determine how its share of the basin water (1850gls) can be distributed, ie Adelaide (200gls) and the remaining between industry, irrigation and the environment.

In prolonged drought, South Australia no doubt will, like many other regions in the Basin, have to rationalize decisions on how it allocates its own water use during these difficult times.

Southern Riverina Irrigators (SRI) respects that all sections and communities within the Murray Darling basin should encourage sustained environmental outcomes for the long term. SRI also encourages recognition that all systems of the river have been modified since European settlement. It is essential therefore that measuring and monitoring of river health, should factor in individual States infrastructure programs, that all attribute to river regulation.

Southern Riverina Irrigators strongly encourage the Federal Government to include regional planning and genuine consultation in the procurement, management and delivery of environmental water. An example of a successful and collaborative environmental initiative has been the facilitation and utilization of environmental water allocation to the Barmah Millewa Forest. Understanding examples of this and other community/Government initiatives, would assist future acquisitions and use of environmental water, ensuring Government investments are optimized.

Environmental water recovery should be addressed by contributions from all States. However the Federal Government needs to address the fundamental differences of water and its regulation within each State. For example in NSW, water is separated from Land, yet in Queensland water remain linked to land.

Purchasing of environmental water entitlements and distribution for environmental benefits should recognize and make provision for those differences. A key mechanism to overcome such differences, may be purchasing and utilizing environmental entitlements within each basin State. Through this approach, it may be possible to identify the most appropriate and

3 MDBC
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efficient mechanism for returning water to the environment. This would bypass jurisdictional differences, while still ensuring that environmental benefits can be effectively apportioned across the basin.

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PRODUCTIVITY COMMISSION – ISSUES PAPER QUESTIONS.

Is the focus on acquiring entitlements the best way of achieving the environment’s needs?

SRI supports NSW Irrigation Council submission

Additional comment:

In determining the environments need – SRI contends that clear distinction should be made between natural drought sequences and the concept of ‘over allocation’

History in the Murray region identifies that the Murray river has experienced a range of dry phases documented since European settlement. The current drought would have seen the Murray River dry up closer to Albury with the river reverting to a series of pools and dry beds.

When the explorer Sturt, first sighted the Murray River in 1820, it was a series of salty pools. Then, the Federation drought of 1885 – 1903 saw a period of immense difficulty for Australian regional communities as drought brought huge financial and social hardship to many.

The 1914 drought, also resulted in the Murray River drying up to a series of pools. It is worth noting, that between 1885 – 1960, the Darling River stopped flowing at Menindee 48 times. During the Federation drought, between 1902 – 1903, the Darling stopped flowing for 364 days.

Therefore, as a baseline point, Australians need to understand what standard or benchmark for the environment is sought. There may be an inaccurate presumption, that re-acquiring water entitlements can drought proof the nation. Despite modern infrastructure such as the Hume and Dartmouth dams, the Snowy scheme and many other dams in the Murray Basin, Australia may not be able to achieve the concept of ‘drought proofing the nation’.

Rural communities acknowledge the benefits of the river regulation but also understand the concept that Australia will continue to have seasonal variations and that yield on water entitlements will always reflect that variation.
Terms such as ‘certainty’ should not be confused with ‘permanent’ supply to entitlements. The complexities of dam storages, state sharing, drought and other issues, will always indicate that even high security licenses will suffer yield variation depending on seasonal or climatic variations.

Is a ‘no regrets’ presumption a reasonable basis for purchasing entitlements, and at what point does this cease to be the case?

SRI supports NSW Irrigator’s Council submission

What are the arguments for continuing the buyback after the new Basin Plan is implemented in 2011, and associated State Water Sharing Plans start to be implemented?

SRI supports NSW Irrigator’s Council submission

Additional comments

Southern Riverina Irrigators have made significant major investments in sustainability programs. These programs have also had significant investments by the Federal, State and Local Governments culminating in long term benefits for the environment and regional communities.

The benefits of this investment go well beyond the current program of environmental purchases and current water sharing plans. Therefore it would seem inappropriate and a waste of investment resources, to remove more water for the environment in a manner that does not recognize property rights and the significant regional sustainability investments made to date.

Government purchases of environmental water underpin the property right and enable social and economic adjustment in regions. This is not to say that such purchases negate the long term regional impact. ‘Buyback’ do however, underpin financial institutions lending and more importantly enable strategic asset reinvestment while sustaining growth in the regional economies.

What implications do environmental demands across the Basin have on the targeting of purchases and the mechanisms and instruments that should ideally be used?

SRI supports NSW Irrigator’s Council submission

Additional comments

Australia has a range of environmental water recovery programs, both a national and state level. National examples are Living Murray (500GL) Water for Rivers (282GL) and currently Water for the Future.

The underlying principle of recovering water for the environment should recognize the economic and social values attached to water property rights.

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In the absence of defined and understood environmental goals, many aspects remain difficult to determine.

SRI supports the development of a clearly defined environmental plan that clearly matches goals with environmental water purchases. Appropriate mechanisms should be established to facilitate monitoring and evaluation of the environmental water, matched with the defined asset that is to receive the benefit.

It is not clear how or under what mechanisms, environmental water will be managed or delivered. Governments have shown clear intent that environmental water will retain its characteristics and this is paramount to effective river management.

Without clearly defined goals however, the risk is that large parcels of water may be purchased with little concept of how or when that water will be used. Water delivery is both complex and difficult. There are a range of natural physical constraints and social and economic issues to consider.

The use of infrastructure investments to maximize environmental watering opportunities should be a key mechanism for the Federal Government to consider. There are numerous examples of infrastructure being modified or used to assist environmental outcomes.

At a regional level, the Murray Wetland Working Group, works in conjunction with the private irrigation supply company, Murray Irrigation, to deliver environmental flows to private wetlands via its channel systems. Modifications are made to enable final delivery, but overall the efficiencies gained and environmental benefits delivered are a good example of on ground, tangible achievements.

**How should environmental water be allocated across competing projects and sites?**

SRI supports clearly defined environmental goals and plans. Once the broader community understands these goals it is possible to more accurately comment to the question.

However, a key aspect to consider is the management and delivery of environmental water and the broader considerations on river management, flood risk, natural physical capacity of systems and equity issues in relation to other entitlement holders.

The MDBA Plan needs to resolve the equity issues of removing environmental water from one area, simply to deliver to another. Current approach may produce disproportionate benefits to the environment.

SRI also acknowledges the environmental benefits that occur via the provision of domestic, high and general security water entitlements. Many river and creeks in the Southern Riverina provide essential breeding grounds for species such as the Murray Cod, Yellowbelly, Blackfish and a range of other important species. Away from the main body of the river, these areas when receiving regular water flows, allow the development of ‘nursery’ areas for fish habitat.

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A recent example in January and February 2009 in the Wakool district of the Southern Riverina, saw thousands of Murray Cod prematurely die as a result of water being withheld from the Wakool river system. NSW Fisheries identified and confirm the deaths. Photographs of dead Murray Cod up to 60 to 70 years old were released in various forms of media. These deaths highlight that it is important to consider environmental issues outside recognized ‘icon’ sites. The risk is that cherry picking icon sites serves a reporting purpose in delivering environmental benefits, however the Federal Government does need to look at ‘multiple benefits’ that can be obtained from ensuring that equity exists in recognition of environmental assets. We need to get smart about how we deliver environmental water, there are opportunities to get multiple benefits from the same water. For example, because the Wakool System is an anabranch of the Murray and the water finds its way back into the Murray, the fish kills could have been avoided if the river had an environmental allocation.

SRI does clearly understand though, that not all environmental assets can be protected from Australia’s ‘drought’ scenarios. However it is equally important to recognize that environmental assets are not solely located on the main body of the Murray River.

**Should the buybacks be designed so as to reduce structural adjustment costs or should adjustment be addressed separately? If the former, are there particular buyback mechanisms that should be used to do this? If the latter, what approach should be used?**

SRI supports NSW Irrigator’s Council submission

*Additional comments*

SRI encourages the Federal Government to acknowledge separately the issue of structural adjustment. This is particularly important in the Southern Riverina region where irrigation efficiencies have been heavily invested in already, by the community.

The supply of water via Murray Irrigation Limited has been developed over many years and runs at 83- 87% efficiency levels. Removal of water poses significant risks to the operational viability of sections and the overall operating costs of the company. This aspect of water buyback continues to be unrecognized by policy makers.2

Water Buy Back, fundamental to the protection of property rights and asset valuations held by individuals and financial institutions, does not complete the picture. Governments should develop an associated structural adjustment package that will allow individual and sub section adjustment.

There has been insufficient consideration to the impacts of water buy back on infrastructure operators. The ACCC have rejected Infrastructure Operators concerns regarding future needs and viability of systems by imposing their own determinations on ‘termination fees’ or ‘water exit scenarios’.

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In effect, the Federal Government’s support of ACCC recommendations has placed considerable additional costs on irrigation operators. The total costs of which cannot be effectively planned for by those operators, due to the incalculable nature of environmental purchases. In effect it is a moving feast that is hard to plan for, the goals are unknown and the resulting status of water remaining in a district or region is difficult to predict.

Add to this future uncertainty with the new Murray Darling Basin Plan, then it is vital that the Federal Government introduce a structural adjustment package to enable communities/systems/operators to adjust.

**Does the exit grant package for small block irrigators play a useful role in the overall buyback scheme? Should it be offered again?**

SRI supports NSW Irrigator’s Council submission

**Additional comments**

The exit program for small block irrigators does not specifically relate to the Southern Riverina region. However as part of an overall water buyback package, it is important that such adjustment is allowed to occur. Improving the program to enable irrigators caught in difficult scenarios to leave, is essential. It must also be remembered that individual circumstances that such people now find themselves in, may have been contributed to by Government policies. An example of this is the over supply of grapes that has been contributed to by additional supply created through management investment schemes in regions. It is unfortunate that constraints and restrictive criteria in the program currently, may limit the amount of water recovered for the environment.

**What impacts has the Restoring the Balance program had on the price of water entitlements to date? What, if any, impact has this had on the market for seasonal allocations?**

SRI supports NSW Irrigator’s Council submission

**DEWHA is now publishing average prices paid for entitlements? What impacts is this likely to have on bids in subsequent or one-off purchases?**

SRI supports NSW Irrigator’s Council submission

**How much influence would the choice of market mechanism used to purchase entitlements for environmental purposes have on the market for water?**

SRI supports NSW Irrigator’s Council submission

**What impact has the entrance of the Commonwealth (and other governments) into the market for water had on background trade in water between third parties?**

SRI supports NSW Irrigator’s Council submission
Additional comments

Irrigators in the Southern Riverina have had to adjust to a range of environmental uncertainties. The application of the 1995 CAP reductions, removal of supplementary licenses, removal of conjunctive licenses – all have left irrigators searching the market for permanent or temporary water.

Since the development of water sharing plans, farmers have been encouraged to trade water to meet their business needs. However the demands for environmental water now make the initial market for water difficult. It will be impossible for farmers to compete with water purchased for the environment.

Again, SRI supports the property right and encourages the Government to finance environmental acquisitions through the ‘buyback’ program. However, the fundamental future of water trade lies within the range of ‘how much does the environment want’?

How much water left for general trade remaining after 1) environmental needs have been addressed and 2) potential changes to the MDBA plan, will determine the effectiveness of trade in sustaining businesses reliant on the supply of water.

Another option Governments haven’t fully investigated, is leasing water for the environment. Alternatively in wet years, Environmental Water could be leased back for ‘production purposes’. As Governments have indicated that the original ‘characteristics’ of water purchased for the environment will remain, future leasing options by Government should easily be facilitated. Flexible options can provide innovative outcomes for the environment in future.

Environmental water retaining its original characteristics will assist in further reducing impacts on 3rd parties.

*How would speeding up or slowing down the Australian Government’s water purchases influence the effects on trade between irrigators?*

SRI supports NSW Irrigator’s Council submission

Additional Comments

SRI is concerned that the lack of a cohesive transparent environmental purchasing program will impact on business confidence and planning, including for future industry skills requirements, such as the employment of apprentices. For highly regulated systems such as those occurring in the Southern Riverina, identifying the end goals for Government water purchases will allow the development of market sustainability and enable better planning and adjustment.

We recognize that swamping markets with environmental purchases now has risks in terms of availability of trade for other non environmental users. Alternatively, applying restrictions in trade undermine the property right and market. However, in other aspects.
resolving once and for all how much water is to be taken, allows more effective planning at both a personal business and infrastructure operator level.

The absence of knowledge in relation to a clearly identified environmental plan, goals and outcomes, will all impact on trade. Governments have argued that ‘water trade’ will enable business adjustment and that trade will ensure that water goes to its best use.

This however, is a fairly simplistic approach and ignores a range of factors. Specifically:

- How much water will remain available long term, to trade – permanent or temporary
- Will the absence of an clearly defined environmental plan, limit future investment, therefore trade
- Will the absence of clear environmental water management rules impact on trade, i.e. retention of characteristics, river operations, delivery of environmental flows.
- Succession planning and future farm investment – the future management and delivery of environmental water may impact on succession plans and property expansion. The location of a property may be defined by its future flood risks. Succession plans may be impacted by water asset values determined in family planning. Trade may be seen as a mechanism to resolve interfamily issues, however if such trade goals posts are changed, this will undermine the most basic succession plans.

_What are the advantages and disadvantages of the different market mechanisms that could be used to obtain water for the environment? In Particular, how do they compare in terms of compliance and transaction costs and the ability to meet the differing watering needs of environmental assets?_

SRI supports NSW Irrigator’s Council submission

_Additional comments_

SRI strongly supports the mechanisms to ensure equitable water purchasing arrangements across the Murray Darling Basin. In particular in Queensland where it will be necessary to adequately consider purchasing both land and the resulting flood plain water license.

SRI remains concerned that the NSW Southern Riverina region (Murray General Security entitlements) is subject to increased pressure to supply environmental water due to the restriction placed on other States in terms of barriers to trade, or through the linkage of land and water entitlements, such as in Queensland.

Without equitable arrangements, in particular South Australian objectives to achieve additional environmental flows cannot be physically achieved. This is primarily because of the natural physical constraints of the Barmah Choke and the current social and
economic considerations, that could result from flood impacts created by large scale releases from the Hume Dam system.

It is therefore vital that market mechanisms address the retention of land /water entitlements. Delinking of Water entitlements from Land will be a long term process. Sufficient money should be allocated for the purchase of both Land & Water in key areas of concern on the Darling and related system.

SRI cannot effectively answer all aspects of this question due to the lack of transparency in relation to water purchased for the environment under the variety of current programs. Despite requests for transparency, monitoring of objectives and outcomes, many environmental purchases remain an unknown ‘issue’.

There has been competing Government departments in the same market. There has been insufficient knowledge about how the market is working as often negotiations are held in ‘confidence’.

Transactions costs, environmental outcomes and a range of other issues are relatively unknown. This continues to be of concern to many in this community.

Some programs however, have offered improvements to how environmental water buybacks could occur. An example of Waters for Rivers negotiating with landholders on a group system to effectively relocate stock & domestic supply and retain water for the environment, demonstrates that Governments working in flexible partnership arrangements, can deliver mutual benefits to Government, Landholders and the environment.

This perhaps may identify the inadequacies of some environmental programs where no ‘benefits’ or negotiations between groups can occur. This may also bring in the issue of sub system retirement and associated structural adjustment package that should accompany environmental purchases programs. Such a package would not be a uniform position, but flexible enough to suit the negotiated objectives of both the Government and the groups.

*Are there other market mechanisms, not listed above, that the Commission should be considering?*

SRI refers the Commission to latter comments in the previous question.

In particular, irrigation reconfigurations and retirements. In specifically identified areas, flexible mechanisms should be encouraged to support the transition for individuals/groups, infrastructure operators.

Current market mechanisms or programs do not allow for associated reconfigurations costs to be recovered by the infrastructure operator. Consequently increased costs by these operators will need to be passed on to individual shareholding (farmers.)

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It is vital that the Government recognize the true costs of removal of water for the environment, and amend current major programs that are often unwieldy and may not suit all situations.

Referred to earlier in this submission, is the concept of leasing water from farmers and/or releasing environmental entitlements by Governments. Flexible arrangements could see environmental purchases, effectively re leased back for production purposes in wet years, when such entitlements are in excess of identified environmental needs.

Other programs such as combining irrigation infrastructure reconfiguration, structural adjustment and other sub system activities, all are options that could be looked at as part of the overall program.

With the benefit of the experience gained from the three tenders under the RTB program:
- What are the advantages and disadvantages of the chosen rolling tender process?
- How could the tender process be improved?
- How do you think an open market process would have fared instead?

SRI supports NSW Irrigator’s Council submission

What mix of market mechanisms and water products should the Australian Government be using to achieve its environmental objectives?

SRI supports NSW Irrigator’s Council submission

What examples of the use of market mechanisms for purchasing water entitlements or similar property rights are you aware of, and what lessons can be learned from these that might apply to purchasing water in the Basin?
- How substantial are or were these purchasing programs (eg, in comparison to the total stock of property rights concerned or the size of the relevant market?)
- What institutional constraints might limit the degree to which those examples might apply to purchasing water in the basin?

SRI support NSW Irrigator’s Council submission

Should the purchasing and infrastructure programs be coordinated and, if so, how?

SRI supports NSW Irrigator’s Council submission
What potential is there for a more cost-reflective approach to pricing of water delivery to obviate the need for targeting purchases of water?

SRI supports NSW Irrigator’s Council submission

How well has the irrigator-led group proposal component of Restoring the Balance addressed the possibilities for taking group action that coordinates infrastructure upgrades and water sales? How could it be improved?

SRI supports NSW Irrigator’s Council submission

Additional comment

The current Irrigator Led Proposal scheme has been a complete failure. It has created division and frustration in the local area. The current termination fee determined by the ACCC will by no means cover the revenue that will be forfeited by Infrastructure Operators in the future.

The cost of sub-system retirement must be borne by the government. It is clearly their intention to downsize the irrigation footprint, therefore it must be at their cost, we cannot expect the private infrastructure companies to bear this cost on behalf of their shareholders. There is simply no advantage for any parties to undertake a sub-system retirement at present. The climate for such an initiative is now opportune, however it will never happen unless Government pay the real cost of closing irrigation infrastructure. In its present form, sub-system retirements are creating enormous friction in the community, because remaining irrigators fear increased fixed cost will be the end result.

What impact is the 4 per cent limit having on the market for water entitlements?

SRI supports NSW Irrigator’s Council submission

What impact is it having on the effectiveness and efficiency of the Australian Government’s purchasing programs (both under the RTB program and under The Living Murray)?

SRI supports NSW Irrigator’s Council submission

To what extent are irrigators who wish to sell their entitlements being disadvantaged by the limit?

SRI supports NSW Irrigator’s Council submission
Is there a limit on outwards trade the best way to address concerns over possible socio-economic impacts on particular irrigation areas?

SRI endorses the principle of a water property right and therefore individuals must be able to realize that property right. Equally, if due to that sale, or multiples sales, an irrigation supply company is then disadvantaged because of the inability to impose exit fees to recover ongoing management costs, the issue of a property right to those who remain on that section of the irrigation system becomes jeopardized.

SRI does not support the ACCC rulings on exit fee determinations (ie 10 x fixed costs of a supply network). SRI strongly recommends that the importance of ensuring that the property right of the seller and the property right of those wishing to continue irrigating or that section or sub section, should not face undue costs or 3rd party property right impacts, due to the original sale. Infrastructure operators should have the ability to work with Government to negotiate appropriate termination fees that suit the needs of the region.

SRI suggests that the application of a fixed limit (ie 4% rule) may not be the best method for one State protecting its water values. Such a limit will only ensure that another area or State is subject to a greater portion of water purchases for the environment, which is fundamentally unfair.

However, one way to address this is to ensure that group supply system can recover future operating costs by imposing a fair exit fee to ensure that the future property right of those remaining on the system and the ongoing viability of the supply company.

Is the Commonwealth- Victorian on the 4 per cent limit a satisfactory way to allow a greater quantity of entitlements to be purchased in Victoria?

SRI supports NSW Irrigator’s Council submission

What impact is the NSW Government’s ban on sales of NSW entitlements to the Commonwealth for environmental purposes likely to have on the ability of the buyback to obtain water efficiently and effectively?

The embargo was the NSW Government response to the inequity of environmental water purchases to date, with NSW being subject to 97% of the purchases.

Clearly this has significant ramifications on sections of NSW economy and regional communities. However since the lifting of the embargo and its replacement with a capped figure of 890 Gigalitres spread over 5 years, this should seek to encourage a level playing field for water purchases across the States.

However, long term ramifications of this are unknown and potentially, the limits on trade still send mixed signals on the actual property right. It is recognized though, that the Southern Riverina Irrigators
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Federal Government is just one buyer in the market and therefore sales outside environmental purchase programs, could still occur.

The implications of a ‘restricted limit’ will impact on pricing. It may also lead to a rush on the market as individuals seeking to restructure debt may ‘rush’ the market in order to sell before limitations apply.

**How substantial are the impediments to trade in entitlements created by the imposition of termination fees?**

While SRI supports the body of Irrigators Council text in this section, it does not support the ACCC ruling on termination fees and the amount set. With the Murray region bearing considerable pressure on environmental purchases, particularly given the trade barriers imposed by Victoria, the implications of unrestricted trade with insufficient termination fees, is a real issue for the Southern Riverina region.

We encourage the Productivity Commission to investigate the flexibility required by individual infrastructure operators to set appropriate terminations fees that they view as appropriate, to avoid 3rd party impacts on those remaining in the water supply system.

SRI members are located in the Murray Irrigation Limited supply region. As such consideration and historical policies/decisions have led to acknowledged operating costs. ACCC rulings on termination or exit fees did not take into account the needs of the infrastructure operators or the implications to those who remain within the system.

The ACCC ruling is an example of a remote decision, ‘one size fits all’. Clearly more appropriate consultation should have allowed discretionary ranges for termination fees that could allow reduced impacts to 3rd parties.

**Is there potential for irrigation assets to be stranded a relevant concern? Should some buyback mechanisms be preferred over others because they have a lower propensity to lead to stranded assets?**

SR supports NSW Irrigator’s Council submission

**Additional concerns**

The issue of stranded assets is particularly evident in the Murray Irrigation areas of operation. As a historical and well planned irrigation district, considerable investment in efficiencies, both on farm and by Murray Irrigation Limited (MIL) itself have occurred.

Purchasing water for the environmental poses considerable short and long term risks to MIL. The haphazard nature of water purchases, the length of time it will take, additional risk of further changes under the MDBA plan, all make the issue of stranded assets very real. In effect, environmental purchases are creating a Swiss cheese effect within

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irrigation networks, leaving them with no ability to plan for their infrastructure and operational needs or costs.

Added to this, the question of how to advance efficiency investments in the intervening years, becomes an impossibility. Plan upgrades or reconfigurations of systems to match changing water demands and Government policies, is made more difficult.

Stranded assets in the MIL area can take 2 major forms.
1) Private infrastructure and on farm investment
   - Land & Water Management Plan (LWMP) sustainability investment have increased the capital outlay on individual farms. This investment may take the form of lasered fields, recycle dams, whole farm planning.
   - LWMP investment per farm can range from initial investments in early stage planning and implementation of approximately $100,000 to $500,000 or more, when plans are completed.

2) Murray Irrigation (private infrastructure operator) investment.
   - General investment in all areas of operation are impacted by water trade out of a region. This can be from overheads in channels and water implementation systems, right through to buildings and other more general capital items.
   - Efficiency investment potentially can become a stranded asset. MIL generally operates at 83-87% correct efficiencies which is a high standard for any irrigation region in Australia. Such investment is made more difficult due to the changing nature of water and Government associated policies. Efficiency investment range from telemetry metering right through to actual fixed channel infrastructure upgrades.²

In general, while some of these efficiency and structural investment costs may have been based on Government/Private partnerships programs, others have directly funded by MIL. Generally these costs have been built into MIL charges. As a private company, MIL has issues of depreciation and other private infrastructure overheads that must be continued, unlike other publicly owned irrigations schemes like in Victoria.

Therefore, while purchasing and removing water from a region may seem relatively simple to remote decision makers, the consequences of these policies are long lasting and far reaching.

**Are termination fees likely to help or hinder the efficient use of, and investment in, irrigation infrastructure during the buybacks?**

SRI argues that private infrastructure operators should have the right to apply appropriate termination fees on water sales out of the supply area.

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² MIL
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The provision of termination fees which would reintroduce surety and certainty back to the viability of the supply company, would encourage and allow future infrastructure investment. The recent ruling by the ACCC that only permits 10 x fixed charges as termination fees, may not account for the infrastructure operator needs.

Therefore the whole concept of uncertainty increases, particular given the random nature of environmental purchases and the lack of cohesive planning and defined program. Again SRI supports the right for individuals to realize their property right on water. However, equally the property right of those wishing to remain in a viable system should not be undermined. The resolution to this is via appropriately set termination fees negotiated by the private supply company in conjunction with its shareholders.

SRI does not support the ACCC ruling to place restrictive limits on the termination fees. SRI considers that the absence of appropriate termination fees will severely impact on the ability to make decisions on infrastructure upgrades during the buyback.

The absence of appropriately set termination fees in parallel with ‘buyback’, will jeopardize future investments as the ability to recover costs is made even more difficult.

**How can the right incentives for investment in irrigation infrastructure be achieved during the buyback program?**

SRI supports NSW irrigator’s council submission

**What impacts are termination fees likely to have on an irrigator’s willingness to sell and the cost of the buyback?**

Irrigators Council has not answered this question instead suggests that this question has been answered previously

SRI contends that termination fees will have impact on an irrigator’s willingness to sell. The question is at what level will those termination fees affect his/her decision to sell. In any event, SRI believes that both buyer and seller have a right to protect or realize their water property right. Therefore a compromise that allows an appropriate termination fee to be set for each private infrastructure operator should be a negotiated arrangement between the operator and its shareholders.

The fundamental principle in a seller objecting to set termination fees, must be weighed up against the property right of those remaining. In other words, the seller’s views must not prevail at the expense of 3rd parties. There is now the option of Terminating or not hence those that are against Termination fees may chose to continue paying the fixed costs, which would ultimately be a better result for all concerned.

Irrigators will make commercial decisions and will factor in the costs and benefits of connection to the infrastructure operators supply networks. The true impacts of the ACCC rules however, have not been fully understood or worked through. Infrastructure

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operators will need to balance the needs of their customers, water availability, farm incomes and viability, combined with the needs of the operator itself. The ACCC policies further disadvantage infrastructure operators like Murray Irrigation due to the variable nature of general security water supplies in the region.

*Are the costs associated with trading water entitlements (including those associated with delays and lack of market information) higher than they should be?*

SRI supports NSW Irrigator’s Council submission.

*Are these costs a significant impediment to the efficient operation of government water buybacks and the water market generally?*

SRI supports NSW Irrigator’s Council submission.

*How might these costs be reduced?*

SRI supports NSW Irrigator’s Council submission.

*To what extent have the CPG’s restricted or limited the design of current DEWHA purchasing mechanisms and the decision to buy only water entitlements?*

SRI supports NSW Irrigator’s Council submission.

*What impact might CPG’s have on the Commonwealth’s ability to use alternative purchasing mechanisms to buy water products other than water entitlements?*

SRI supports NSW Irrigator’s Council submission.

*Additional comments*

Government Procurement Guidelines (CPGs) may impose conditions that reduce the effectiveness of decision making in the buyback program. It is worth looking at how other environmental programs have obtained water through other partnership programs or purchase programs, such as Water For Rivers. Building in the flexibility, gives the Government greater options such as those outlined in this submission.

If the CPG restricts the ability of the Government to buy or partake in other water products then they definitely are a major constraint and would have a large impact on their ability to use alternative purchasing mechanisms.

The leasing option and temporary trade option have some large benefits to the Water for the Future program. The River Reach proposal has enormous merit to everyone. Government could enter into an arrangement with irrigators to lease any part of their Southern Riverina Irrigators
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entitlements. A price could be determined for different level of allocation announcements. A price that was similar to the annual returns per megalitre for different enterprises would be very attractive for all parties. The irrigator may like to lease the first part of his allocation at a higher price to cover his fixed costs, or subsequently lease the last part of his allocation at a lower price.

The benefits for the Government are the cost effectiveness of the proposal. Proposals such as leasing give security and long term benefits, not only to the irrigators, but also to the broader community. All parties would receive substantial benefits by including such options in recovery water for the environment.

If Government are restrained from such options due to the CPG’s, then this is an impediment to the Water for the Future program.

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