National Farmers' Federation

Submission to

Productivity Commission's Draft Research Report

Market Mechanisms for Recovering Water in the Murray-Darling Basin

12 February 2010

National Farmers' Federation

Member Organisations

AGFORCE

Australian Dairy Farmers

ADFA

Australian Livestock Exporters' Council ALEC

ALPA

CANEGROWERS

CATTLE COUNCIL OF AUSTRALIA

CORPORATE AGRICULTURAL GROUP

COTTON AUSTRALIA

Goat Industry Council of Australia inc

NSW Farmers ASSOCIATION

N.T.C.A

RGA

RICEGROWERS' ASSOCIATION OF AUSTRALIA INC

RIDLEY

SHEEPMEAT COUNCIL OF AUSTRALIA

Agriculture's Future ↔ Your Future ↔ Our Future

TFGA

The Pastoralists' Association of West Darling

Victorian Farmers Federation

WAFARMERS THE WESTERN AUSTRALIAN FARMERS FEDERATION

WOOLPRODUCERS AUSTRALIA

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1. The National Farmers' Federation

The National Farmers' Federation (NFF) is the peak national body representing farmers and, more broadly, agriculture across Australia. It is one of Australia's foremost and respected lobbying and advocacy organisations.

Since its inception in 1979, the NFF has earned a formidable reputation as a leader in the identification, development and achievement of policy outcomes - championing issues affecting farmers and dedicated to the advancement of agriculture.

The NFF is dedicated to proactively generating greater understanding and better-informed awareness of farming's modern role, contribution and value to the entire community.

One of the keys to the NFF's success has been its commitment to presenting innovative and forward-looking solutions to the issues affecting agriculture, striving to meet current and emerging challenges, and advancing Australia's vital agricultural production base.

The NFF's membership comprises of all Australia's major agricultural commodities. Operating under a federated structure, individual farmers join their respective state farm organisation and/or national commodity council. These organisations collectively form the NFF.

The NFF recently implemented a re-structure of the organisation. Through an associate category this has enabled a broader cross section of the agricultural sector to become members of the NFF, including the breadth and the length of the supply chain.

Each of the state farm organisations and commodity council's deal with state-based 'grass roots' issues or commodity specific issues, respectively, while the NFF represents the agreed imperatives of all at the national and international level.

2. Introduction

The NFF welcomes the opportunity to make a submission to the Productivity Commission's (the Commission) Draft Research Report on Market Mechanisms for Recovering Water in the Murray-Darling Basin (the Draft Report).

The National Farmers' Federation (the NFF) particularly welcomes the Commission's position on the strict scientific basis on which the Sustainable Diversion Limit (SDL) for the Basin Plan is to be developed. NFF strongly supports the balanced approach to determining the SDL, to ensure that the Basin continues to provide for social, economic and the environment – to do otherwise is an inherent failure. Moreover, there is a real danger of over recovery due to the scientific basis for the Plan as well as the lack of consideration of land planning, engineering and a range of other approaches to ensure least water volume for maximum efficiency for environmental assets.

On the other hand, the Draft Report suggests on a number of occasions, that the Commonwealth considers a range of administration actions to reduce consumptive water use. NFF strongly objects to these suggestions. One of the fundamental premises of the National Water Initiative (NWI) was to provide investment certainty for water users. To adopt a strategy of acquisition by stealth will undercut rural confidence and support for the NWI and any Basin Plan. These suggestions are clearly anti-NWI, and NFF consequently rejects this approach out of

hand. Moreover, NFF supports the Commission's observation that policy implementation is fragmented and this leads to a number of issues.

The other major area of divergence between the NFF position and the Draft Report is on infrastructure investment. In its recent meeting with the Commission, the NFF provided commentary on why infrastructure investment should be strongly supported and why this should be sequenced appropriately with the acquisition program. Further information will be provided in this submission to underpin this position.

As a general comment, there is an implied assumption that there will be less irrigation (both in terms of new areas and new parts of existing farms as well as intensity). Any potential view of expanded irrigation opportunities is seen as a negative rather than a positive thing. It is implied that this is about expanding development and this automatically assumes increased extraction. This is not supported by any data. In fact, the opposite appears to be the case. Neighbours are seeing opportunities with their neighbours exiting from irrigation (e.g. retirement or exit grants package and selling land and water separately) to expand the area under irrigation using their existing entitlements. The irrigators are seeing an opportunity to acquire an irrigation farm at a much reduced rate – as up to 80% of the asset value of an irrigation farm is in the water entitlement. Once this is sold off, the land can be acquired for around 10-20% of the price of acquiring the land and water together.

NFF also notes that the Draft Report fails to adequately address the provision of timely information (water volume and price) of Commonwealth purchases. The water market, to be fully functional and informed, should be provided this information in a timely manner. A perverse outcome is that irrigators are "forced" into using water intermediaries as these know what bids are accepted and what are rejected. Moreover, the use of intermediaries increases the irrigators' transaction costs due to the requirement to pay a commission.

A further area of concern to NFF is that interception activities clearly have and continue to impact both the environment and entitlement holders. The Basin Plan provisions only allow for the Murray-Darling Basin Authority (MDBA) to consider significant interception (by definition, this could mean past, current and future). However, the cumulative effect of interception is having a significant impact. Any suggestion[1] to bring interceptors into the entitlement framework is another form of administrative attenuation of property rights. NFF rejects such approaches.

The NFF would make the observation that when it comes to the Sustainable Rural Water Use and Infrastructure (SRWUI), the Commonwealth blames the States (tardy implementation and a lack of contributing funds and/or resources) and the States blame the Commonwealth for being unreasonable and too bureaucratic. Such approaches are leaving irrigators and delivery operators in an untenable and difficult position. NFF believes that this must cease as it is impacting the choices that irrigators can make about their future.

3. Specific Concerns about the Draft Report

Chapter 2: Water use in the Murray-Darling Basin

Allocations for the environment. NFF would add that all losses (storage & transmission) and base flows are also environmental water but rarely recognised as such.

[1] 2009 COAG Water Planning & Management Framework

The challenges of delivering water to HCV assets from the acquired entitlements are limited by allocations – this is a challenge faced by irrigators, which has been particularly difficult during the drought. As Minister Wong has indicated time and again, the Commonwealth stands in the same shoes as irrigators and must accept the water planning rules and hence the allocations delivered against their entitlements. NFF would not support amendment of any Commonwealth entitlements to provide a better outcome for environment at the cost and impact to irrigation entitlements.

Addressing over allocation. NFF observes that under Council of Australian Governments (COAG) water reform agenda Governments are yet to agree to a definition of over allocation. Over allocation is also an observation at a point in time. The Basin Plan is the Commonwealth's attempt to address over allocation, as it has been perceived that the States have failed to address this issue. However, should the future climate scenario for the SDL in the Basin Plan be under estimated, there will continue to be over allocation in the future due to the very nature of the system and the COAG definition of over allocation. NFF observes that the real issue is over use and this is and should be appropriately managed.

Chapter 3: Development of water markets

Role of Intermediaries. Brokers who are actively representing irrigators in the tenders have privileged information about what prices and water products are being accepted by the Commonwealth. NFF notes that irrigators have been "forced" into using these brokers as there is a failure by the Commonwealth to provide timely and transparent disclosure of the Commonwealth's acquisitions (both trade volume and price). A lone irrigator cannot possibly find out this information.

As a result, in lieu of independently assessing a price for water entitlements and lodging a tender, an irrigator must use a broker to lodge a successful bid (and pay the broker's associated commission) or face high transaction costs by lodging a number of tenders until he hits the appropriate price range.

Commonwealth Acquisition Exit Strategy. An issue of concern is that the Commonwealth Government's acquisition program has a quantum that could cause significant disruption and economic consequences for the remainder of the market should it exit at a high level of acquisition to nothing in a short time frame. The Commonwealth must clearly indicate to the market its exit strategy. The market must be fully informed to avoid price shocks and market collapse that will unavoidably impact every irrigator's entitlement – and any financial borrowings that have been obtained with the entitlement as mortgage.

Chapter 4: Allocating environmental water

Scientific Assessments. NFF are concerned by the focus on the MDBC Sustainable Rivers Audit (SRA) and CSIRO Sustainable Yields Audit (SYA). Both of these scientific reports, while adding some detail, have limitations which may lead to inappropriate use. Neither was designed to inform acquisition of entitlement. The CSIRO SYA does contain errors (e.g. did not include the NSW groundwater entitlement cuts) and has limitations which are outlined by the CSIRO[2].

The SRA is a work in progress and the first report is limited to assessing hydrology, fish and invertebrates and only one round of sampling for each site. The subsequent report is due in

[2] Van Dijk, A., Kirby, M., Paydar, Z., Podger, G., Mainuddin, M., Marvanek, S., et al. (2008). *Uncertainty in river modeling: A report to the Australian Government from the CSIRO Murray-Darling Basin Sustainable Yields.* Canberra: CSIRO.

2010-11 and will provide a number of sampling rounds for each site as well as an expanded range of assessment criteria. Again there are also limitations, e.g. some downstream sites have performed better than upper catchment sites, and there is a disproportionate spread of testing sites across catchments. The dependence by Department of Environment, Water, Heritage & the Arts (DEWHA) on these reports to inform acquisitions is of concern.

Coorong & Lower Lakes. One of the main impacts on this important region has been the management of water locally, including diversion of overland flow and the significant impact on streams and creeks that feed into the Lakes. Management options must consider restoring and correcting some of these land and water management issues around the Lower Lakes and Coorong.

Likewise, there are a number of important wetlands around the Basin that are affected by private land management, notably the Macquarie Marshes and Gwydir wetlands. Environmental outcomes cannot possibly be addressed by flow alone.

Incorporating community preferences. NFF can only concur and support the Commission's comments regarding the basis for the development of the Basin Plan and consideration of an equal weighting of social, economic and environment. Moreover, failure to do so will result in over recovery and possibly a waste of taxpayer dollars.

Chapter 5: Assessment framework

Impacts on irrigators from administrative acquisition of water. NFF notes that the Commonwealth's acquisition and infrastructure program (over the period to 2014) will be used to offset its own risk assignment obligations (as well as the new knowledge obligations for NSW). It is also likely that the Commonwealth will target future investment to those areas where it will be most exposed for the risk assignment compensation when the Basin Plan is finalised. Irrigators should only expect a compensation cheque if there is a Commonwealth shortfall. The Water Act is silent on the States obligations and their approach to risk assignment remains a concern to NFF. It is an unresolved issue.

The *Water Act 2007* (Clth) is also unhelpful in terms of the formula for the compensation that will be paid to irrigators. The Commonwealth is only liable if the value of the future (less reliable) entitlement is less than the current (more reliable) entitlement. Irrigators, on the other hand, will expect today's full market value of the loss in value. NFF has some sympathy for the expectations of irrigators, particularly if these entitlements underpin borrowings.

NFF totally rejects any attempts to administratively reallocate water between uses by decreasing the quantity of entitlements for consumptive uses (prevents irrigators from taking advantage of better seasons), operating the system with lower allocations (playing around with the allocation rules), or issuing additional entitlements to the environment. While administrative reallocation will occur with the Basin Plan and accredited WRPs, the additional measures described above are not at all supported.

Impacts on irrigators from investments in infrastructure. It should be stated that irrigators do and will continue to invest in on farm infrastructure. It is unfortunate that the drought has affected and perhaps delayed significantly the capital investment plans of irrigators. Importantly, any on farm investment will be a co-investment by both the irrigator and the Commonwealth. It would be most unusual for the Commonwealth to fully fund such on farm works.

Moreover, the risk of participation sits with the irrigator. The very, and unnecessarily, long implementation timeframes have and will continue to negatively affect irrigators. This is because they put in an expression to participate (or other mechanism). By the time the project is approved, transfer of entitlement occurs and the farmer receives the funds, prices for component parts of the infrastructure will have increased. This has actually happened. In some cases, the movement is too much and an irrigator will need to withdraw due to the significant costs now being solely borne by the irrigator, which makes the project unviable. In other situations, the irrigator will need to seek other options to cover this additional unplanned cost (e.g. borrowings).

Moreover, the irrigator fully bears the risk if the water savings nominated are not achieved (i.e. there is under recovery of savings).

NFF also rejects statements to the effect that irrigators ought to just sell their entitlements to fund their own infrastructure work. Attachment 1 demonstrates why this is not a good outcome for the irrigator. This is because not only does the irrigator need to sell over double the entitlements that the water infrastructure would sell to fund it, he would still need to reacquire water to be able to irrigate, significantly increasing the cost of the project.

Infrastructure projects deliver multiple social, economic and environment benefits. Attachment 2 is an NFF briefing that demonstrates these outcomes.

Chapter 6: Recovering water through non-market means

Recovering water through administrative approaches. NFF does not support administrative reduction in entitlement yield. Administrative approaches undermine the property rights which the NWI seeks to ensure are respected. It undermines lending arrangements that may be underpinned by water entitlements – noting that up to 80% of irrigation farm assets may the water entitlement. Another way of saying this bluntly is that this is a theft of water by Governments.

The suggestion to "*transfer a proportion of consumptive use entitlements to an environmental manager*" is also rejected. Entitlements are highly valued by irrigators. The yield on entitlements varies depending on climate and runoff. Such an approach will prevent irrigators from utilising their full property right in wetter years and assist improve farm profitability. Again this is consistent with theft by default.

Such an approach will also change the nature and characteristics of entitlements. NFF rejects the notion of "fit for purpose". NFF expects that irrigators now and in the future will hold a range of water products suited to their enterprise mix.

Similar comments could be made about manipulating the rules for pumping in unregulated systems.

Risk Assignment Provisions. Regarding risk assignment, the NFF agrees that the Commonwealth will have likely met its obligations (and those of NSW) through the acquisition and infrastructure programs. However, there is no explicit communication of this to entitlement holders at present – many may be expecting an additional compensatory measure and expectations should be managed now if this is the Commonwealth's approach.

As stated above, NFF believes that over allocation will never be resolved as an issue as the definition depends on the climate assumptions. COAG cannot agree on a definition. Moreover,

the States made adjustment to deal with over allocation via 2004 water plans[3]. If the Basin Plan is another "crack" at dealing with over allocation, and climate is drier than anticipated under the Plan, over allocation again becomes an issue.

NFF concurs with the Commission's findings in terms of the limited basis upon which the SDL's will be developed and there is a high risk that the Basin Plan will result in over correction with serious social and economic costs. NFF notes that the Authority should consider the communities views, land management, engineering and other inputs. Moreover, this will potentially result in over recovery in some catchments. NFF notes this has already likely occurred for the Barwon Darling unregulated system.

Administrative approaches without compensation. NFF does not support compulsory acquisition of water or water recovery through administrative means. Tagged entitlements mean that the environment, like irrigators, is not shielded from the impacts of the new SDL.

NFF acknowledges that the Commonwealth may be picking up some of the obligations of irrigators and State Governments through its acquisition and infrastructure programs – this will be dependent on the approach the Authority takes to determining the SDL. However, investment by the Commonwealth is a broader decision aimed at ensuring that the irrigation sector is better placed to cope with a future with less water. Any obligations that the Commonwealth picks up that ought to be the States is a matter for them to resolve.

NFF disagrees that policy change is solely an issue for the States. It is an issue for both the States and the Commonwealth as both have water related legislation and policies that may impact on entitlement reliability.

NFF welcomes comments that compulsory and voluntary acquisition achieves the same result but that latter would be less discriminatory.

Infrastructure upgrades. As an interesting observation, the Commission views infrastructure as a "non-market approach to water recovery" and yet recommends that only the market price for water is paid for these projects. Surely this is an ambiguous comment.

Recovering water through infrastructure upgrades. NFF reiterates earlier comments that the irrigator is left with the risk that the infrastructure will deliver less water than agreed and transferred to the Commonwealth, and the risk of infrastructure cost increases. While the example given is that a farmer might have water surplus to requirements, this is highly.

NFF supports, as a high level principle, that infrastructure investment returns water to the Commonwealth in proportion to the Commonwealth's investment. It may be appropriate to vary this from time to time.

Infrastructure programs have long lead times for project planning, are unnecessarily cumbersome and are not assisted by the Commonwealth's procurement and grants guidelines.

The Commission appears to assume that the infrastructure upgrades are implemented without irrigator or infrastructure investment. This would be a rare situation. In most cases, infrastructure investment is a co-investment. As such, it cannot be conceived to be a subsidisation of infrastructure investment.

[3] See each State's NWI Implementation Plans

NFF concurs that there will inevitably be inequities with infrastructure investment, but this also applies to acquisition. For example, irrigators in water sources that have little acquisition compared to higher levels of Commonwealth acquisition will fare less well once the Basin Plan and accredited water plans are implemented.

The impact on downstream users from reduced return flows has little relevance today, except that today this is mainly relevant to direct river pumpers. Most irrigation occurs within gravity systems, many of which have already implemented works to reduce return flows and become more efficient long before there was a National Water Initiative let alone a Basin Plan and Commonwealth programs. Moreover, those using return flows are actually using the property right of upstream irrigators (and their inefficient water use) to increase their reliability. It is the same argument when Governments recognised entitlements over history of use. Those with higher levels of use were actually using the underutilised property rights of others.

Gold plating is always an issue. Irrigators can claim that dam safety standards mean that they incur the cost of dam structures beyond the requirements for irrigation structures. This is also gold plating. Many irrigators are taking the opportunity to buy dry farms so any investment may not necessarily be wasted or gold plated. It depends on the future use. Incorporating this into today's decisions about infrastructure investment is a poor basis for decision making. The key question is whether the infrastructure is fit for purpose and whether the cost is appropriate for the infrastructure being considered.

The Commission's discussion regarding infrastructure, and its draft findings against infrastructure investment clearly do not or under-consider the wider benefits of infrastructure investment. As an example, a large program of on farm investment may be used as a means of support to drought ravaged communities. Farmers have mothballed farms and so it is the perfect opportunity to undertake significant change. Service providers who have lost business due to the drought (e.g. chemical sprayers) could have been diverted to laser levelling. Investment in locally produced and/or supplied infrastructure could keep local economies operating as well as local employment. There is considerable flow on benefits for the Commonwealth in terms of retention of services to rural communities and decreased costs for Commonwealth funded assistance programs (e.g. unemployment benefits).

The Commission's report fails to make any observation about competitive neutrality. In reality, where Governments are asking irrigators to use the market to manage their risk, yet there are a number of Government failures to comply with competitive neutrality. Areas include the application of the 4% trade cap, failure to introduce full cost reflective water charging for water delivery and water planning and management, subsidies for water charges and a host of investment programs.

NFF are somewhat perplexed by the Commission's position on water savings from infrastructure projects. While NFF agrees that there may be cause for arbitrage, there are ways to ensure this doesn't occur. For example, State Government departments (and organisations like the Ricegrowers' Association of Australia Inc Water Efficiency Project) know and understand well the range of savings likely from the range of on farm water projects.

These can be used as a rule of thumb to consider whether the "offered" savings are realistic. However, in the end, the irrigator is offering entitlement to cover these savings. The risk entirely sits with the irrigator as to whether the savings achieve match, exceed or in fact undershoot the target. To that end, there is no risk to Government – providing the offered projects savings are reasonable. The Commission's suggestion that such projects undergo a more rigorous project

approval process will only result in less projects (because, quite frankly farmers won't be bothered) and a more cumbersome process.

When investing in infrastructure projects, the Commonwealth are investing in or purchasing infrastructure. Part of the consideration is a transfer of water savings and the remainder can be lumped into other multiple benefits (a more productive and efficiency irrigation business, environmental, social and economic flow on benefits). Therefore, it is both inappropriate and inequitable that the cost of these savings reflects the market price for water.

It should be noted that for the majority of on farm water projects, the savings are not derived from plant water use but on reducing infiltration losses, recirculation and reuse of water and reducing water infiltration into the soil.

Water may become more costly to purchase. NFF notes that the drivers for irrigators to "*pay a higher price*" for water is the water product, the commodity being produced, commodity prices and associated water charges.

Coordination is important. NFF rejects the suggestion that infrastructure projects should be deferred until the majority of water purchasing has been completed. This will restrict the choice of irrigators about their future – a future of irrigated production and all its flow on benefits to rural Australia and food security, or a phase out of irrigation!

Budgetary cost effectiveness. NFF suggests that the Food Bowl Stage 2 is atypical and the result of a political arrangement codified through an Intergovernmental Agreement. It is therefore not a fair comparison of the merit of most on farm projects.

Economic efficiency. NFF notes that irrigators do undertake on farm infrastructure projects – but when doing so retain all the savings themselves. Government investment is about irrigators and Government co-investing and returning a share of the savings to the environment. The incentive to partner with Government includes, in part, implementing their longer term farm plan and infrastructure investment over a shorter timeframe.

Appropriateness. NFF notes that Coleambally Irrigation (CICL) example and adds that Coleambally has partnered with Water for Rivers for some delivery infrastructure upgrades on the principle of a return of water for the environment. CICL, Murray Irrigation and Murrumbidgee Irrigation also partnered the State and Commonwealth Governments for Land & Water Management Plans delivering on and off farm infrastructure (and other) investment.

Are subsidies for infrastructure upgrades the best form of assistance. NFF notes the comments from Environment Victoria. NFF would suggest that Victorian irrigated agriculture is different to irrigated agriculture across most of the Basin. Irrigation largely occurs in semi-arid regions. There is no option to transition away from irrigation to less intensive industries due to soil types and other aspects, unless wool production is desired. Irrigation is the lifeblood of these regions, and removal of irrigated agriculture will lead to significant impacts.

Similar arguments apply to irrigation infrastructure operators. NFF notes that there will never be a program designed so that it is 100% effective, efficient, appropriate and equitable. Even the acquisition program has shortcomings such as water sources that have had little water purchased and will be facing extreme disadvantage under the new SDLs.

Mechanisms can be put in place to ensure that the proposed water savings are realistic. In the end though, the risk sits with the irrigator and providing the project meets the wider

Commonwealth objectives of positioning the farm business to deal with less water in the future, enable the irrigator to implement the project in a timely way. Let the farmer get on with the job he/she knows best – the business of farming!

NFF notes the Commission's statement that if its Draft Recommendation 6.2 is implemented, it will likely result in SRWUI being underspent. NFF advises that this is unlikely as $3.8 billion is allocated under an Intergovernmental Agreement with the States and there remains only approximately $1 billion unallocated to programs.

NFF is disappointed that the Commission has picked up and used the word "subsidies" and this seems to be derived from environmental group submissions. Importantly, compared to other developed countries, Australia's environmental groups appear to rely solely on Government action. They should look at examples overseas where such groups work constructively with farmers to deliver environmental stewardship outcomes (e.g. in the State of Oregon by purchasing end of system flows to allow salmon spawning).

Chapter 7: Designing a portfolio of water products

Purchasing entitlements. NFF concurs with the Commissions views on the "no regrets" approach to targeting purchases.

Benefits from storage rights. NFF notes concerns about meeting short term environmental needs arising outside of the irrigation season but must reject this notion. Irrigation seasons usually run from August to end of April. This leaves only around three months from late autumn to winter. Typically this time is used to run regulated rivers low in an effort to "mimic" natural flows. In particular, it provides an opportunity to establish stream bank vegetation. The proposal using this for environmental flows has two drawbacks – it will increase system losses (with the system run very low, watering many assets may not be possible due to many having high overtakes) and for the southern Basin, water environmental assets at the wrong time.

The new arrangements for carry over (outside the NSW general security entitlements) may need to be reviewed to ensure that there are no third party impacts to entitlement holders within a state or from other states.

Opportunity costs. NFF does not support that the Commonwealth goes into the wider water market to purchase allocations. To do so places the Commonwealth in direct competition with irrigators seeking to acquire water for production or to replace water entitlement sold or allocations to underpin reliability. NFF suggests if the Commonwealth is to acquire allocations, then this is conducted as a separate market where entitlement holders can offer their allocations to the Commonwealth. NFF would also support other suggestions like lease arrangement proposed by RiverReach. Another option might be philanthropic "donations" of allocations.

NFF questions whether the Commission, in its assessment of the relative options considered the payment of water charges.

NFF welcomes suggestions that environmental allocations carried over ("held") in storage could be used to increase future allocations for all entitlement holders. However, the relative impacts must be modelled to ensure this is fact does occur.

Purchasing season allocations: effectiveness. In the Murray, experience shows that environmental water is more likely to deliver prolonged flooding events (necessary to underpin breeding events) when piggy backed on top of unregulated natural flood events downstream of the dams.

Efficiency opportunity costs. The stated limitation of being unable to purchase water outside the irrigation season is irrelevant for regulated systems, as this is not the ideal time for environmental flows, and even if a watering event was to occur, the volume of water required in a low flow (natural) period over winter would be ineffective and inefficient use of precious resources.

Purchasing of covenants on entitlements. NFF rejects this proposal on the grounds that this is essential changing the nature of the property right. With tagged entitlements, this cannot and should not occur.

The discussion (top of p. 152) about encumbrances should be compared to the "snowy borrow" encumbrances to assess any applicable learning's.

Purchasing water in unregulated systems. NFF does not support administrative attenuation of these licences. However, the "purchase" of changes to licence conditions may be an appropriate outcome. Such consideration must be cognisant of the impact these changes will have to agricultural production and the inability for these irrigators to have viable other options to improve irrigation reliabilities. A good example is the Oregon Water Trust which purchases cease to irrigate early from ranchers for salmon spawning.

NFF understands that the example of the Toorale shepherd of water undertaken in 2009 was due to a unique set of circumstances that may not be always applicable and allow this as an ongoing option. Moreover, negative third party impacts must be avoided.

Administrative changes to flow rules. NFF absolutely rejects that the Commonwealth Government should lobby State Governments for changes to unregulated water resource plan rules – even with the suggestion of providing compensation.

Purchasing land and water packages. NFF suggests that there are better options for the acquisition of water and other environmental outcomes than the narrow outcomes arising from the Toorale purchase. Using this specific example, the water entitlement was 14 GL underpinning 2000 ha of irrigation enterprise, however the property was largely a grazing operation.

An alternative approach could have been to leave the property in private hands. NFF suggests that 12 GL could have been acquired for the environment, leaving 2 GL on the property for a smaller high value irrigation enterprise. Grazing could have continued and the high conservation value areas of the property enhanced via an Environmental Stewardship Program. This would have left a viable agricultural property underpinning food production and local employment – particularly for the local Indigenous community. Local Government rates would continue to be paid (public lands do not incur these charges). There would have been a balanced approach to social, economic and environment. Water could be used for environmental assets while on farm environment is not only protected but is actively managed for environmental outcomes. The Commission's comments on p. 159 would appear to support the NFF model.

Efficiency: transaction costs. NFF notes the examples of the range of the administrative costs for contracting of environmental services. NFF notes that Governments (and often research organisations) are inefficient. If the same services were let to commercial organisations, different and cheaper costs would result. As an example Land & Water Management Plan[4] (LWMP) administration costs were around 8% whereas CSIRO and Government department programs often run upwards of 40% administration costs. NSW IPART has recognised the inefficiency of

[4] Murray, Murrumbidgee and Coleambally Irrigation

a state owned corporation and deducts an "efficiency" dividend from the costs claimed as the basis for water charges.

Chapter 8: Mechanics of the buyback

Utilising existing market platforms. NFF rejects that the only purchase option for the Commonwealth ought to be the same market in which irrigators operate. This places irrigators with small pockets in the same marketplace as the Commonwealth with large deep pockets.

NFF supports views that the conveyencing process is too bureaucratic and approvals and consequently settlements take too long. While the Commission have made some suggestions to make the process more streamlined, the NFF suggests that these have not gone far enough and are not sufficiently commercially focussed. Another option would be for this function to be outsourced to a commercially focussed organisation. As such Water for Rivers may be appropriate, and is well recognised and support by the irrigation sector.

NFF rejects the ACCC position on intermediaries. Regulation of brokers is the preferred model. Perhaps an analysis of various brokers ought to be considered to assess their financial viability and risk management processes to underpin risks such as litigation.

Binding bids. NFF suggests that the reason for the withdrawal of bids from the 2007-08 tender may, more rightly, have arisen from the need by distressed sellers to settle debts and could not due to the protracted settlement process. Unless this situation is improved, irrigators will continue to withdraw tender offers. NFF suggests that in lieu of converting to binding bids, a truly commercial focus is applied with settlements to occur in a reasonable timeframe – and that the Commonwealth is required to comply with these timeframes.

Improving the efficiency of the conveyancing process. NFF suggests that the initial step in the approval process is that DEWHA accepts bids that comply with the program objectives followed by the steps outlined by the Commission.

Swiss cheese effects should be managed in other ways. Some assume that current and future dry farms will remain dry farms. Anecdotally, this is not occurring as irrigation farm business take the opportunity to acquire cheap "dry" farms, and to use their existing entitlement over a larger area of land.

The Commonwealth's Exit Grants package also has a Swiss cheese effect (along with other Government programs). Moreover, it has restricted the structural adjustment of small horticultural blocks to more economically viable sizes. The exit grants package should have enabled the irrigator to exit irrigation and remain in the family home. It is appropriate that the water was sold to the Commonwealth. However, the land should have been able to have been subdivided with the irrigator remaining in their family home and able to sell both irrigation infrastructure and permanent plantings intact to assist the structural adjustment of the horticultural industry.

Targeting areas for rationalisation. NFF concurs with the Commission that some sellers will keep their entitlements and continuing irrigating. Moreover, many are also taking the opportunity to purchase very cheap "dry" irrigation farms and use their existing entitlements over a larger area of land resulting in less hydraulic loading in the landscape.

Regarding Twynam, anecdotally NFF notes that the company was also acquiring water entitlements at a much lower value than which it sold to the Commonwealth. Is this arbitrage?

Perhaps, however, the Commonwealth believed it had made a good purchase at the time within the parameters of acquisition and aligned to the market price – there was a willing seller and a willing buyer and the price was agreed. The fact that the market collapsed subsequently allowing Twynam to re-enter and acquire entitlements could be seen as a good commercial decision by the Board. Moreover, market collapse is realistic and likely when the Commonwealth withdraws from acquiring entitlements as was the case in this situation.

NFF does not agree with the comments suggesting that acquisition is accompanied by covenanting the land to prevent irrigation or decommissioning irrigation. Surely, this is a perverse outcome if Governments were to choose this. The reform agenda is about providing for the environment, not putting a cap on irrigation or irrigation development. Even the MDBC Cap was consistent on this. The issue is extraction not close down of irrigation.

Targeting water that causes significant environmental externalities. NFF would add that removing water alone will not assist dealing with salinity impact zones which will deteriorate once the application of water is removed, i.e. salts will rise to the surface.

Traffic Lights. NFF rejects the use of "traffic lights" to target acquisitions. In the main, the impact on entitlement and land values must be considered. A farmer given a "red" or "amber" light will undoubtedly have these values affected and when these underpin financial dealings, this will leave the farmer in very tenuous situation with bankers. A more appropriate approach is to have the discussion and dialogue with farmers about the issues and their position. The NVIRP have noted that while this is costly and time consuming, it delivers a better outcome, such as relocating those wishing to remain in irrigation to a new irrigation area and those who wish to become dryland farmers to the dryland areas.

Chapter 9: Institutional and governance issues

Coordination of environmental recovery. NFF agrees that it is not transparent how DEWHA considers and implements acquisition and consideration of water recovered from its other programs. Nor is it clear how DEWHA considers environmental water already in existence within other Governments or organisations that will be contributing to the new world.

Coordination of water and other inputs in achieving environmental outcomes. NFF concurs with the Commission's view that the Basin Plan process may result in more water being allocated to the environment than is necessary and that this is a major coordination issue. NFF supports the Commission's preferred approach to identify what environmental outcomes are needed and then to provide the financial assistance to environmental managers to achieve these outcomes. However, the Commonwealth are unlikely to reverse its approach.

Institutional options for water recovery at the Commonwealth level. NFF notes that although the RTB and SRWUI programs have objectives in securing the long term future for irrigation communities, it remains difficult to see this being achieved. The NWI reforms should see irrigators as a valued part of society. If these reforms do not deliver this, then this could be seen as a fundamental failure.

NFF notes that there is significant angst about the drought impacts on the environment. This is both in terms of environmental "damage" and in terms of the yield of any purchased entitlements. There appears to be no appreciation of the positive outcomes, e.g. wetlands being dried out for the first time in perhaps decades, and the decline in European carp numbers. Australia's diverse species have evolved to deal with floods and drought and we are currently in the worst event in over 300 years for the southern basin.

As Minister Wong continues to state, the purchase of entitlements will yield water in the longer term. In the meantime, the small volume is being shared strategically among those who require it most. In many respects, the smaller yield on environmental entitlements has focussed attention on the most "needy" areas of the environment – just as it has other water uses, such as critical human needs.

NFF notes the Commission's statement that the SDL may require the Commonwealth Environmental Water Holder (CEWH) to re-enter the market to reacquire yield lost through the application of the SDL. However, all water users face the same situation. There must be some acknowledgement that the Basin Plan requires a focus on "key" environmental assets. By default, this means that not all environmental assets will be assisted and in some situations, a decision will have to be made on what to protect and what to leave. The CEWH already has the ability to sell entitlement and purchase other entitlement that would better suit some assets. However, this will come at a cost to the management of the water resource and should also be considered.

NFF has concerns about the "shepherding" of environmental water. Water is "tagged" for a reason – to assist preventing third party impacts. To allow environmental water to be shepherded from one water source to another clearly creates a "super" high security class of water. As a high level principle, any changes ought to be available to all entitlement products in that water source, and where this is not agreed there should be no negative impacts to entitlement holders like irrigators. As an aside, any positive benefits that might arise should be accepted on the premise that this may assist in defraying some of the yield impacts arising from these water reforms.

NFF does not concur with the Commission's comments that there is an inability to monitor and measure the outcomes in wetlands like the Macquarie Marshes and Gwydir Wetlands. Technology like satellite imagery and aerial surveys are already being used. Purchasing environmental outcomes should be an option.

Chapter 10: Overcoming impediments

Dealing with connectivity of water systems. NFF observes that Governments have failed to deal with interception. As a result, both the environment and entitlements are being eroded. NFF concurs that the four identified interception activities must be addressed. However, NFF does not support that this is simply by "bringing" this use into the entitlement framework. As a high level principle, these interception activities ought to acquire a water entitlement – either from the market or from government for low development systems. NFF does not support the Basin Plan approach of only dealing with significant (and likely future) interception. In other words, the policy response must account for past current and future interception and their cumulative impacts on the water resource.

Improving inter-temporal water use choices. Regarding carry over, NFF rejects any attempt or suggestion that a review of limits ought to treat environmental entitlements differently from those held by irrigators. The principle of tagged entitlements requires that all like entitlements should be treated the same. However, there is merit in noting some of the operational rules in existence. For example, the water carried over as part of the Barmah-Millewa Forest Allocation is the first water to spill from Hume and Dartmouth Dams. This was a trade off for allowing such a large quantity of water to be stored for up to six years (when irrigators can only store from year to year). These arrangements are also consistent with the requirements of the environment, i.e. these are usually unregulated events and an unregulated spill event only adds to the flood event and consequential outcomes.

4. Draft Findings and Recommendations

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.*

The NFF notes that this draft finding points to the fact that irrigators and the environment are continuing to be penalised by jurisdictions failing to address interception activities. The exception is South Australia's preparedness to address the impacts of plantation forestry.

NFF also notes that water resource plans have remained suspended – in most cases for several years. This situation leaves both irrigators and the environment at the "mercy" of state decisions. Moreover, since the Commonwealth have commenced its oversight of the Basin, there is less publicly available information on how water is shared in the southern connected basin. Reports should be made regularly available so that irrigators and other stakeholders can understand these "informal" arrangements for how the limited amount of water is made available.

At the earliest opportunity, water resource plans should be re-instated.

As an aside, while the drought has resulted in major impacts to the environment, farming and rural communities, there are some good news stories that are being forgotten. Firstly, Australia's unique species have evolved to droughts and flooding rains. Moreover, some wetlands that have been inundated for decades have had a long overdue drying out. And the drought has resulted in a significant decline in European Carp.

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.*

NFF agrees.

Draft Finding 3.2

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

While NFF agrees, NFF also points to the need for regulation of intermediaries. In particular, governments should not wait until there has been a failure resulting in irrigators losing money and/or water, to agree and act on regulation. Even some intermediaries have called for this to be done.

Moreover, the water market has bought practices that have been stamped out in other markets.

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.

NFF concurs with the Commissions draft findings in relation to the Northern Basin. Regarding the southern connected Basin, there is a need to be mindful of existing arrangements. For example, the Barmah-Millewa Forest Allocation borrow to irrigators (which must then be repaid) and return flows from flood events which are currently reused as part of the consumptive pool (improving allocations). Removing these arrangements to irrigators may reduce the need for additional environmental water products. However, this must be modelled to ensure that there are no negative impacts from any new arrangements on irrigators.

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.

NFF advises that decisions on the quantum of extractive entitlements in a water resource plan should be based on good science. Any tradeoffs must respect property rights.

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.

NFF largely agrees but notes that the new Basin Plan also "must not compromise the productive base" of water – and must be explicit on whether the productive base has been compromised.

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.

NFF agrees but advises that there is a need for early communication by the Commonwealth is it is likely to have met its (and NSW) risk assignment obligations via the acquisition and infrastructure programs. NFF points to a need for Victoria, South Australia & Queensland to be transparent about their arrangements for risk assignment.

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.

NFF agrees. It is also imperative that the States water users agreed with any risk assignment approach under National Water Initiative (NWI) Clause 51. This is a specific provision of this

clause. NFF also notes that unless the risk assignment provisions between the states are closely aligned it will be a disaster for competitive neutrality.

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.*

NFF notes that the Commission has not considered wider public benefits/considerations that infrastructure investment delivers. NFF continues to support the purchase from willing sellers only.

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.*

NFF does not agree. It would appear that the Commission is looking at infrastructure from a pure purchase point of view. Governments are investing in infrastructure and the agreed consideration includes infrastructure, water and money. The Commissions view is at odds with the Government's objectives of "more crop per drop".

Some infrastructure projects may be unsound, however properly targeted, peer reviewed investments are a strategy in the nation's interest.

It is also a matter of philosophy, e.g. some would question whether the Government's stimulus package was wise?

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.***

NFF does not agree with the Commission's proposed approach. The draft recommendation demonstrates a fundamental lack of understanding of agriculture and the drivers of a successful market driven farmer. Why would they go through the hassle? The Sustainable Rural Water Use and Infrastructure (SRWUI) offers investing Governments an opportunity to influence its irrigated industries in a market driven economy.

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.*

NFF has concerns about the shepherding of environmental water as this changes the nature of the "tagged" entitlement to create a "super" high security class of environmental water. NFF accepts, as a high level principle, that no entitlement holder should be worse off. Therefore, the

impacts (positive and negative) need to be modelled to ensure that any shepherding arrangements do not negatively impact on irrigators.

NFF also supports that where entitlement holders are better off, this may be a way of offsetting the wider impacts of major water reforms.

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.***

NFF agrees.

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.*

NFF does not agree. Where a large single investor operates in a market involving many smaller irrigators, there will be untenable impacts on the ability for those irrigators to secure either entitlements or allocations.

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.*

NFF agrees.

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.*

NFF does not agree due to the inefficiencies of the process and the inability of Government to settle in a timely manner precludes this due to the cost risks to irrigators (e.g. they may have entered into binding contractual arrangements based on the binding bid and acceptance by Government).

Making offers binding will ensure that there are fewer sellers to the Commonwealth. Improving the Government procurement process and grant guidelines may yield the best efficiency and cost savings.

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.*

Largely agreed; although it should be noted that no Government has (or is willing) to guarantee indefeasibility of title.

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.*

NFF concurs providing "other more direct instruments" is not used to attenuate entitlements.

NFF is also concerned about the negative impacts on entitlement by the use of the "traffic lights" to direct the purchases. This can only undermine property rights and affect financial dealings for those irrigators in amber or red zones.

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.*

NFF agrees.

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.*

NFF agrees

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.*

NFF agrees.

Information Request

> ***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?

NFF recommends that an independent commercially focussed organisation like Water for Rivers is used to undertake the remainder of the acquisition program – under the firm direction of the Commonwealth Environmental Water Holder (CEWH) who ought to be informed by the Basin Plan.

NFF does not support the purchase of allocations by Governments in the same market with irrigators – it must be a separate tender or other market. If this approach is progressed, it will reduce the ability for irrigators to adjust.

It is important that the CEWH can appropriately tailor the water products at its disposal. More importantly, there should be consideration of allocation trade to irrigators when the environment cannot use these. This would assist to facilitate adjustment.

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.*

The NFF position is that all governments are contravening the principles of competitive neutrality in a range of ways. If the 4% cap is to continue, then it must be applied in the same manner in each jurisdiction.

Evidence shows that the more producers are becoming distressed because of the drought, the more these bilateral agreements are skewing regional water values.

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.

See above comment. NFF notes that the ACCC has proposed an alternative phase out approach.

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.

The NWI states that rural water users must move to lower bound pricing. This has not occurred in all states.

NFF notes that cost reflective pricing has been largely implemented (for most gravity irrigators) at an area level but not at individual irrigator level. To do so, would be extremely expensive.

Therefore, the transaction costs are too high and it would be inappropriate to implement at a farm level as the gains would be lost due to its cost.

Moreover, there are some legal issues with the Water Act 2007 that mean that some infrastructure operators are not included under the definition and hence are not required to enforce the water charge rules.

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.***

NFF concurs, however notes that use of the word "managing" is perhaps not appropriate. The NFF has stated that third party negative impacts must be avoided where possible.

NFF notes that one option to consider may be to include that environment is the first water "spilled" followed by irrigator carry over.

NFF does not support the use of administrative options to reduce entitlement yield and hence reliability. This is compulsory acquisition without compensation and will not be tolerate.

5. Conclusion

The NFF welcomes the Commission's draft findings in relation to the Basin Plan and that there is a real risk of over recovery. Moreover, the NFF are concerned that this will also lead to inefficient environmental water use. The environment should have the same standards as applied to irrigators.

The NFF notes that interception is a major concern and continues to impact on both the environment and irrigators. The cumulative impacts must be addressed through the implementation of the Basin Plan and accredited water resource plans.

The NFF does not support the Commission's findings in relation to options to recovery water from administration attenuation of entitlements as this is "theft" by default. Moreover, infrastructure is a legitimate program that delivers multiple benefits for the Government and rural communities. However, tardy implementation of the major priority projects must be resolved – and the jurisdictions must stop the blame game.

NFF has noted that the Commission does not address the lack of timely volume and price data on Government purchases. This is impeding the market and forcing irrigator to using brokers – increasing their transaction costs as a result.

NFF welcomes the opportunity to discuss this submission further.

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Attachment 1: Case Study Selling Entitlement vs. Infrastructure Package

The NFF notes that the economic view of the world would support just an acquisition package and have any investment in infrastructure either delayed or the funds transferred to an acquisition program. However, from the perspective of a farmer, the acquisition program would be an option should he/she wish to exit the industry or are a distressed seller. For irrigators wishing to continue with irrigation and to invest to be the most efficient irrigation business, the irrigator will need to finance such an investment. There are three options:

1. Sell entitlements to the Government to fund the investment;

2. Seek to partner with Governments to invest in the infrastructure and share the water savings; or

3. Seek other finance investment opportunities (e.g. through a bank) and retain all the water for increased irrigated production or to underpin future reductions in water availability.

The last option does not concern the Commonwealth or any person/organisation outside the farm business. However, it is worthwhile considering the financial implications to the farmer (not the Government) of the first two options.

This case study looks at a high flow rate capacity broad acre surface irrigation development over 80 ha.

80,000 m paddock lasering @ $1.50/m3 =	$120,000
10,000 m drains and channels @ $1.50/m3 =	$22.500
Water control structures (stops, pipes etc)	$6,000
Recirculation (dam, pumps and engine, pipes) =	$72,000
TOTAL COST OF PROJECT	**$220,500**

Cost of water saved ($220,500/85 ML) = $2594/ML

Options to fund project:

1. Sell entitlement @ $700/ML[5] for Murray Irrigation entitlements, the irrigator would need to sell 315 ML to cover the cost of the project. This is more water than he would use to water wheat under the more efficient irrigation layout (currently uses 135 ML). The farmer would be left with no entitlement to cover irrigating wheat. He would then be required to also re-enter the market to acquire water either on a temporary or permanent basis, further adding to the cost of the project. Using the figure below, 135 ML @ $700/ML adds an additional $94,500 to the cost of the project.

2. On farm infrastructure project. The farmer invests $110,250 of his own funds along with $110,250 of Government funds. The water saved is 85 ML, of which half is shared with the Government. Cost is $2594/ML. The farmer retains sufficient entitlement to continue to grow wheat more efficiently.

[5] Murray Irrigation Water Exchange – offers to sell. There were two offers to buy – one for 1 ML @ $1000/ML so not a realistic price (can ask much higher money for small quantity). The selected price of $700/ML was for a parcel of 1000ML. offers to sell ranged between $800/ML and $1500/ML.

Attachment 2: On Farm Infrastructure Investment

Background

1. Historically, farmers have funded capital investment themselves, including irrigation development. The investment decision is based on the collective benefits to the farm business with all of the benefits, including water savings, accruing to the farmer. To date there have been few Government programs to allow the environment to accrue some of these water savings.

2. State and Commonwealth Government's have recognised the importance of improving irrigation system infrastructure to deliver multiple landscape benefits. Historically, this has been through the Land and Water Management Plans with funding shared between Governments and irrigators. The on farm investment component has included a range of irrigation layouts & systems, plans, land use change, recycling and storage, drainage, seepage works and enhanced biodiversity.

   Importantly, this Government investment has excluded a return of water to the environment.

3. More recently, Government investment in infrastructure have specifically sought a return of water for the environment, e.g. Food Bowl Stage 1, the Living Murray and Water for Rivers. Attachment A provides a summary of investment in water savings projects including the estimated cost of water recovered.

Discussion

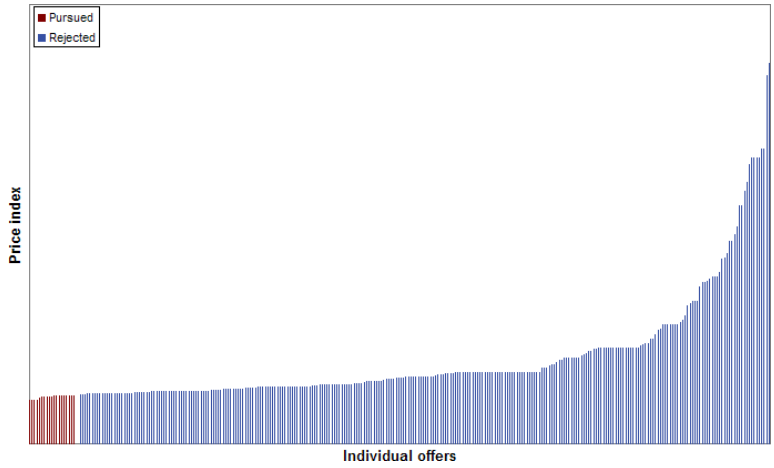
Water for the Future Fund

4. The Commonwealth government has allocated projects worth $4.8 billion from the $5.8 billion Infrastructure investment program, some of which are acquisitions and one is a structural adjustment package:
   a. State priority projects for acquisitions:
      i. Queensland - $350 million
      ii. South Australia - $80 million
   b. $57 million exit grants (i.e. exit grant and re-training funds) of small horticultural farms.

   NFF contends that water acquired under the above initiatives is a significant shift from the intent, and changes the balance, of this program. These acquisition projects should be re-appropriated to the $3.1 billion acquisition program and the exit grants from similar program run by DAFF. This will free up additional funds for on farm investment.

5. The government's acquisition program seeks to pay the market price for the entitlements offered. The graph on the following page from the Department's website shows that acquisition of a greater volume of water was possible in the initial $50 million tender for little more cost – the red bars indicate what accepted offers, the blue those refused. With large volumes of water potentially leaving irrigation, it is important that on farm investment is implemented to maintain production.

Figure 1. Price index of NSW Murray and Murrumbidgee River catchment offers



6. The easy option for Governments is minimal cost water acquisition with little focus on agricultural and other benefits that could be delivered through infrastructure investment. NFF contends that this is a short-sighted approach.

7. Some commentators have stated that infrastructure investment and reconfiguration should not happen until the acquisition process is finalised. This view is premised on several assumptions, including that irrigators will sell all their water and retire (from farming or irrigation), that some land is not suited to irrigation, and that the acquisition package may mean irrigation areas may need to be retired.

   The first premise has been refuted by a recent ABARE report[6] that shows that only 4% of irrigators indicated an intention to sell all their entitlements (8% indicated they would sell some of their entitlements). The same ABARE report shows that 16% of irrigators indicated an intention to acquire water, while 17% would expand their irrigation area. This would reduce the risk of retirement of irrigation areas as well. The premises ignore the ability of irrigators to purchase dewatered land that has existing irrigation infrastructure at low land values. The low acquisition cost will enable them to conduct profitable irrigation businesses. Thus, any Government co-investment is unlikely to be stranded. For irrigation properties, the water rights have represented up to 80% of the value of the entire farm package.

   Attempts to "classify" irrigation land suitability need to be undertaken with caution as they may result in a range of negative impacts to existing and future irrigators, including a devaluation of their assets and possible implications to lending arrangements.

8. The Government's policy (indeed the Commonwealth Procurement Guidelines) brings an impasse to bear. Governments view on farm investment as water acquisitions (not infrastructure investment) and these projects cost considerably more than the market price. Yet government investment in a range of infrastructure projects shows wide extremes in the cost of projects – from as little as $260/ML to as high as $10,000/ML.

   Some of the approved projects under the $5.8 billion infrastructure package will not return any water to the environment, while others will return water ranging from 2 to 183 GL/year. The cost of this water varies from ~$1,100/ML to over $14,000/ML, with the average being $4,072/ML[7].

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[6] 2008 ABARE, An economic survey of irrigation farms in the Murray-Darling Basin Industry overview and region profiles, Research Report 08.9.

[7] The information available does not distinguish whether this is site specific volumes and prices or conversion to long term cap equivalent volumes and prices. See Attachment B for more detail.

9. Interestingly, a report by ACIL Tasman[8] found that:

    a. "*there is a range of factors likely to drive the current reluctance by holders to sell entitlements and enter into the Government tender process*"
    b. "*the volumes of buyback being sought...will almost certainly put substantial pressure on market prices*"
    c. "*closed tendering...well suited to acquiring modest volumes of water at prices below those that could be expected to emerge from a fully informed and operating market, but are likely also to limit the volumes offered at realistic prices*"
    d. "*it is likely that a change will be needed to the strategy over time if the government's water volumes objectives are to be met*"
    e. Strategy revision will involve a "*willingness to pay substantially above the current market expectations and accept a higher average and marginal price*", and a shift in "*the short and medium term reliance on buybacks towards greater relative savings from infrastructure*"
    f. Infrastructure will "*potentially have an important role to play in balancing the competing objectives of government policy*", i.e. to manage the risk of paying too much.

10. A reduction in return flows from irrigation is an identified "interception risk" creating a policy dilemma – more efficient irrigation systems means less water is returned to the river, while inefficient irrigation systems returns water to the river with some water quality issues. Investment in more efficient irrigation systems on and off farm that includes a return of water to the environment will attenuate the impact of this interception risk.

11. There are a range of competing government programs purchasing water in the market, either directly in the same market as irrigators (e.g. Water for Rivers, NSW RiverBank) or separately (MDBC Water Tender and Commonwealth Government Water Tender). This is seen as cost effective (market price is paid), time efficient (conveyancing versus completion of works) and a good use of resources but is also acknowledgement that the cheaper infrastructure options have been expended.

12. There are significant concerns in rural communities about the impacts of the removal of water from productive agricultural use, and the decline in the economic health of the region, rural populations, contraction of services, and the vibrancy of communities. Infrastructure investment may see an increased need to service the higher levels of technology and perhaps an opportunity to retain younger people in rural communities.

13. Future infrastructure investment by Governments will require targeting more on and off farm options and Governments should consider the multiple objectives delivered by projects. NFF contends that through system infrastructure investment will achieve the principles in the Murray-Darling Basin Water Reform IGA including:

    a. Secure a long term sustainable future for irrigation communities;
    b. Deliver sustainable and lasting returns of water to the environment; and
    c. Value for money.

Are On Farm Projects Worthwhile?

14. A most successful (and only) on farm water efficiency project is the Ricegrowers' Association of Australia Inc (RGA) project under the Living Murray Initiative (TLM). In round one, irrigators committed 11,216 ML of water (LTCE) from 111 expressions of interest received

[8] 2008 ACIL Tasman, Australia's Working Rivers: The role of infrastructure and water buybacks in recovering environmental flows, prepared for the Crane Group Ltd, May 2008.

and valued at approximately $44 million. Twenty-two projects were approved for funding by partner governments and are currently being implemented, returning 1,206 ML, valued at $2,500,000, to the environment ($2,073/LTCE ML).

The second round delivered 175 expressions of interest to return 23,298 ML of water valued at $74 million. TLM has partly funded the project and NFF understands that RGA are in discussions with Water for Rivers for the unfunded projects.

15. This shows that there is significant water available for recovery from on farm projects, with irrigators willing to undertake such investment and return water to the environment at levels comparable to off farm infrastructure investment. Hence, the value for money argument is no more an impediment than for other approved infrastructure investment.

16. Governments' investing in private infrastructure is more complicated. Some economists are of the view that if irrigators thought on farm efficiency works were worthwhile, they would invest in them themselves. Many irrigators have implemented projects and retained the efficiency gains to increase on farm productivity. A typical investment program on an irrigation farm is 15-20 years. Governments have an opportunity, with the prolonged drought affecting that ability to invest, to accelerate this timetable.

17. Government investment in on farm projects may include a dividend in the form of a statutory water entitlement and with cost effective implementation costs when compared to off farm infrastructure. Not all on farm projects will deliver water entitlements, e.g. installing high tech meters will yield dividends without the landholder giving up entitlements.

18. A further concern for Governments is how to implement on farm works when these projects are for small volumes of water, over literally thousands of farms. The RGA example resolves this dilemma by providing a framework that will allow industry to implement projects, particularly as farmers see industry as being someone they trust. Industry can be the interface between Governments and irrigators.

19. In summary, on farm projects offer a range of benefits to farmers, Governments and the wider community:

    a. Water for the environment and improving water use efficiency without eroding the ability to produce food (more food, less water).
    b. Improved environmental outcomes at the landscape level i.e. reduced groundwater recharge and associated salinity, which in time will reduce salt flow to the river system.
    c. Maintaining rural community demographics and community structures (the adoption of newer technology has the scope for demanding higher level of service and may encourage the younger generation to retain involvement in irrigated agriculture).
    d. Allows Governments to choose the type of irrigation innovation and investment it will fund and conversely those it will not.

20. In addition to the water that may be recovered under the Water for the Future program, there are significant quantities of water either already recovered or being recovered for the environment (see Attachment B for a substantive list).

Linking government policies together: the way forward

21. Governments need to recognise that multiple policy objectives are achieved through on farm efficiency investment:

    a. Drought preparedness;
    b. Reconfiguration of regions and landscapes while maintaining a profitable sector; and
    c. Returning water for the environment.

22. NFF has undertaken some initial analysis with the cost of an on farm program is potentially $2.2 billion[9] (Attachment C and D). A case study of a high flow rate capacity broad acre irrigation development is located at Attachment E to demonstrate the cost of the efficiency investment.

23. NFF urges the Government to commence on farm infrastructure works in an effort to allay rural community concerns that the Government focus is solely to remove water from agricultural regions despite public undertakings and first principle of securing the long-term sustainable future for irrigation communities. This could mean negotiations with organisations with a capacity to deliver such investment and to bring forward suitable projects, e.g. regional NRM, industry and irrigation organisations.

[9] Based on ABS Water Accounts and MDBC data