

Market Mechanisms for Recovering Water in the Murray Darling Basin

Productivity Commission Draft Research Report

Water for Rivers
Response to the report



Background

Water for Rivers

Water for Rivers is the trading name for Joint Government Enterprise Limited, which is a Public Company (limited by guarantee) established in December 2003 by the governments of NSW, Victoria and the Commonwealth.

The Company was set up to identify and implement water savings projects within the Murray, Murrumbidgee and Goulburn River systems, in order to return environmental flows to the Snowy River and Murray River systems.

The Snowy Water Inquiry in 1998, held in response to the proposed corporatisation of the Snowy Mountains Hydro-electric Authority led the Governments of Victoria, NSW and the Commonwealth to act in relation to the re-establishment of environmental flows in the Snowy River system. Through a signed Heads of Agreement, the parties confirmed the agreed outcome of the Snowy Water Inquiry and outlined the requirements in the Snowy Water Inquiry Outcomes Implementation Deed (SWIOID). The SWIOID is the formal deed of agreement between the Governments of NSW, Victoria and The Commonwealth.

Managing Water Scarcity

The current prolonged drought has substantially challenged water resources management with tensions between alternative water users (consumptive and environmental) magnified. The drought has led to record low inflows to streams in the southern Murray-Darling system and the Snowy River. It has placed increased economic structural pressure on irrigation system management and modernisation and also long-term urban water security, through decreased catchment inflows and significantly reduced storage levels.

This environment is challenging reform delivery through available resources across existing water management organisations/businesses to proactively plan the future, and the structural changes that are occurring in our irrigation community and its landscape.

This increased attention to water resource management has moved the focus of the debate away from a narrow 'irrigation versus environment' paradigm to a national perspective that includes mainstream urban supply issues and in a future climate change environment.

This is also in an environment where the community's ability to accept the rapid change occurring in the water industry, not only from a supply and security perspective, but also in terms of regulatory reform of the sector and meeting new water industry standards is also being challenged.

Despite this, many users are aware of the benefits of water efficiency measures and the prevailing community attitudes about this issue, as they strive to maintain positive business outcomes within a backdrop of continuing uncertainty with future water use management, with planning underway for the introduction of the Basin Plan and Sustainable Diversion Limits (SDL's) and the genuine environmental demand for water to protect key environmental river and wetland assets, that are also more severely impacted due to diminished allocations across the basin and the Snowy River.

Context for Comment

Water for Rivers' response to the Productivity Commission Draft Research Report is made in the context of its experience working with the water industry and irrigation community since 2003. Water for Rivers has sought to recover water (based on its objectives set by government) through principally water efficiency and water savings projects where possible, leaving behind a regional legacy of water use efficiency and increased agricultural productivity.

Water for Rivers also operates to a clear set of water recovery targets tied to defined environmental flow and ecological objectives in the Snowy River. These are based on sound science which defines the key environmental assets and ecosystems to be protected.

Water for Rivers welcomes the Commission's approach under its Act to consider the community wide impacts of the issues it reviews, by taking a broad approach, as well as taking into account the need for consideration in the context of the Basin Plan.

It is Water for Rivers experience having worked closely and locally with irrigation communities for some time now, on a diverse number of water efficiency projects, that cost effective infrastructure projects are an essential ingredient to achieving water recovery with additional social and economic outcomes. This is evidenced by the Commission's Draft Research Report which has highlighted the success and cost effectiveness of our program using a small expertise based public corporate entity. Even so the Commission has questioned the efficacy of such an approach by government. This is addressed in more detail in our response to counter these findings.

A key component needed in the broader policy context and the Basin Plan is a vision and set of targeted outcomes for the social and economic wellbeing of the Basin community and dependent national communities and industries. That is the opportunity cost of water to maximise the overall return to the community needs to be taken into account. Taking this into consideration and the need to effectively and efficiently deliver water equitably within our basin river systems, requires cost effective delivery system and environmental management to manage future SDL's.

Response

Water use in the Murray-Darling Basin

Draft Finding 2.1

Current planning arrangements tend to assign a more than proportional cut to environmental water during dry periods. With climate change expected to increase the prevalence of dry conditions (particularly in the southern Basin), the environmental consequences of this could become increasingly significant. Accordingly, the prospect of climate change adds to the imperative to reconsider the balance between environmental and consumptive uses of water.

Response: Nil

Development of water markets

Draft Finding 3.1

Water markets are well developed and active in the southern-connected Basin, but not in parts of the northern Basin. This has implications for the buyback — market-based water recovery is more difficult where markets are not well developed.

Response: Nil

Draft Finding 3.2

Market intermediaries, including brokers and exchanges, have developed alongside the market to facilitate increased trade, with lower transaction costs.

Response: An additional outcome of the buyback should be the strengthening of market structures and processes throughout the Basin. In the Southern Basin, in particular, where markets are well developed, DEWHA should seek to use existing brokers and exchanges where possible to source entitlement, rather than setting up duplicate structures. It has been WFR experience that existing intermediaries offers a cost effective way of sourcing entitlement, with all parties learning more about the products and existing trading rules as a result. This in turn, creates a more competitive market environment.

Allocating environmental water

Draft Finding 4.1

Water recovered in the northern Basin will usually result in limited environmental benefit for the southern parts of the Basin, given hydrological constraints. Water recovery within the northern catchments that are effectively disconnected should be driven primarily by environmental priorities within those catchments. Conversely, the southern Basin — including the Murrumbidgee, the Murray and the Goulburn rivers — is highly interconnected, allowing considerable flexibility in sourcing and delivering water for environmental purposes.

Response: Nil

Draft Finding 4.2

Decisions on allocating water between competing uses in the Basin should be based on good science. But this is not a sufficient basis for achieving the best outcome for the community. Community preferences should be considered where tradeoffs are required between different environmental outcomes, and between environmental and consumptive outcomes.

Response:

When the Snowy Water Inquiry was undertaken it adopted an approach of determining through a scientific reference panel, the environmental condition of the river resulting from the operation of the Snowy Scheme and the benefits and costs that would be derived from a range of additional flow options. The panel also took a total catchment management approach, which involved more than just looking at water flows, but also considered Riverine works that would improve environmental health of the river.

The inquiry analysed potential trade offs for a range of environmental, economic, social and heritage issues. Its final recommendation of environmental outcomes for the river was made after the consideration of social and economic impacts.

This process gave confidence to key stakeholders and the community including the Victorian , NSW and Commonwealth Governments that the final flow requirements considered impacts to both communities in the Snowy and the contributing Basin catchments.

Recovering water through non-market means

Draft Finding 6.1

Under the Water Act 2007 (Cwlth), the Murray-Darling Basin Authority is required to determine environmental watering needs based on scientific information and to consider least cost ways of meeting these needs in setting sustainable diversion limits. This way of allocating water between environmental and consumptive uses does not take into account community preferences, the opportunity cost of water or the role of other inputs such as land management. As the sustainable diversion limits will be used to guide future water purchasing under Restoring the Balance, the effectiveness and efficiency of this program are likely to be compromised.

Response:

The Commission has correctly raised the enormous challenge in setting environmental priorities and making environmental allocation decisions in a way that maximises benefits which cannot be achieved, without understanding relationships between environmental flows and ecological responses and outcomes, as well as being able to with confidence measure them.

The difficulty for water recovery initiatives to date for all river systems has been the impact of the prolonged drought on environment allocations and not being in a position to be able to understand and measure the ecological responses of various environmental attributes.

Therefore:

Issue 1 - how is a decision determined about environmental targets based on good science when we know that in many cases the science is lacking, and jurisdictions haven't been able to measure the impact of recovery to date such as the Snowy program and Living Murray flow targets (due to drought), through an adaptive and integrated management process using environmental monitoring.

Water for Rivers recognises the importance of preceding the determination of future SDL's with a very open and transparent process for release and consultation, over what environmental wetlands and river systems will be 'in the inventory' and what will be or 'may be out', after taking into account the economic and social consequences in a climate change environment.

The diversion limits aim to be 'environmentally sustainable'. The Water Act 2007 defines this as the amount of water that can be taken which if exceeded would compromise the key environmental assets, ecosystem functions, productive base or environmental outcomes of the water resource.

To set these limits, the Basin Plan may:

- identify the environmental assets across the Basin that are to be protected
- determine the acceptable environmental condition of these assets, and
- quantify the watering regime to sustain these assets

The question of how should SDL provisions be determined in a way that optimises economic, social and environmental outcomes, needs to firstly be answered by providing clarity on the ecological assets in the landscape that are to be protected and not compromised. Only then can you realistically be in position to apply a 'triple bottom line' approach to assessment and costing, and any interim arrangements that may be required, to meet future SDL's in terms of the veracity of the recovery measures that need to be undertaken in partnership with community at the local level.

Issue 2 - therefore in setting SDL's and determining the efficacy of the purchasing program under the Restoring the Balance Program, consideration will need to be taken on how the SDL's are adjusted by trade offs which need to be in place before 'temporary diversion provisions' become or move to permanent SDL targets.

Water for Rivers has made the above response on the basis of our experience with community and in understanding the environmental values that are attributed to the company's investment decision by its Board taking into account associated environmental land management actions that are closely linked to land and water management plans across the basin.

Draft Finding 6.2

Considerable uncertainty exists about the application of the risk assignment provisions set out in the National Water Initiative, as amended by the Water Act 2007 (Cwlth), in respect of compensation that might be payable to irrigators upon the implementation of the Basin Plan. This is impeding the ability of irrigators to plan for the future and is affecting the efficient conduct of the buyback.

Response: Supported

Draft Recommendation 6.1

All Basin jurisdictions should clarify how the risk assignment provisions set out in the National Water Initiative, as amended in the Water Act 2007 (Cwlth), will apply to the reductions in water availability that are likely under the Basin Plan. This should occur as soon as possible.

Response: Supported

Draft Finding 6.3

Purchasing water products from willing sellers is generally the most effective and efficient means of acquiring water, where governments are liable for the cost of recovering water for the environment.

Response:

Whilst this finding is generally true it could be considered very narrow in the context of the Commission's stated objective of seeking to understand the interaction between different approaches to recovering water in the context of the Basin Plan and the community wide impacts of water recovery.

It is WFR experience that water recovery from improved river management can provide very cost effective savings, as well as additional improvements to customer service and local environmental benefits. Whilst these types of projects are limited, they should be sought out as a priority.

More detail on this issue is provided under Draft Finding 6.4.

If water markets factored in economic, social and environmental “production capacity” of water entitlements, and the fixed and variable charges of water storage and delivery fairly represented all of the costs of water delivery including conveyance losses, the market would indeed allow water to move to both the highest value use and the most suitable and cost effective areas of the Basin. In this case purchase of water entitlement would be ‘the most appropriate’ mechanism to recover water. But water markets don’t factor in all of these costs and benefits, and in addition, government artificial barriers to trade still exist. Until the market is operating transparently and unencumbered the Commonwealth Government should use policy, regulation and monetary incentives to push the market in a direction that will provide long term community benefits for all.

Draft Finding 6.4

Funding infrastructure upgrades is generally not a cost-effective way for governments to recover water for the environment. It is also unlikely to be an effective or efficient means of sustaining irrigation communities.

Response:

In isolation, funding infrastructure upgrades may be a less effective and efficient means of recovering water for the environment. However, if the broader aims of a water recovery program are also to provide increased agricultural productivity from each unit of water applied and improve the long term social and economic prospects of regional communities, infrastructure investment can provide a raft of additional benefits.

Critical to the success of effective infrastructure investment is the rationalization of existing irrigation infrastructure coupled with the development of appropriate green field schemes at a scale and location suited to optimising social and economic benefits within a new, environmentally sensitive system of river management. This will require a new vision for irrigated agriculture and a plan of adjustment for communities adversely affected by short term change.

The Commission Report highlights that 'good science' is required when making decisions on the approach needed to achieve future SDL targets, however discusses at length (in Chapter 4 & 6) and cautions this approach, highlighting the need to ensure adequate community preferences and tradeoffs decisions, are taken into account. That is, making decisions about the level of recovery for environmental benefit and consciously trading this off (opportunity cost) with the level of regional or foregone agricultural production.

Similarly, it can be argued that 'good economics' is required in making decisions on the approach needed to consider investing in infrastructure to recover water, but why hasn't the Commission taken a similar opportunity cost approach, as above, with the trade off of foregone agricultural production in respect to funding infrastructure upgrades?

It is true that based on 'economics alone' it is sound to conclude in Draft Finding 6.3 that purchasing water entitlements from willing sellers is generally on its own the most 'cost efficient' means of acquiring water, but is it the most 'cost effective', when taking into account the broader community, social, regional development and catchment & river management outcomes that need to be addressed across Basin irrigation communities?

That is, when making the decision to reduce take (achieve SDL outcomes) in Basin sub catchments, on principally regulated systems, it seems incongruous that the findings of the Commission do not support 'triple bottom line accounting' of investing in irrigation modernisation which also includes consequential delivery system rationalisation to achieve environmental and land management cost benefits.

Based on Water for Rivers experience, cost effective and efficient recovery can be achieved to provide community certainty, with respect to irrigation futures and to shy away from this, is not recognising the importance of water recovery alignment with water reform and positive adjustment of our irrigation regions.

Typically structural adjustment is necessary when some of the original structures that are in place are no longer viable or sustainable and can be the result of changes in management systems and improvement in technology.

It is too simplistic to right off this form of investment because without it, regional communities will find it difficult to understand and agree to the necessary impacts of the proposed SDL's when they are introduced.

Contrary to the reports discussion which cautions this approach, if managed appropriately, careful planning and realistic cost sharing as a result of transitioning to full cost recovery of infrastructure, can be cost effective, when taking into account all project costs (including avoided) & benefits including the environment, and not just focusing only on the cost/ML of water recovered.

A positive solution to a 'change in service', for example, closing down an irrigation delivery system with the conversion to a stock and domestic supply system, is a much preferred sub regional outcome, whilst achieving other multiple benefits eg improvements in water delivery technology and equity in water use, through meeting new metering standards as well as conveyance savings from system losses.

Often this investment is also a much preferred economic solution and positive policy tool compared to working through any proposed direct compensation proposals.

This approach also enables effective real time water accounting and flow management in river systems to be introduced, as a result of new technology to enable future river managers to accurately identify water consumptive and environmental use. All these sub system water resource management commensurate benefits, need to be taken into consideration (and costed) to demonstrate accountability to all users and effective water delivery/flow regulation to manage future SDL's. This is just one example (not to mention its criticality in terms of future water accounting) of additional benefits provided by regional river and irrigation system infrastructure projects.

An example of this approach is the Murrumbidgee Project which Water for Rivers is working with State Water to develop with the support of the NSW Government.



Murrumbidgee River Efficiency Project
Making the most of every drop of water that we have.
Key points

- A \$60M investment in new technology meters and gauges and a computer-operated river will ensure equity among all water users.
- Accurate measurement and forecasting of all river inflows and diversions will minimise the amount of water released from the major dams.
- The project will be funded in exchange for the water savings resulting from the efficiency gains in river operation.
- The project is expected to recover in the order of 30GL of water savings.
- The project will benefit agricultural production by providing more reliable water delivery and better water information services.
- The project will better protect and accurately deliver environmental water.

The question needs to be asked when considering the Commission Report - is a better outcome achieved by just purchasing the equivalent amount of water on the Murrumbidgee system, or is there a better outcome for our irrigation community and the environment by investing in infrastructure that is going to improve total river system management for all users?

If Water for Rivers was not investing in broader scale irrigation and water efficiency projects, the necessary infrastructure, information and technology would not be available to contribute to farm viability, regional community, economic and social benefits, as well the consequential broader river management and environmental outcomes for the MDBA, that must be accounted for and measureable in the future by our river managers.

How can the Murrumbidgee River be made more efficient?

The Murrumbidgee Water Efficiency Project is aimed at better measurement and control of river flows. These include the installation of real time metering and monitoring of water use, improved gauging of river flows and optimisation of on-route storage capacity. Central to the project is the development of a computer driven operational system capable of simulating future river conditions based on forecast tributary inflows and demand data to minimise dam releases.

This will result in less operational surpluses (flows in excess of demand), reduced evaporative losses and less potential for unauthorised water use and water theft.

The Murrumbidgee Water Efficiency Project will provide benefits to water users, river operators and managers, the environment and the community.

Ongoing drought and climate change mean there will be less water for everyone.

The Murrumbidgee project will improve water use efficiency and reduce losses in the river system, making more water available for both the environment and consumptive users.

To undertake a ‘water recovery project/process’ is far more complex than purchasing water, and the benefits are far broader in terms regional sustainability to provide an irrigation future and the consequential environmental benefits.

Murrumbidgee Project Benefits

There are significant inequities in water distribution with some water users getting more or less than they are entitled to due to inaccurate meters.

Through the installation and operation of more accurate meters, the Murrumbidgee project will ensure that everyone gets the volume of water to which they are entitled. The data management technology associated with new meters will also provide water users with up to date information on their water accounts and the potential for remote monitoring and operation of their pumps.

Water users are concerned that they will lose water reliability and access to water as a result of the Murrumbidgee project.

The project will free up useable water currently being lost to the system, enhancing reliability and access for all users including the environment and consumptive users.

The community is expressing a growing concern over the health of rivers and wasteful water use.

The Murrumbidgee project is all about making the best use of every drop of water we have by minimising evaporation and detrimental losses and by more closely matching the amount of water released from the dams with the level of demand on farms, in towns and in the natural environment. Some of the savings generated by the project will be used as environmental flows.

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Murrumbidgee Project Benefits

There is an increasing global demand for food and fibre.

The Murrumbidgee project will better define the level of service in water delivery and improve water delivery to some water users, allowing them the opportunity to maximise production from their stock and crops. The project will encourage the positioning of agricultural enterprises to take best advantage of the levels of water delivery offered in the river system.

You can't manage what you can't measure.

The Murrumbidgee project will meet the genuine and growing demand for more accurate measurement and control of water flows and diversions. Investment in, and application of, new technologies in water management and operation have been slow to occur. This project will accelerate uptake of technology to make the Murrumbidgee one of the world's best managed rivers.

The Murrumbidgee project will result in up to \$60 million of investment in the region.

In return for a portion of the water savings generated from the project, Water for Rivers will invest in all aspects of project development and implementation, including installation of new meters and associated telemetry, upgrade of flow gauging data collection, upgrading on-route storage capacity and the implementation of a computer driven operational system.

The Murrumbidgee project has the support of the NSW Government.

Both the NSW State Water Corporation and the Office of Water have provided leadership and technical support to the development of the project. The NSW Government is keen to see real water savings projects implemented as part of its contribution to increasing environmental flows.

Water management begins at the farm to determine future service requirements, that is improving application of water on a paddock in a district cannot be seen in isolation from the delivery system, the river off-take, the river supply, the storage, etc up the system. It is an integrated system with all components requiring investment. A 'holistic approach' must be adopted and costed, one part of the process cannot be effectively improved in isolation otherwise how is the MDBA and river managers in the future going to effectively implement SDL's and demonstrate community accountability and 'accurate water balances' & 'water accounting' of use within a system?

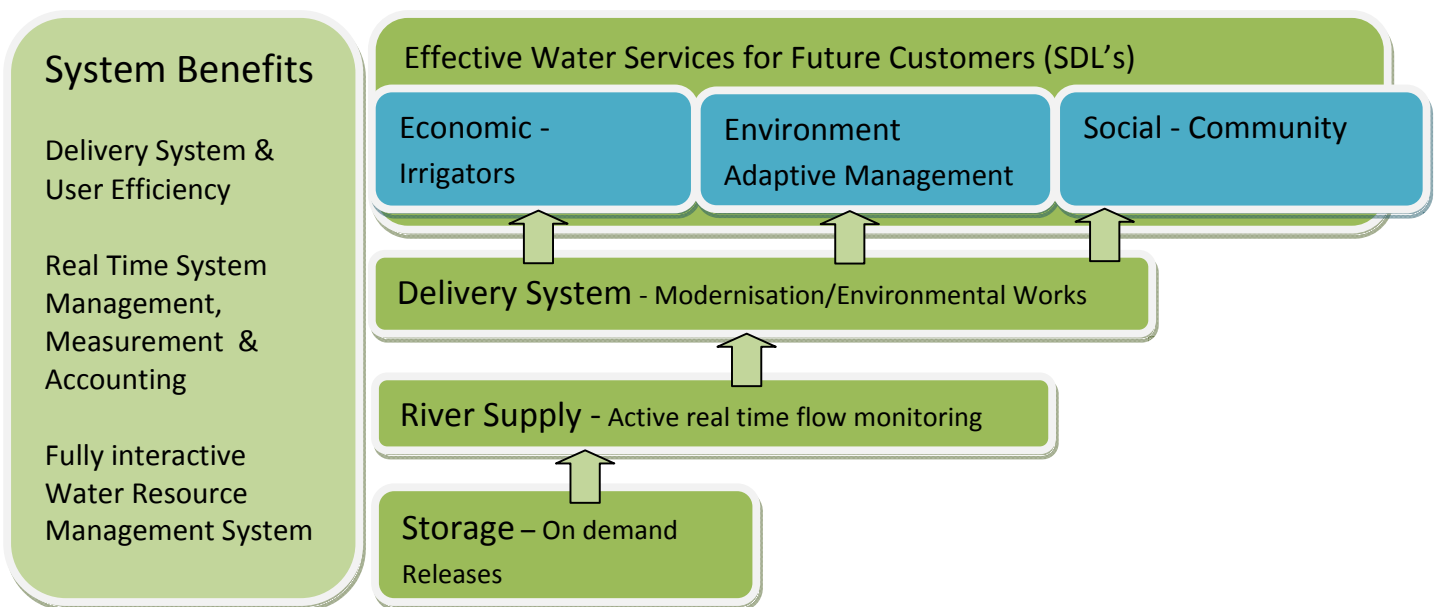
Effective and efficient water resources management – cannot occur without substantial improvement in real time water use and flow information used to serve our future irrigation industry which has partnership benefits to broader scale water resources and environmental management.

Efficient delivery of all consumptive use also enables active river shepparding of flows and will allow the active co-ordination between water and other inputs in achieving environmental outcomes which are outlined in Draft Finding 9.3 ie recovering water is necessary in most cases but is not always sufficient to achieve the desired environmental outcomes in the Basin.

Information/data on which to build a project is often non-existent – Digital Elevation Models, Accurate Measurement, System Hydrology, accurate Water Balances, etc. One would expect that much of this information would be available as part of good Natural Resource Management practices. Information produced as a result of a broad scale irrigation / water efficiency projects certainly has value to manage natural resources. These benefits are often not acknowledged.

Infrastructure projects are modernising and replacing irrigation delivery systems that were installed many decades ago. If Australia's objective was to not have irrigation then yes of course it would be more cost effective to purchase. All broad scale irrigation efficiency projects also have a serious element of correction – removing irrigation and infrastructure from non-viable areas, making the available water go further. This has community and cost implications.

The Commission Report highlights and states in Chapter 9, the importance of “the need to use water in conjunction with other inputs to achieve desirable environmental outcomes. Yet this is a critical issue.” This point was made in reference to the emerging institutional structures governing water in the Basin with a focus exclusively on recovering and allocating water. Water for River's strong view, based extensively on its recovery experience working closely with irrigation communities, is that we are denying community of many of their existing rights of service if water recovery simply focuses on the recovery and not the wider benefits of the outcomes that are to be achieved with water reform.



The Productivity Commission report sums up chapter 6 by stating that, “if there is one fund managing water recovery there might also be a case for some funds to be allocated to assist irrigators and related communities adjust to a future with less water. All forms of assistance including subsidies for infrastructure projects could then be considered on their ability to contribute to adjustment”.

It is Water for Rivers experience as evidenced by its cost effective delivery model and on ground approach as outlined in section B2 of the report, taking into account all project benefits and project scope, that effective use of public funds can be demonstrable for recovering water through non market means linked intrinsically with market based methods of recovery. Examples of the cost effectiveness of infrastructure projects are outlined in Table B.5 (p248) of the Commission Report. Water for Rivers would be pleased to discuss this further with the Commission.

In conclusion Draft Finding 6.4 could be better described by the following:

Funding infrastructure upgrades is generally not a ‘cost-efficient’ way for governments to recover water for the environment. However when combined with purchasing water and system rationalisation and other commensurate benefits, it is likely to be a very ‘cost effective’ & positive means of adjusting irrigation delivery systems and sustaining future irrigation communities to meet future SDL environmental targets.

Therefore consideration should be given to reframing the Commission’s Draft Recommendation 6.2 to reflect the need for ‘balanced water recovery to meet multiple benefits’ rather than conclude in the report that the application of this recommendation would lead to little spend with the need for reallocation to more purchasing, which is not a desired policy outcome of the Governments Water for the Future Policy and of course many of our regional irrigation communities that will undergo significant change. Obviously, good project design and development as well as scale is essential to demonstrably highlight the benefit of use of public funds above market price.

Therefore all projects should be subjected to full cost benefit analysis to fully account for the social, environmental and economic benefits of non market mechanisms when improving water management in the Basin.

Draft Recommendation 6.2

Rigorous approval processes should be applied to all projects under the Sustainable Rural Water Use and Infrastructure program. In particular, projects should generally only be approved where the cost per megalitre for water entitlements recovered is similar to the market price. Premiums above this price should only be paid in exceptional circumstances.

Response: Refer above. This recommendation should be qualified.

Designing a portfolio of water products

Draft Finding 7.1

Purchasing unregulated water entitlements can provide environmental managers with different environmental watering possibilities to holding storage-backed entitlements. Although less reliable, holding unregulated entitlements can help managers to restore natural flows in river systems. However, their effectiveness and efficiency can be compromised by complexities involved in shepherding environmental water downstream. These third-party effects may need to be addressed through negotiating with groups of irrigators, or through administrative changes to environmental flow rules.

Response: Supported

Draft recommendation 7.1

The Australian Government should adopt a portfolio approach to purchasing water products, and not focus solely on water entitlements. Other products, such as seasonal allocations, leases on entitlements, options contracts and contracts for environmental services, have advantages in specific contexts and should be considered.

Response: Supported, however, a portfolio containing more seasonally based products can only really be effective where environmental outcomes and targets are well defined and locally or catchment specific. Whilst such a portfolio approach requires on-going management and a long term commitment to funding, it should be acknowledged that this will be the requirement for optimising environmental outcomes.

It is not realistic to think that a one off capital investment in water entitlement, no matter how large, will provide all of the answers to ongoing and long term delivery of environmental improvement.

A portfolio approach will give the environmental water manager sufficient flexibility to deliver a range of environmental outcomes under a range of seasonal conditions. It will also provide for the exchange of water back to agricultural production in years where this represents the greatest benefit to the whole community.

Mechanics of the buyback

Draft Finding 8.1

Where active markets for water entitlements exist, acquiring water entitlements directly from those markets is likely to be more efficient than utilising alternative purchase mechanisms.

Response: Supported. This has been the experience in of WFR in buying entitlement in the southern valleys in NSW and Victoria and has assisted in reducing overhead and transaction costs. It also helps to build a more diverse and robust market “industry” within the private sector.

Draft Finding 8.2

Allowing irrigators to bid several combinations of entitlements and prices as part of a single bid could improve the efficiency of the tender.

Response: Supported.

Draft Finding 8.3

The effectiveness and efficiency of the tender process would be improved by making the offers to sell binding on potential sellers.

Draft Finding 8.4

The efficiency of the conveyancing process could be improved by:

- *exchanging the contracts of sale before the due diligence process commences*
- *assessing the current due diligence process for potential duplication with current state approval processes and removing the sources of duplication*
- *introducing a formal requirement on the Department of the Environment, Water, Heritage and the Arts to notify tender participants of any delays in the process and the reasons for the delays.*

Response: Supported. This has been the practice of WFR.

Draft Finding 8.5

Using the buyback to address indirect objectives, such as achieving distributional goals, system rationalisation, and reducing the salinity impacts of water use is likely to compromise its effectiveness and efficiency. Other more direct instruments would generally achieve those objectives at lower cost.

Response: If, through the purchase of entitlement at a market price, you can also deliver other benefits in terms of system rationalization, reducing salinity impacts or improving other local environmental benefits, why wouldn't you do this. WFR has shown that you can deliver these outcomes without compromising the return of water for the environment.

The Commission reasoning to discount targeting buyback is narrow and does not match the reality of Water for Rivers experience & project work.

Purchasing water solely guided by 'one objective' of moving water to higher value use as the first reason for why the buyback would be compromised on efficiency grounds does not take into account the changing use of water as an input in irrigation farming. Using water solely to move it to a higher value use is aspirational, but does not take into account the marginal cost nature of irrigation compared market price of commodities and the importance of mixed lower value irrigation. In any event similar to the analogy of 'good science' needing to be balanced with 'community trade offs' it is 'too narrow' to turn around and discount that trade off argument to achieve 'multiple regional community benefits' when looking at distributional goals for water delivery.

Second, what if a targeted buy back could be shown to avoid present and future negative impacts?

Third what if you extinguished delivery share as a condition of buy back to avoid/prevent post buy back trade?

Finally, what if inequitable outcomes could be avoided by building in buyback as part of the Commission's recommendation 9.3 to implement better systems to coordinate the mix of water purchases 'AND PROJECTS' with other actions and inputs to achieve the desired environmental result?

Provided sufficient checks and balances are in place there is no reason in Water for Rivers experience to resort to picking winners if as outlined co-ordinated system rationalisation by agreement could be achieved with co-ordination between water and other inputs in achieving environmental outcomes outlined in section 9.2 – ie local solutions. There are examples of these projects occurring today and the benefits of linking RTB and SRWWUI should not be discounted in geospatial outcomes that are & will often be required in the Basin landscape.

Water for Rivers would be pleased to discuss this further with the Commission and in relation to our response to finding 6.4.

Governance and Institutional issues

Draft Finding 9.1

Transparency in environmental water recovery by the Commonwealth would be improved by providing clear and public information summarising the existing and planned holdings of environmental water across the Basin, and explicitly explaining how Commonwealth water recovery is being coordinated between the two Commonwealth water recovery programs (Restoring the Balance and Sustainable Rural Water Use and Infrastructure), and with other environmental water holdings.

Draft Finding 9.2

Current governance arrangements for the management of environmental water in the Basin are fragmented between various state and local environmental water managers and the Commonwealth Environmental Water Holder. Governance arrangements for coordinating environmental watering activities are unclear.

Draft Finding 9.3

Recovering water is necessary in most cases, but is not always sufficient to achieve desired environmental outcomes in the Basin. Other inputs, such as capital works to manage and direct environmental flows, and changes to land management practices, may also be required. Yet the focus of the Basin Plan, and the Australian Government's buyback and infrastructure programs is solely on recovering water, without regard for the role of these other inputs. Better systems are needed to coordinate the mix of water purchases with other actions and inputs to achieve the desired environmental results.

Request For Information

Based on good governance principles, what do you think are the appropriate institutional structures for:

- conducting the purchase of entitlements under the Restoring the Balance program*
- purchasing the suite of water products that the Commonwealth Environmental Water Holder will need, to meet varying environmental demands in the interim before the Basin Plan takes effect*
- purchasing environmental outcomes through new programs aimed separately at private providers and public environmental managers?*

What do you think the role of the Commonwealth Environmental Water Holder should be in holding and trading in water products once the Basin Plan has been fully implemented?

Overcoming impediments

Draft Finding 10.1

Restrictions on water trade in Victoria and New South Wales have the potential to impair the effectiveness and efficiency of the buyback

- Victoria's agreement to allow some exemptions to a 4 per cent limit on out-of-area trade of water entitlements is an improvement but because the extra purchases can only occur from specified areas, the constraints are still distortionary and decrease the cost effectiveness of the buyback*
- New South Wales' agreement to lift a blanket embargo on sales to the Commonwealth and replace this with annual volumetric caps is less distortionary than the Victorian restrictions, but it does limit options for conducting a faster buyback should this be deemed necessary.*

Draft Recommendation 10.1

The 4 per cent limit on out-of-area trade of water entitlements should be eliminated as soon as possible, rather than phased out by 2014 as currently scheduled. Limits on the amount of entitlements that can be sold to the Commonwealth through the buyback should also be eliminated.

Draft Finding 10.2

Moving to cost-reflective pricing for water delivery is likely to improve the efficiency of water trading. Irrigation infrastructure operators that implement this reform will reduce the risk that geographically dispersed sales into the buyback could harm the competitiveness of their irrigation area.

Response: Supported. Water fees and charges should reflect the true cost of delivery including conveyance losses, environmental costs, operational costs and system inefficiencies. Postage stamp pricing eliminates the incentive for improving efficiency. Cost reflective pricing provides incentive for delivery system improvement, and allows individual farm businesses to situate themselves in an area that offers the level of service and input cost appropriate to their enterprise.

Draft Recommendation 10.2

The Murray-Darling Basin Authority should commission an independent study into ways of expanding the ability of water users to carry over water, while adequately managing third-party impacts. This study should consider options that treat environmental entitlements and consumptive use entitlements the same and options that treat them differently.

**Photographs: Lateral Move On farm Reconfiguration, Barmah Wetlands, Murray River
Copyright – Murray Darling Basin Authority. Photographer – Arthur Mostead**