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Coleambally Irrigation Co-operative Limited

Submission to the Productivity Commission

Study into Water Use and the Environment: The Role of Market Mechanisms

(Discussion Draft)

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Introduction:

Coleambally Irrigation Co-operative Limited (CICL) has previously made two submissions to the Productivity Commission in regard to this study. CICL welcomes the opportunity to provide additional comment on the Draft Report. For ease of tracking, comments are offered consistent with the layout of the Draft Report. I congratulate the Commission on its efforts in drawing together often disparate views to what will ultimately be an excellent reference document. I have only offered comment where my view is divergent from that expressed in the report.

Key Points:

- The Commission has not provided any commentary on the appropriateness or otherwise of the MDBC's proposed methodology for the determination of Exit and Access Fees. Such commentary would be useful given that this has been the basis of agreement between the States and the Federal Government and instructions given by Government to Irrigation Corporations in NSW.
- Irrigation Corporations have expended considerable funds in complying with these principles and other Government enforced changes in terms of amendment to Rules and Articles of Association to facilitate permanent trade. Given that this is Government sponsored change it would be reasonable to expect Government to meet these costs (as they do in other States) rather than increasing the burden on irrigator owned irrigation schemes.
- Irrigation infrastructure involves long-life and high cost assets, that in terms of renewals occur as expenditure spikes. Coleambally has taken the responsible path of seeking to fund these expenditure spikes from members' contributions, whereby members pay an amount closer to the true cost of water rather than forcing the next generation to borrow to cover the costs of the current generation. Debt funding imposes an additional financial burden in the form of interest payments that are undesirable and should be avoided if possible.
- Over time levies must raise the full amount of the funds necessary to cover the expenditure spike. If the management entity held such high levels of reserves their historical short-term focus would result in the funds being used to reduce the price of water leaving inadequate funds available to cover the expenditure spike. The clear mandate is to fund these expenditure spikes with the lowest possible cost of funds and provide for the maintenance and capital works programme.
- The Commission describes Exit Fees as a tax on water trade. However, the issue is not that there are market impacts, but whether that tax is distorting or distortion correcting, e.g. a Pigovian tax. The Productivity Commission report provides only a limited analysis of impact of Exit Fees and does not extend the welfare analysis to include consideration of the impacts on investment decisions made by irrigation districts. More importantly, the report assumes from the outset that tax impacts are always distortionary.
- CICL disputes its policy relevance because the analysis is narrowly focused and does not account for broader economic issues. The Commission's approach fails to recognise the distortionary imbalance between Access Charges and avoided costs and the long term consequences for investment and risk management. An analysis of this nature requires a more systematic review across all stakeholders.
- Economic efficiency requires risk to be allocated to the party best able to manage that risk. Without Exit Fees, irrigation service providers must make long term infrastructure investment

decisions based on an assessment of the risk of water entitlements exiting the district at some stage in the future and stranding the investment.

- Without Exit Fees, districts are unlikely to make the very significant investments needed to improve delivery efficiency, raise service standards and reduce environmental impacts.
- The Commission does not adequately address issues of supply side efficiency. The Commission's analysis should not only address pricing signals for existing water users, but also efficient signals for infrastructure investment by irrigation districts into the future. (Refer further to pages 27-29)
- Economic efficiency and the impact on long term investment must be examined more systematically and in far more detail than provided in the Commission's Draft Report.
- CoAG provides principles of full cost recovery. Exit fees and Access fees align with this principle – the alternative would appear to be a transparent Community Service Obligation.
- Contractual arrangements exist between CICL and the State Government and between CICL and its members which were voted on by members as part of the take over from Government by irrigators in the ownership and operations of the irrigation scheme. Intergenerational equity and the maintenance and renewals in perpetuity are fundamental tenants of these contractual arrangements.
- The Draft Report would benefit from examples of well targeted market mechanisms. This may include mechanisms to guide development to where spare system capacity exists to reduce congestion and other third party impacts.
- The Draft Report mentions findings from reports such as CSIRO's *The Shared Water Resources of the Murray-Darling Basin,* but does not draw a clear link in developing market mechanisms to see water traded away from high impact zones or recognition of the 'impactor pays' principle.
- Evaporation was recognised as a 'real' system loss yet no mention is made of the potential structure of market mechanisms to reduce evaporation losses in key areas.
- Carryover and other such water products should not be used to steer agricultural production to a system of fixed high-cost crop plantings. Balance and diversity should be encouraged to match the volatility of markets and climate.
- CAP compliance is fundamental if erosion of existing property rights in water are not to be eroded.
- There is a reliance on modelled data with a lack of calibration against empirical data both in the economic and environmental discussions.
- A cost/benefit analysis of water trade using empirical data would add rigor to the economic assessment and commentary.
- Improvements in a range of environmental factors (including salinity are not only the result of drought conditions.
- High security water has been selling on the market between $1,300 and $1,500/ML as opposed to the figure of $1,000/ML as mentioned in the report.
- CSIRO's *The Shared Water Resources of the Murray-Darling Basin* report provides nothing more than an educated guess as to potential flow requirements and takes no account of changes associated with Water Sharing Plans or even resource assessment and Allocation Policy.

- Often there are additional uncosted benefits that flow from water savings initiatives i.e. beyond the cost of the water.
- Comparative prices for water on the temporary transfer market between high allocation and low allocation years would have been instructive.
- The impact on the market and the wider reaching impacts of Managed Investment Schemes warrants more detailed investigation, particularly tax treatment and market distortions.
- A more useful example of market mechanisms to address dryland salinity would be more appropriate i.e. areas of high impact that are impacting on environmental and cropping options.
- It is unclear from the Draft Report if there exists the expectation of the Government paying the annual water charges associated with the purchase of permanent water entitlement.
- One of the key contributors to driving on-farm water use efficiencies has been the impact of water shortage (drought). In the vast majority of cases in the Coleambally Irrigation District efficiencies achievements do not equal increases in crop plantings above that of a 'normal year'. I suspect discussion in the report is skewed in line with a relatively recently released ABARE report that looks at the 5 years of (questionable) cropping data leading up to and including 2001. Allocation policy and a range of other factors have significantly changed since then which makes such data redundant in terms of the current situation – although often quoted.
- In CICL's case the adoption of Total Channel Control technology has reduced channel operating levels to original design operating level and improved customer service with increased flows and short lead times on water orders.

Rural Water Use Roundtable Discussions:

The discussions held on the 28th June, 2006 raised a few topics that were not covered in any substantive way in the Draft Report.

A view was expressed that Irrigation Corporations in NSW would create increased risk and complexity in terms of encumbrances and dealings with water entitlement. CICL representatives refuted this suggestion and outlined how this view was incorrect. We found it strange that this view was one recently espoused by the Australian Bankers Association (ABA) and was arrived at in isolation and without consulting the parties active in this environment – a reason for serious concerns. CICL's response to the ABA's Draft Irrigation Corporation Policy clarifies this matter and has been shown as Attachment A in this submission.

Water registers were also discussed, with some suggesting a need for a State run central register. CICL expressed the view that existing central registers at present suffered from inherent delays with dealings and high error rates. CICL's register by way of example facilitates dealings to a timeframe of 48 hours, and since registers are linked to billing, has a much higher accuracy level. CICL proposed that registers be maintained at the local level and take on a structure/architecture that allowed them to be rolled up at a State level to facilitate public access. This is further discussed in Attachment B. It was also perplexing that comments on this matter were coming from people with no experience in the administration of such registers, and as such a reason for serious concerns.

Terms of Reference (ToR):

The ToR flags the NWI agreement to *establish water market and trading arrangements that will:*

v) provide appropriate protection of third-party interests.

However the Draft Report does not go into any detail regarding the potential impacts of water exiting irrigation districts to either the service provider or the community other than passing reference to structural adjustment. The Draft Report describes Exit Fees as an inappropriate mechanism – but from a potentially impacted stakeholder's perspective I would like to see much more detail around structural adjustment and how it could be applied.

The argument for Exit Fees is based on financial viability and equity grounds e.g.

- Equity: Irrigators formed the Co-operative and made subsequent investment and operational decisions on the basis of the reasonable expectation that the regulations relating to outward trade would continue into the future. In the lead up to privatisation irrigators were required to develop a 50 year business plan for the State Government on the basis of 'locked in' principles – one of which was stability around entitlements within the Bulk Licence.
- Financial viability: the business is potentially not financially sustainable in the long run without Exit Fees or an equivalent mechanism. The Draft Report sheds no light on just what these equivalent mechanisms may be.

By way of example of different levels of impact and beneficiaries:

- **Scenario 1**

  A State Government purchases a property in a town or city to turn it into a park. The Council no longer collects rates from the associated land and the remaining Council ratepayers have to pay for the roads and infrastructure that service the land which was previously contributing to the rates base. However the remaining Council rate payers are largely the beneficiaries of the new amenity.

- **Scenario 2**

  A State Government purchases a large rural property, that had a significant water entitlement and employed 50 people, and turns it into a national park. The Council no longer collects rates from the associated land and the remaining shire ratepayers have to pay for the roads and infrastructure that service the land. In this instance it is the broader community that is the main beneficiary, with the loss of jobs impacting on the local community, reducing the rates base and in turn reducing the 'local' amenity.

- **Scenario 3**

  Water is permanently traded from a vibrant irrigation district in NSW to, say a new investment in Victoria via a Managed Investment Scheme (MIS). The MIS contributes to the growing glut of a commodity which impacts heavily of SA irrigators. The new investment has moved water to downstream of a natural river flow restriction and also to a higher impact zone in terms of salinity impacts on the supplying river. In this case who pays? Clearly in the

absence of Exit Fees the irrigators from the exporting water district, other irrigators downstream of the river restriction and other producers of the particular commodity. But who benefits, and what of efficiency?

Chris Harrison in The Age, 25th June, 2006 states he:

> *…doesn't understand why everybody is not "screaming blue murder" over the impact of water policy changes in Victoria. "After floods, fire and drought, we can recover," said the farmer from Pyramid Hill, who has a six-gigalitre water right with Goulburn-Murray Water. "But (water reform) is a fundamental change."*
>
> *Three generations of Harrisons in six family units are supported by their 6,070-hectare property. But Mr Harrison is watching his community slowly die as families sell up and move away because of rising costs and uncertainty over water rights.*
>
> *"We can't find the numbers for the CFA," he said. "We can't make up the numbers for our footy team. But try and argue that with economic rationalists."*
>
> *Sunraysia Irrigation Council chairman Danny Lee says ……. he believes 'water banks' will help keep rural irrigators viable.*
>
> *"Our community is being devastated by the amount of water it's losing, it's as simple as that".(ABC News, 26/6/06)* In The Age, 25th June, 2006, *Mr Lee and his supporters say the Federal and state governments' water trading policies are destroying rural communities in the Robinvale, Red Cliffs, Mildura, Merbein, Pyramid Hills and Boort districts. The irrigators claim their communities have lost potential annual farm income of $45 million because of the sale of hundreds of thousands of megalitres of water.*
>
> *Mr Lee said farmers were forced to sell water or leave their farms.*
>
> *"The water is seized upon by the vultures of farming, large corporate investment funds and transferred away to new irrigation developments," he said.*
>
> *"This water mostly ends up leaving the district."*
>
> *"The results are devastating to rural towns and regional economies."*

It is in this environment that irrigation based communities are seeking direction from Governments, and it would be useful if the Commission took the opportunity to respond to these widely held community views.

The ToR indicates that the *Commission is to:*

- *assess and report on the feasibility of establishing workable market mechanisms:*
  - *to provide practical incentives for investment in rural water-use efficiency and water related farm management strategies…..*

The body of the Draft Report tends to suggest that existing incentives are poorly targeted and not providing outcomes to which they are intended, yet offers no detailed examples of just how such incentives could be better targeted. You will have noted that incentives paid under CICL's Land and Water Management Plan have achieved very significant improvements in both productivity and

environmental outcomes. This information was presented in CICL's previous submissions and would seem at odds with the general thrust of the Draft Report.

The Commission was also to *take into account relevant practical experiences in other areas, such as with the tradeable salinity and pollution credits*…..I suggest the Commission could add value to the Draft Report by considering experiences elsewhere in the world e.g. the USA where I advise reference to Marc Reisner's "*Cadillac Desert: The American West and Its Disappearing Water"* could provide useful insights.

On 31st January, 2001 Ofwat (the regulator for the water industry in the UK) approved the purchase of Welsh Water assets by the "Peoples' Water Company", Glas Cymru. The proposed Board of Glas Cymru was familiar with the South West Irrigation structure and they adopted a modified version of that structure for Wales. Glas Cymru owns the water infrastructure assets on behalf of the local consumers. Glas Cymru and Dwyr Cymru form a two tier structure. Welsh Water is approaching a significant expenditure spike of £1,130 million last year that could not be funded by water prices.

> *"In cash terms for each of the five years to March 2005 Welsh Water will spend on average £130 for every £100 it gets from its customers"*
> www.glascymru.com - Glas Cymru's plans for Welsh Water p.6

As a result Glas Cymru borrowed from the UK bond market £600 million to cover the spike. Glas Cymru has chosen a non-profit structure to further reduce its costs but will be required to pay interest on borrowed funds. The original owner of Welsh Water, Western Power Distribution had continued to pay shareholder dividends based on annual profits but had failed to make adequate provision for the expenditure spike. In discussions with Ofwat it appeared that water utilities and regulators only require the standard company financial projections of 3 to 5 years. It would appear, that with such short-term financial projections the expenditure spike were not foreseen by a number of water utilities in the UK. Each two tier structure adjusts to the specific needs of its customers and as a result each is slightly different. In the case of Glas Cymru, time did not permit funding the expenditure spike through levies and it was necessary to borrow the required funds.

In 2012, Coleambally Irrigation Mutual Co-operative Limited (CIMCL) will face its own expenditure spike challenges. CIMCL has taken the approach that it is more financially responsible to build up the necessary funds over time by levying the members to cover the spike. A number of other UK water utilities are looking to adopt their own version of the two-tier structure, either as mutuals or as non-profit entities.

The Coleambally community has taken what has been effectively rundown State irrigation assets and have been systematically refurbishing them in line with our expectations of achieving long-term sustainability without leaving a debt for future generations.

Glossary:

Access Fees are an option that has been widely canvassed as a mechanism to facilitate trade. The body of the Draft Report does not cover this mechanism in any substantive way. I suggest that this is an area needing coverage.

Overview:

Elements covered in the Overview shall be discussed in respective subsequent elements of the Draft Report.

2.2 Unbundling Delivery Capacity

The concept of *delivery capacity entitlement* is valid to *manage congestion and ration access to the distribution system*. However in CICL's case we have a system which has channels with considerable spare capacity due to the scheme lands being developed to approximately 60% of its intended coverage area. In terms of economic efficiency it may be prudent for the Commission to consider market mechanisms that encouraged development towards areas of spare capacity to maximise such efficiency and minimise third part impacts associated with congestion. For example, Timber Corp are looking to develop a further 10,000 hectares of almonds downstream of the Barmah Choke, where water supply issues will only be further exacerbated, yet CICL has potentially over 10,000 hectares that would be suitable for this type of development, with no flow constraints or third party impacts.

The concept of *delivery capacity entitlement* is very similar to the concept of an 'access fee', which I have previously mentioned. The Victorian Government is introducing this facility. However in the Coleambally instance of a property that has sold off all its water entitlement, and is effectively a dry block, there is no capacity for CICL to recover what are effectively land based rates. The land itself has little to no value, and unlike Goulburn-Murray Water, CICL doesn't have the comfort of being Government and covered by complimentary legislation. CICL as a privatised entity does not enjoy the luxury of being able to impose a charge on the land of an individual to whom CICL does not provide a service or product. In addition, under Co-operatives legislation we are required to do 90% of our business with our members and membership is conditional on holding shares which in turn is commensurate with water entitlement. As such the law limits CICL in dealing with revenue derived from non-members.

In addition, CICL under its bulk water licence has responsibility for environmental outcomes over the area serviced by the irrigation scheme. Environmental performance is enforced under water supply contractual arrangements. It would naturally follow that if a property was no longer provided with water that CICL would no longer be in a position to enforce environmental performance. To comply with our licence performance we would probably need to have such areas excised from our areas of operation. Irrigation Corporations' bulk licences in NSW are used to achieve other State sponsored environmental outcomes e.g. control of noxious weeds and pests etc.

With an ongoing access or delivery right fee CICL's only hold is on the water entitlement and associated shares which are attached to CICL's licence and via CICL's Customer Contract. CICL is obligated to deliver the water allocation associated with the entitlement to the landholder as long as he/she has paid their water bill and met other environmental performance measures. If the entitlement is no longer a part of the licence, the seller is no longer a member of the Co-operative and there simply is no legal avenue available to CICL to impose a charge. As such the chances of CICL being able to collect outstanding charges would be negligible to non-existent. It may be useful to draw this distinction in the Draft Report. As mentioned previously, CICL generally has spare capacity and the notion of attaching a value to capacity is only valid where current systems are at, nearing or exceeding capacity – otherwise there is no call for a market.

2.3 Accounting for groundwater, surface water and return flows

Accounting for return flows

I draw your attention to the recently released report, *The Shared Water Resources of the Murray-Darling Basin* (MDBC Publication 21st and 22nd June, 2006). I found both parts of this Report to be informative, with some very positive aspects such as the 2*00EC improvement in water quality over the past 20 years. (Part 1, page 19)*

Part 1 identified the main problem area in relation to salinity as *the Kerang area where irrigation development on a natural groundwater discharge area, combined with regional drainage, led to salt exports being about 6 times greater than imports of salt.* But even in this case things have improved i.e. *over the last 15 years, salt loads in this region have decreased due to water re-use, diversion to evaporation basins, salt harvesting, improved irrigation practices and decreased irrigation. (P19)*

The report also flags the Lower Murray as the main contributor to salt in the River - some of which is naturally occurring, but has been exacerbated by irrigation.

It was also interesting to see the report noted that …*The largest single contributor to evaporation within the Murray-Darling system are the lower Lakes in SA (Albert and Alexandrina), about 750GL/year (annual average).* This compares with the upper Murrumbidgee *(including Burrinjuck and Blowering) of 70-80GL/year, Menindee Lakes 460GL/year* and *Lake Victoria 120GL/year.*

I think a rather simple argument could be mounted that would suggest that irrigation activities should be undertaken where possible in the upper catchments to reduce the impact of saline discharge to the river and reduce the very significant impact of losses due to evaporation in the lower areas; yet this would seem at odds with the current Government thinking. Perhaps this is an area that is worth exploring in terms of market mechanisms. When looking at the 'big picture', evaporation requires discussion, particularly the impact this could have if market mechanisms were developed to significantly reduce this waste. Certainly an active salinity trading market would be useful, and this is covered to some degree in the Draft Report, but perhaps it could be expanded with examples of how it could work in such situations as those mentioned above.

A recent media article is shown below for your information:

> ***Research seeks best times for leaching in vineyards***
> *By Shay Bayly – Australia, Friday, 16 June 2006*
>
> *A trial in Langhorne Creek in South Australia has shown applying leaching irrigation to vines post-harvest is not effective, and it may be more practical to leach at the end of winter.*
>
> *These results are part of Flinders University PhD candidate Amy Richards' research project, 'Managing root zone salinity under precision irrigated viticulture in Langhorne Creek'.*
>
> *Now in the second year of her three-year Cooperative Research Centre for Irrigation Futures scholarship, Ms Richards is investigating how much winter rainfall is needed to leach accumulated salinity without having to apply additional irrigation, and without compromising fruit quality.*

"If growers do not receive x-amount of rainfall, then we need to establish when it is best to apply leaching irrigation," she said.

I fully support the Commission's call for additional research into the connectivity between surface and groundwater systems.

2.4 Improving intertemporal water-use choices

Carryover rules

The Draft Report correctly states that the Murrumbidgee valley currently has a 15% carryover provision. However stakeholders in the valley are being asked to consider increasing this provision to 30% for General Security water.

Up until the last couple of years CICL has historically been a net importer of water via the temporary transfer market. This has been masked in the last couple of years by record low water allocations and commercial arrangements struck with Snowy Hydro in bringing forward water releases.

From CICL's perspective an increase in carryover will decrease announced starting allocations to General Security water entitlement holders. This will impact summer planting decisions and entrench under use of the resource with a corresponding reduction in economic activity.

A reduction in the pool of water on the temporary trading market will drive up the price of water to those wishing to access unused water - this will certainly change irrigator behaviour. At the business level, State Water is moving to a 60/40 split on charges (fixed access charge versus usage). As more of the charge gets loaded towards the usage end revenues will reduce commensurate with under use. Similarly CICL derives a significant portion of its revenue from usage. An increase in carryover provision could be offset by increasing the proportion of the fixed entitlement charge. However a loaded fixed charge has been demonstrated elsewhere in Australia to deliver poor environmental outcomes. Our business, and that of State Water I expect, is around maximising production capacity in an equitable fashion.

Yes - Increasing carryover will promote a more stable environment around under use - this has positives and negatives around the type of crops grown and masks the reality of vagaries in our climate and markets. Peter Cullen et al has promoted a shift to high value crops such as wine grapes and orchards etc - but I don't see them sticking their heads up now that the wine grape and citrus industries are in crisis. Such an outcome takes no account of market realities i.e. through the result of a very large capital expenditure farmers are less inclined to plough out and plant something the market is willing to buy, at a price which is profitable. Diversity of cropping that allows alignment with the market, and to a lesser extent the season, is more consistent with Australian conditions, unless Government is to offer subsidies as per the US and EU. If all our customers grew citrus, or wine grapes at the moment then the outlook for our local economy would be grim. There needs to be balance in managing water availability risk; the existing carryover at 15% provides that. However the removal of timing constraints with trade in the Murrumbidgee could free up water and positively compliment any increase in carryover.

3.1 Nonregulatory constraints

Hydrological constraints

Refer to my previous comments on the Timber Corp scenario under 2.2.

Social Constraints

There is considerable discussion about communities and their desire not to see water leave the area. Recent media commentary has been included under the ToR Section in this submission. In the case of small regional centres whose economies are centred on irrigated agriculture this view is difficult to dispel unless presented with evidence to the contrary. Statements such as *"…profitable opportunities for trade would arise that would benefit irrigators, individually and collectively. To think otherwise is to misunderstand (or obfuscate) the simple economics and arithmetic of water use in Australia,"* adds no substance to a counter argument or sentiment expressed earlier in this submission. The loss of 1,000ML or 10,000 ML of water in the Coleambally situation would directly reduce crop planting, fertiliser and chemical sales etc. The fact that one, or a number of farm businesses have made a considerable amount of money as a result of the sale, will in all probability not see that money invested in the local community. The Commission would add value to the Draft Report if this area was covered in a more substantive way.

3.4 Constraints on trade in water entitlements

The Draft Report certainly paints a bleak picture for the role of Exit fees in facilitating trade. The methodology used to calculate the Exit fees in the case of NSW Irrigation Corporations conforms to the guidelines set out in the document *'Principles for the Development of Access and Exit fees'*. The Murray Darling Basin Commission endorsed the principles at meeting 81 of the Commission on 14th September, 2004 and was continuing to promote these guidelines at Public Meetings just this month. NSW Irrigation Corporations paid considerable sums of money to consultants to calculate Exit fees consistent with these guidelines at the behest of the State Government and the National Water Commission. It is extremely disappointing that the Draft Report and that of a recently released ABARE report draw similar conclusions in regard to Exit fees – one arm of Government at odds with the other, with private enterprise meeting the costs of confusion. I trust that your final report will recommend that costs associated with determination of Exit fees be reimbursed to Irrigation Corporations in the event that Exit fees are not accepted as the appropriate means to manage third party impacts. As previously mentioned the irrigation area was privatised based on a range of agreed principles. A large shift in these principles that compromise business viability must be compensated. Privatisation of the Coleambally Irrigation Scheme has seen it go from a 'sloppy' operator to a world leader through changes in management and shareholder investment.

It appears that there is an issue with the quantum of proposed Exit fees. However the Commission offers no serious alternative for the business to recover legitimate business costs. Exit fees exist in both the power and telecommunications industries e.g. should I wish to replace a current satellite internet connection with a cheaper broadband connection, which has now become available, this will only be facilitated at considerable cost (a specific instance with one of my work colleagues puts this price at $4,000). However irrigation assets have much longer lives than the telecommunications equipment – particularly bridges.

CoAG provides principles of full cost recovery, transparency and discourages internal cross subsidies. If Government is to provide an alternative that does not reflect the full cost then it is obliged to provide a Community Service Obligation. I trust an alternative would also pass the test in ensuring intergenerational equity.

Irrigation Corporations were instructed by DNR and the National Water Commission to take proposals to shareholders to amend Rules of the Co-operative that restricted trade on the basis of compliance with the MDBC principles on Exit or Access fees. State legislation was amended such that Irrigation Corporations would incur very significant financial penalties in the event their Rules or Articles of Association were not amended to facilitate permanent trade out of their respective Bulk Licences. In addition to the costs associated with determination of the Exit fee, we have also incurred approximately $50,000 of legal fees associated with the redrafting and approval of revised Rules. I suggest that Government should also look to refund legal costs if it is determined that Exit fees are not an appropriate mechanism in facilitating trade. It must be remembered that necessary changes were not an initiative of the private entity, but rather one of Government – just paid for by the private business – cost shifting. It is a recognised fundamental that the impactor pays. In this instance it should clearly be the Government.

I trust that in the event that Government back away from Exit fees as the mechanism to facilitate trade that the alternative does not give rise to situations of '*Moral Hazard*'. Irrigation assets are very long life assets with commensurate replacement costs. Hence fees collected are contributions towards future renewals. It would be irresponsible to think that funding could be put off until such time as assets need replacement with an investment decision made at that point in time. All shareholders are aware that a renewal annuity has been calculated on the basis of meeting the lumpy and long terms cost implications of assets, and in doing so meet obligations in terms of intergenerational equity. This was at the core of privatisation and the contractual arrangements between CICL and its members.

The Draft Report suggests that decommissioning of redundant infrastructure is a real alternative to the payment of an Exit fee. Such comments are misguided. It is very unlikely that ALL parties will wish to sell ALL of their water entitlement out of a district, and at the same time always reside on the end of a channel system. It is much more likely that individuals may sell some of their entitlement in a very random spread leaving opportunities to decommission a remote opportunity.

In the case of CICL (as with most Irrigation Corporations), we are responsible for meeting the replacement costs of bridges and culverts over supply channels and drains. In the case of drains, these are largely channelised natural features i.e. always needed a bridge or culvert irrespective of any irrigation activity. In the off chance CICL was in a position to decommission a section of channel, I expect that following the logic presented in the report some entity (possibly the irrigation entity) would be expected to remove the bridge and fill in the channel. Of course this in itself is a very costly exercise, but what of the bridges over drains, which are on natural drainage features? The removal of a couple of farms from irrigation will not remove the need for bridges and culverts over such features. Twenty such structures exist on the Kidman and Sturt Highways, with hundreds more on State and Shire roads. A very large portion of our costs are tied up in such structures. Of course Government may then accept responsibility for bridges, however Local Governments in NSW have a capped rates base and as a result no capacity to fund ongoing renewals. This being the case, then the responsibility would fall to either the State or Federal Governments. If we are to avoid Exit fees then perhaps the trade off could be Government take over renewals associated with all bridges and culverts in the interests of economic efficiency. This may well be reasonable as I

am unaware of any other examples of where individual companies are responsible for the ongoing maintenance of 'public assets' other than mining companies, in a much more restricted fashion.

Other trading rules

CAP compliance rules are essential if property rights are not to be diminished. I trust the Commission is not suggesting the withdrawal of such rules to increase efficiency as to do so would erode General Security Water property rights.

3.5 Constraints specific to trading groundwater

The level of knowledge on the groundwater / surface water interaction is inadequate to allow the trade between the two. In the current knowledge void environment trade would inevitably erode property rights.

3.6 Implications of freeing up water trade

The Commission flags that, *to the extent that structural adjustment challenges do arise from expanded water trade as a consequence of freeing up trade, there are existing safety-net and rural adjustment programs in place to assist those whose incomes fall to low levels. Where these are inadequate, governments could consider additional, targeted assistance measures that minimise distortionary impacts on water trade and on other resource allocation decisions*. As mentioned previously I do not believe the Commission has adequately addressed its ToR in regard to the management of third party impacts – particularly at the business level.

4.3 Government policies

In terms of favoured tax treatments providing the catalyst to boom bust economies in the rural sector I draw your attention to a recent media article.

> ***Govt tax windfalls could help solve the wine glut***
> *Australia*
> *Friday, 16 June 2006*
>
> *Despite an unsympathetic response from the Federal Government, South Australian grape growers are still pursuing an international marketing campaign to overcome the low prices caused by oversupply of grapes and wine.*
>
> *SAFF wine grapes section chairman, Tim Rogers, is disappointed with Federal Agriculture Minister Peter McGauran's response at last week's wine summit in Melbourne to growers' calls for government to work with industry to combat the glut.*
>
> *"He offered us nothing – it was if he was saying that it was our mess and we can fix it," Mr Rogers said.*
>
> ***"Let's be quite clear on this: the South Australian industry has never asked for a bail-out, but we believe the Government must share some responsibility for the present***

***situation, because for more than a decade it offered tax incentives to encourage mass vineyard plantings by investors**."*

Mr Rogers says the long-term sustainability of the Australian wine industry is at stake if the present situation was not addressed.

"And if grape growers are forced to walk off their land, this could place our world-renowned wine regions under threat," he said.

The Commission states that, "*It is beyond the scope of this study to determine whether MIS and related tax arrangements have a net positive or negative on the community……..*" I suggest that the Commission has been presented with enough evidence that it should be looked at in more detail, and at the least make a recommendation that this aspect needs to be examined in more detail.

My casual observation is that after around 5 to 10 years of activity by MIS in particular commodity production systems that those commodities go into a bust situation taking down many smaller farming family operations. This particular cupboard is full of skeletons – aloe vera, tee tree oil production, certain timber plantations, olives, grapes, and probably almonds in the next few years. I remain unconvinced that this is proving to be an efficient use of capital or resources.

5.1 Assessment framework

I suggest that a key criterion missing from the discussion is the **capacity to measure change** as distinct from **model change**. Rural communities have a healthy scepticism for modelled results where changing parameters or coefficients can deliver any desired outcome e.g. the Murray Flow Assessment Tool (MFAT). This scepticism has been supported by recent media attention on Channel 9's Sunday Show and associated media articles. Hard data provides a much more credible and substantive case than modelled data. An extract by Dr. Jennifer Marohassy in *The Land* newspaper is reproduced below.

Australia's Salinity Crisis: What Crisis?

Six years ago the National Farmers Federation (NFF) and the Australian Conservation Foundation (ACF) joined forces to lobby the federal government for $65 billion dollars on the premise dryland salinity was spreading at an alarming rate.

This campaign was based on a joint report Repairing the Country which was published just before the National Land and Water Resources Audit's dryland salinity assessment was released claiming 17 million hectares of farmland would be lost to salt.

Then a few months later, the National Action Plan for Salinity and Water Quality was announced, with the promise of $1.4 billion in funding.

Australian agriculture was making headlines and for all the wrong reasons.

Over the last six years the area affected by dryland salinity has contracted and it is now evident that the 'rising ground water' model, on which some of the very gloomy predictions were based, has very limited application outside of irrigation areas. It is also apparent that many of the claims, irrespective of the model used, could not be supported by the available evidence.

Channel Nine's Sunday Program featured a story on salinity last Sunday (28th May) suggesting that millions of dollars have been wasted on dubious claims.

The program repeated the standing joke in western Queensland that the controversial painting in the Australian national gallery called Blue Poles, is about as much use for predicting salinity as the official salinity hazard maps often referred to as 'red poles' by local landholders.

As Dr Brian Tunstall, formerly a CSIRO research scientist, explained, over much of the area marked red on the Queensland maps, there's no groundwater for over a hundred metres down, and yet the rising groundwater model was used to produce the red splotches that are purported to indicate salinity hazard.

Dr Wendy Craik headed the NFF when it claimed spreading dryland salinity. On Sunday, Dr Craik acknowledged that as a tax payer, she is pleased all the money she asked for on behalf of the NFF was not provided, and that flawed models were used to talk up the salinity threat.

Dr Craik, now heads the Murray Darling Basin Commission (MDBC), and is still publishing reports based on the flawed rising groundwater model. For example, just two weeks ago the MDBC published Risks to the Shared Water Resources of the Murray-Darling Basin which includes an assessment that in the lower Murray, salt loads from clearing for dryland agriculture 50-90 years ago are going to manifest as a worsening river salinity problem in 100 years time. Hang-on, the doomsayers predicted a general rise in groundwater in the Mallee region from tree clearing years ago, it never happened, and it is unreasonable to now propose a 150 year time lag!

The Sunday Program exposed evidence pointing to possible scientific fraud in salinity science and management in Australia. But which politician or organisation is going to lead the charge for accountability and change? It would seem that both sides of politics, and both the ACF and NFF have been complicit in the salinity charade so far. The big loser continues to be Australian agriculture.

5.3 Government framework

I fully support the Commission's findings in regard for the need for better coordination and management of environmental water. An example of the limitations of the existing management regime is provided below.

State Water's Customer Services Manager raised the matter of allowing the first three days of the natural flow spike to pass our river offtake point with no diversions in an effort to maximise the environmental benefit of the flow. Historically catchment runoff derived freshes in the Murrumbidgee River below the major storages have been made available to river diverters as supplementary water.

CICL agreed to the above proposal on the basis that any forgone opportunity would be made up at a later date, hopefully from stored environmental allocation. We saw such an outcome as a real win-win for both the environment and our customers. However it later became apparent that such an outcome whilst desirable by all parties is not facilitated by the Water Sharing Plan which remains largely silent in this area. I understand that DNR, and the Environmental Water Allocation Reference Group were all consulted and were supportive of the concept. The CMA was apparently

also consulted but I am unsure of their final position. The ultimate responsibility in dealings with the stored environmental water was unclear in terms of the CMA or DNR.

The original concept of utilising stored environmental water to bulk up flow peaks to achieve enhanced environmental outcomes has operational problems in terms of aligning timings when flow spikes are the result of tributary inflows further down the catchment. Concerns have also been expressed by river pumpers in regard to specific flows being released to increase 'flood' levels and any consequential flood damage to crops and/or infrastructure. Allowing a natural flood spike to pass would be considered within the bounds of an 'act of god' whereas a deliberate release on top of a 'flood' may well attract liability issues.

CICL strongly supports the concept of swapping supplementary water for stored environmental water where agreement has been reached between the parties. This is exactly the opportunity that Irrigation Corporations have been promoting as a benefit to all yet now appears to be stymied by the lack of support by the Water Sharing Plan and definition of 'adaptive environmental water'.

6.1 Environmental changes and externalities associated with altered river flows

It was interesting to see that the effects as stated in Table 6.1 identified beneficiaries that largely make no contribution to the costs managing storages and releases other than through possibly general taxes. Perhaps this point could be highlighted. What this in effect highlights is that there are third party beneficiaries just as there are poorly defined third party impacts as a result of irrigation.

CICL has in partnership with the CRC for Irrigation Futures established a Regional Irrigation Business Partnership to progress initiatives specifically targeting system harmonisation i.e. aligning water demand more in line with the natural river system.

6.2 Current and emerging approaches to addressing the effects of altered river flows

Investing in off-farm infrastructure

The MDB Ministerial Council established the Living Murray Initiative in response to the declining health of the River Murray System. However as previously discussed there exists considerable evidence to suggest that the health of River Murray System is not in decline. It must also be remembered we are in one of the worst droughts on record. In a natural system the flow at Morgan would currently be reduced to little more than a trickle – refer to published photos of Murray River at Morgan associated with the early 20th century drought where it was completely dry. In stating this I am not suggesting that things are ideal, however I do believe that communities (often with the assistance of Government) in the Murray Darling Basin are implementing measures that are improving a range environmental factors.

The Shared Water Resources of the Murray-Darling Basin (MDBC Publication 21st and 22nd June, 2006) found that there has been a *200EC improvement in water quality over the past 20 years (Part 1, P19)* at Morgan.

Part 1 of the report identified the main problem area as *the Kerang area where irrigation development on a natural groundwater discharge area, combined with regional drainage, led to salt exports being about 6 times greater than imports of salt.* But even in this case things have improved i.e. *Over the last 15 years, salt loads in this region have decreased due to water re-use, diversion to evaporation basins, salt harvesting, improved irrigation practices and decreased irrigation. (P19)*

The Commission's Draft Report discusses issues around sourcing water through infrastructure investment at costs less than $1,000 per megalitre of Long-Term Diversion Cap equivalent. It is perhaps worth mentioning that the current market price of High Security water in the Murrumbidgee is around $1,400 to $1,500 per megalitre. High Security water has an allocation of 95% in the Murrumbidgee Valley. No one would sell water to the Government at less than the market price. For example CICL is looking to sell 3,500ML of conveyance water to Water for Rivers to assist funding the rolling out of Total Channel Control. This water has higher reliability than high security water i.e. 100%, yet in the interests of industry helping to achieve targets we are looking to sell to Government at below the full market price.

6.3 Design Issues

Factors affecting longer-term water availability

I was encouraged to see that the Commission noted caveats in *The Shared Water Resources of the Murray-Darling Basin* regarding the reliability of stream flow estimates. It was extremely disappointing to see comments by CSIRO Land and Water Division's, Rob Vertessy, make comments in the media that puts a different spin on this information, e.g. *The Land* newspaper (28th May, 2006, page 29,) is shown below.

> *The report claims a further 2,000GL (2,000 billion litres), on top of the 500GL is needed before 2030 to retain current flows.*
>
> *It suggests that any environmental benefits from the 500GL, put aside by the NSW, Victorian, SA and ACT agreement would be eroded by future reduced flows.*
>
> *Head of CSIRO's Land and Water Division, Rob Vertessy, said he was less concerned about whether the target was reached and more interested in a higher one being set.*
>
> *"The big question is how soon are we going to reach agreement that we have to recover another four or five times that target in the next two decades just to hold at present levels."*

Perhaps this assists in gaining an appreciation for the damage being done to CSIRO's credibility. I have raised the matter with CSIRO's senior executive, who saw no real issue with Mr Vertessy's comments. Yet when I discussed this matter with one of the report's authors they distanced themselves from his comments.

In the report's recommendations it notes:

> *Ideally, a detailed water account, quantifying all uses of water with reasonable confidence is required. Currently, we cannot provide such an account to the level of detail required.*

Part 2 indicates that this is ***preliminary*** *work undertaken to improve our understanding of* ***potential*** *future changes to the shared water resources of the Basin and the risks those changes may pose.* It also goes on to identify knowledge gaps in relation to; Climate Change, Afforestation, Groundwater Extraction, Irrigation Water Management, Farm Dams and Bushfires. In spite of these caveats Mr Vertessy would appear reasonably certain that an additional 2,000 to 2,500GL are required to be returned to the Murray River.

It should also be noted that in terms of groundwater extraction the NSW's government is about to enact Groundwater Sharing Plans which will see entitlements reduced by around 50% in the Murrumbidgee to 270,000ML as the sustainable yield. I asked one of the authors what numbers were used for groundwater extraction i.e. the current level of entitlement, history of extraction or the new 'sustainable yields'. I was advised that it did not go to this level of detail. The reports do present useful data, however in terms of providing a predictive function, it only provides a very coarse indication of possible, potential scenarios.

I have been advised by State Water that in the case of the Murrumbidgee Valley, as of 21st October, 2005, the total volume in the Environmental Water account was 30,095ML. And that for the 2005/06 season DNR used approximately 19,000ML in watering wetlands. Approximately 10,000ML will be carried over to the new water year. These figures have not been audited by DNR as yet and they do not include end of system flows and freshes from the Murrumbidgee which I expect will be well over 150,000ML for the current year. It would be difficult to claim that flows from the Murrumbidgee (for environmental purposes) are consistent with the worst drought on record.

It should also be noted that in NSW, DNR undertakes a Resource Assessment of available water for allocation twice per month in the Murrumbidgee Valley – probably similar in other valleys. If the water isn't available it simply isn't allocated for consumptive purposes. If flows diminish in line with the 'CSIRO educated guess' then it would be reasonable to expect that we are moving well beyond the worst drought on record levels and as such consumptive use of water by irrigators would be severely curtailed. Existing environmental water has a higher reliability than General Security water, so whilst environmental flows may diminish, they would not diminish by the same rate as irrigators' water – but then I would expect the environmental flows to be consistent with what could be expected under natural drought conditions. I doubt that the authors of the CSIRO report are suggesting that we maintain un-naturally high flows during such periods. If the culprit to this educated guess is climate change brought about by global warming, then focusing on market mechanisms for trade of water is addressing the symptom rather than the cause – is it somewhere else where we should be looking at system efficiencies?

Box 6.5

I agree with the Commission's view however it may be worth highlighting that the price of water on the temporary transfer market is very low in years of high water allocations compared to the prices experienced during periods of drought and low water allocations e.g. around $15/ML as compared with around $110/ML. It would also be reasonable to expect that environmental managers would be looking to increase flows during periods of high allocations and water availability. Entering the market to purchase annual allocation during these periods is less financially onerous than looking at utilising this market on a permanent basis. This then builds the case for a mix of water products to be held by the environmental water manager to meet the challenges of climatic variability i.e. permanent entitlement to meet environmental requirements to meet expectations for droughts and low water availability and the temporary market in times of plenty.

Table 6.3 and other elements of the Draft Report tend to focus on irrigation corporations/irrigation areas as the target for securing environmental water. I suggest that some Managed Investment Schemes hold as much water or more than some Irrigation Corporations when considered on the same basis i.e. high security and general security with conversion rates. I am also not convinced that low cost infrastructure options have been exhausted – the problem in realising the cost effective water savings is often demarcation lines between the various management entities e.g. if State Water invests in infrastructure to achieve water savings then the savings revert to DNR – so why invest? There is also no recognition of additional environmental benefits that are derived from investment in infrastructure. When water savings are the only considered benefit the impact is to undermine the credibility of the cost/benefit analysis. I suggest that the Commission recommend that cost/benefit analysis of infrastructure investments consider the totality of costs and benefits derived from the project, and not just those attributed to water savings alone.

The Drat Report indicates that [P]*purchasing seasonal allocations would require ongoing expenditure*. Does this imply that the entitlement purchased for the environment will not pay storage, release and associated management costs incurred as a result of holding water entitlement? If this is the case then there are additional third party impacts on other entitlement holders who no doubt would be forced to then also pick up these costs. The 'fair' method in dealing with this should be met via a transparent Community Service Obligation – if it is determined that the managers of the environmental water are not to pay their share of storage, release and management costs.

The Draft Report (page 141) acknowledges *Hafi et al* in relation to Call Options. I understand that this concept was in fact first developed by Murrumbidgee Irrigation, perhaps this should be acknowledged.

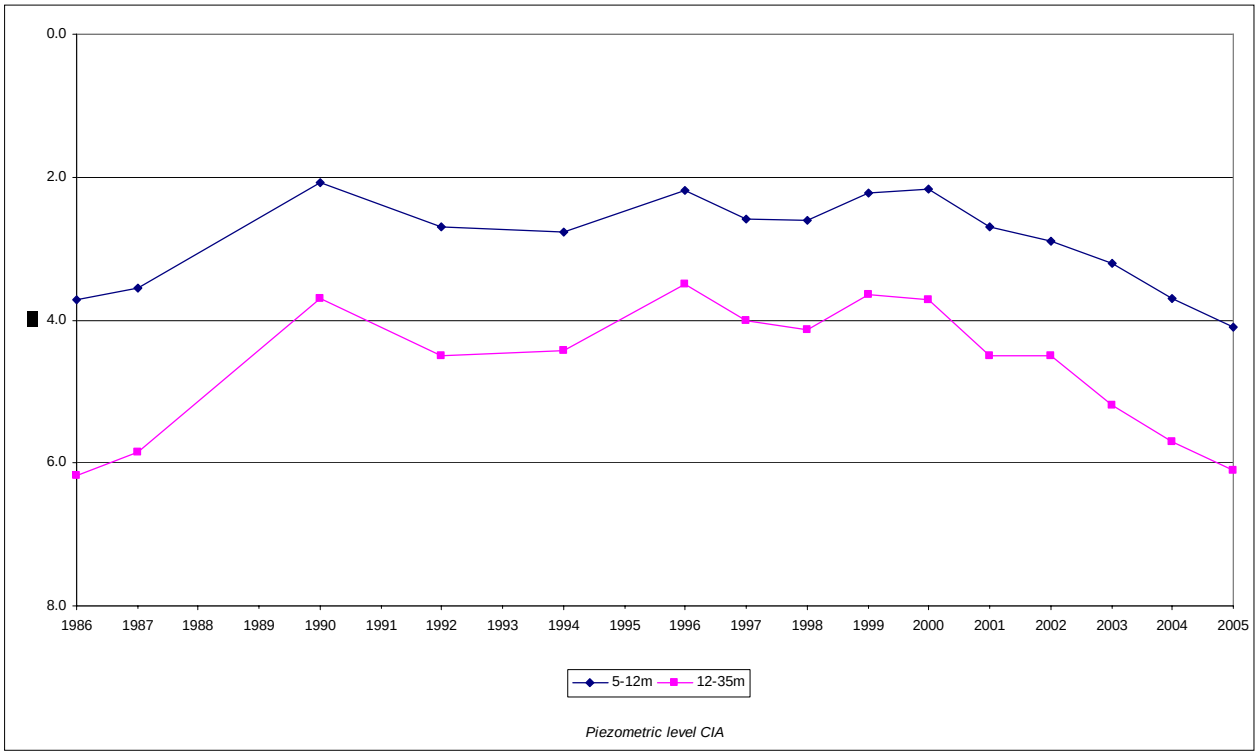
Volumetric tax on water use by irrigators (P148-150)

I agree with the discussion on this matter in the draft report. Perhaps this could be expanded further to flag the potential impact of competitiveness on rural industries in a global market should an externalities tax be included on water charges. Most of our international agricultural commodity competitors have no such tax – in fact most have their water charges heavily subsidized by their nations treasuries. In the case of the US and EU these are seen as "National Security" issues.

7.1 Salinity

The report flags the fact that South Australia and Victoria have the largest number of farms impacted by salinity. It also notes that the largest contribution to salt comes from these States. The report goes on to find that *recent dry conditions have reduced and delayed salinity impacts, including those from irrigation activities*. Whilst I agree totally with the finding, it has not been the only factor. You will note in the graph of average piezometric levels in the Coleambally Irrigation Area shown below that levels decline from 2000 onwards. This is also consistent with some major inroads being made with the on-farm adoption of water use efficiency initiatives sponsored under the Land and Water management Plan. CICL has spent a lot of resources and we are firmly convinced that seasonal conditions are not the only factor contributing to the very positive outcome shown below.

CICL has also established a number of real time salinity monitoring sites across the Irrigation District utilising our existing SCADA system. This will be further expanded over the following twelve months.



I highlight the need for caution in the use of 'proxy indicators' for potential salinity effects (refer to previous discussion regarding the Channel 9 Sunday program on salinity hazard mapping). The beauty of modelled results is that you can achieve any result you set out to achieve, particularly if it is not peer reviewed and appropriately calibrated against 'real' as opposed to modelled data.

The recent workshop on the Draft Report provided useful discussion around salt interception schemes. Based on that discussion it would be useful to determine if the full costs associated with the schemes are being met. If they aren't then there exists a subsidy, which in turn would result in distorting comparisons with Access and Exit fees between irrigation districts and States – distort water trading markets, let alone any subsequent salinity markets.

The Draft Report discusses the potential to use incentives to encourage the removal of salt. In my experience incentives work well when they are accompanied by a well understood disincentive (in this case associated with salinity contribution to river flows for example – particularly in known discharge zones).

Price-based mechanisms: subsidizing land management change.

The Commission uses an example of Murrumbidgee Irrigation and CICL's potential to provide an incentive to farmers in the upper catchment to manage dryland salinity. Whilst I agree with the fundamentals of the concept the average EC of water diverted from the river at CICL's river offtake ranges from around 140 to 240 EC units and as such is fit for all intended uses. Perhaps a more

useful example could be further down the Murray River where it is well understood that most of the salinity emanates.

Table B.4

I believe that the entitlements shown in CICL's case are those that are available to our customers for consumptive purposes (and in CICL's case include groundwater entitlement). CICL also has 130,000ML conveyance entitlement. In Murray Irrigation Limited's case, for example, they have distributed this proportionally to their shareholders. Perhaps a table which highlighted just bulk surface water entitlements would be more useful and ensure comparisons of apples and apples.

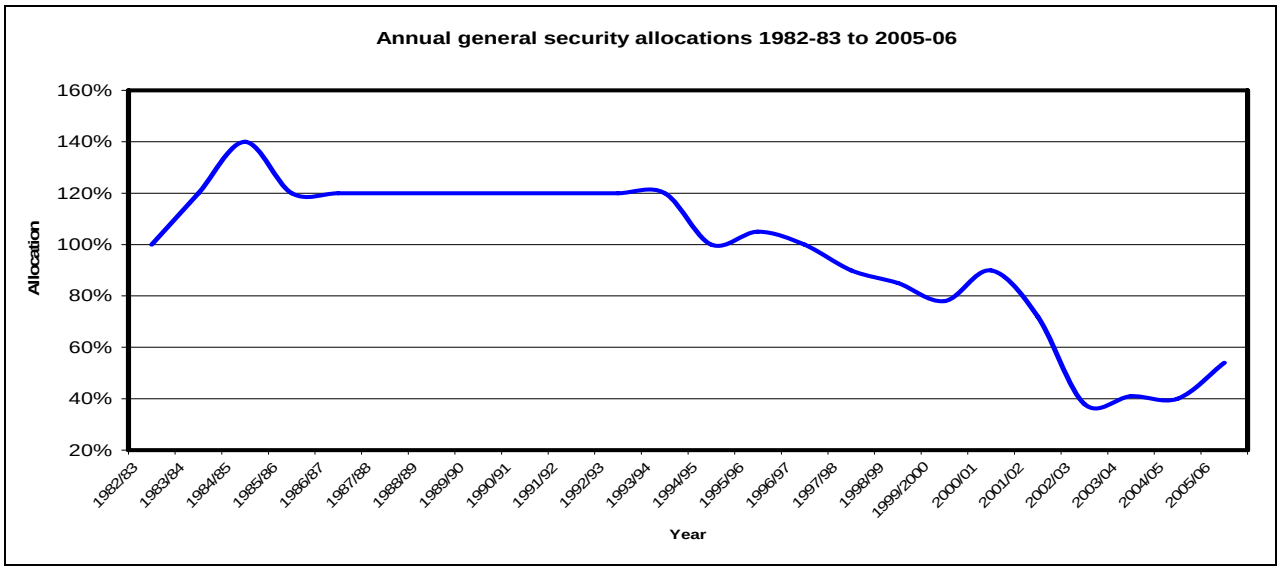
C.2 Efficiency on farm

Box C.4

It is perhaps worth flagging that the value of marginal product (VMP) could vary dependent on what stage an irrigated crop may be at e.g. due to hot summer conditions an irrigator may need some additional water (over what had been budgeted) to finish off a maize crop as against incurring a significant yield decline.

On-farm water-use decisions affect environmental flows and water available to other users

Young and McColl imply that irrigators are making on-farm water savings to expand irrigated cropping. This needs to be examined in a broader context. The graph below provides an indication of the general security water allocation in the Murrumbidgee valley over time. It reinforces the fact that we are in the worst drought on record. Certainly our customers are making on-farm efficiency savings and in doing so allowing them to crop more land from a much reduced available water supply than they would otherwise have been able to. The total area of crops has significantly diminished – there has been no net expansion, but rather a net reduction.



I suspect that such comments as expressed by *Young and McColl* may be linked to an ABARE report that looked at the 5 years up to and including 2001. However the use of this data is misleading as it is way out of date. I have used rice industry data to provide an example of its extreme limitations.

Rice area data:

Crop Year	Total Area (ha) harvested
C1993	122,902
C1994	132,656
C1995	129,235
C1996	149,719
C1997	165,701
C1998	140,190
C1999	150,826
C2000	131,843
C2001	184,470
C2002	147,268
C2003	38,356
C2004	64,735

- Average hectares for the past 5 crops (C2000 - C2004) = 113,334
- Average hectares for the 5 years prior to this (C1995 - C1999) = 147,134

Therefore there was a reduction of 23%.

If you compare 5 year trends leaving out the drought years there has been a slight increase i.e.

- Average hectares for C1993 - C1997 = 140,043
- Average hectares for C1998 - C2002 = 150,919

Therefore a 7.8% increase.

However the big crop of C2001 really needs to be discounted as it skews the results. This crop was an aberration because there was a huge amount of 'off allocation water' available that year, i.e. was before the off-allocation rules changed. This size crop will never be grown again. These are hard figures and vary considerably from those presented by ABARE in its recent report containing dated data. I expect the aberrant 2001 figure skewed results on crop areas and water use.

C.3 Efficiency in water delivery

I note the personal comments by Irrigation Corporations in relation to distribution efficiency i.e. metered deliveries over metered diversions. Some seem very optimistic.

CICL has provided data to the Commission separately to this submission to demonstrate the credibility of the figures quoted by Malcolm Turnbull.

I am also unaware of any pipeline system that incurs no water losses. I suggest reference to water delivery systems in both Sydney and Melbourne may be instructive.

There is discussion in this Section regarding the reduction of system losses by lowering channel heights, but in doing so diminishing the level of service provided to irrigators. Perhaps it should be noted that in most of these cases these channels are in fact moving back to what was their original design operating level. In the case of the adoption of Total Channel Control technologies CICL has:

- reduced channel operating levels back to design levels and in doing so reduced channel seepage and leakage,
- upgraded farm delivery outlets to increase supply capacity, and
- provided two hour water ordering to customers.

This has in very real terms increased the level of service to our customers.

Yes – escape losses have also been vastly reduced, and this has impacted on the supply of 'opportunistic water' to customers on the Coleambally Outfall Drain. However the pricing of opportunistic water reflected its reliability. Reducing system escapes has seen this water move to a higher value purpose, with pricing to match. It should also be noted that CICL's investment in technology has to date been wholly funded by its customer shareholders and not Government.

D Water trade and exit fees

As indicated in the Draft Report, Exit fees levied by irrigation districts on outward water trade represent a tax on water trade . The report also states that Exit fees are distortionary. To support this judgement, the Commission provides an analysis of the welfare effects on irrigators and the water service provider as the recipient of the Exit fee.

There is no doubt that a tax impacts on market outcomes. The issue is not that there are market impacts, but whether that tax is distorting or distortion correcting, e.g. a Pigovian tax. The Draft Report provides only a limited analysis of impact of Exit fees and does not extend the welfare analysis to include consideration of the impacts on investment decisions made by irrigation districts. More importantly, the Draft Report assumes from the outset that tax impacts are always distortionary.

We do not dispute the analysis provided by the Commission, we dispute its policy relevance because the analysis is narrowly focussed and does not account for broader economic issues. The Commission's approach fails to recognise the distortionary imbalance between Access Charges and avoided costs and the long term consequences for investment and risk management. An analysis of this nature requires a more systematic review across all stakeholders.

Correcting the distortionary effect of water charges

The supply of water for trading is a function of the opportunity cost of that water. An irrigator who is unable to sell water due to trading restrictions will maximise his or her economic welfare by using the water on-farm up to the point at which marginal revenue equals marginal cost of production. An irrigator who is able to sell water on the market has the opportunity to make a greater return if he or she sells water when the market price for water is greater than the net return on farm (marginal revenue minus the marginal cost). It is noted that, the marginal cost of water for an irrigator includes the cost of the water delivery service provided by the irrigation district.

Ideally, to recover delivery costs the irrigation district will charge a two-part tariff comprising of an Access Charge for fixed costs (predominantly sunk capital costs and maintenance costs) and a Volumetric Charge for short run marginal costs. The benefits of two-part tariffs have long been recognised in the water industry. In theory, the volumetric component should reflect the marginal cost of supply and the fixed charge should reflect the fixed costs, including a return of and a return on efficient past investments.

The rationale for the two-part tariff is: [1]

- **demand efficiency** is maximised when the price of water reflects the actual change in cost to the irrigation district or service provider, i.e. price = marginal cost
- **supply efficiency** requires that service providers achieve full cost recovery, i.e. price = the average cost of supply.

The dual role of prices can be reconciled through the formula: $R = A + p.x$
or, rearranged: $A = R - p.x$

Where:
R is total revenue required to ensure full cost recovery
A is the Fixed (Access) Charge
p.x is the Volumetric Charge multiplied by the volume

Thus the fixed charge is essentially the balancing item required to achieve full cost recovery. Importantly, the fixed charge is an essential element to ensure supply side efficiency.

If an irrigator sells water outside the district, they will no longer be required to pay either the Volumetric Charge or the Access Charge. On the supply side, the irrigation service provider will avoid all short run marginal costs but fixed costs (maintenance and capital costs) will not change in the short to medium term, particularly where there is no opportunity to rationalise delivery infrastructure. Irrigators who sell water outside of the district will therefore avoid 100% of the Access Charge, but the water service provider will avoid a much lower proportion or none of the fixed costs. Therefore, the ability of irrigators to avoid Access Charges represents a price signal that does not reflect the change in the water service provider's cost base.[2] Exit fees correct the supply efficiency distortion by ensuring that water users do not avoid paying for fixed costs.

Long term consequences for investment and risk management

Economic efficiency requires risk to be allocated to the party best able to manage that risk. Without Exit fees, irrigation service providers must make long term infrastructure investment decisions based on an assessment of the risk of water entitlements exiting the district at some stage in the future and stranding the investment[3]. Service providers (and their shareholders) will typically have

[1] These issues were considered in more detail in Appendix G of the Industries Assistance Commission report, *Government (Non-tax) Charges, Volume 3, Efficiency Issues and Public Enterprises* (1989).

[2] Water traded inside a region is not distortionary in the same manner, as a purchaser of water inside the region will be required to continue paying the Access Charge (to the same service provider) if the water is to be used within the region.

[3] The average expected life of infrastructure assets in channel irrigation systems exceeds 50 years.

less knowledge about a particular customer's intentions than the customer in question. Therefore, it is reasonable to expect irrigation water providers to be more cautious than their customers when deciding to augment or rehabilitate existing infrastructure.

Without Exit fees, water service providers (reflecting the interests of existing growers) may be unwilling to make significant investments in long lived delivery infrastructure assets due to the uncertainty about their customer's long term willingness to remain in the district and to continue paying Access Charges. Moreover, without Exit fees, districts are unlikely to make the very significant investments needed to improve delivery efficiency, raise service standards and reduce environmental impacts.

Prima facie, Exit fees do appear to be applied in some other markets. Exit fees are not applied in markets with little or no repeat business (such as the retail food industry) as customers can not be locked into ongoing contracts. High volume, repeat business markets such as telecommunications are typically able to absorb the fixed cost through the natural increase in the customer base. However, emerging services such as internet access or mobile phone plans frequently require the equivalent of Exit fees if customers terminate a contract within a specified time period. Repeat business markets with a small customer base and large up-front costs – in particular large scale infrastructure projects – often require customers to enter take-or-pay contracts and early termination payments may be employed to address the risk of stranded assets.

Conclusion

The Draft Report does not adequately address issues of supply side efficiency. The Commission's analysis should not only address pricing signals for existing water users, but also efficient signals for infrastructure investment by irrigation districts into the future.

The discussion above provides a clear message that economic efficiency and the impact on long term investment must be examined more systematically and in far more detail than provided in the Draft Report.

Malcolm Turnbull has recently made the following comments in relation to water supplies to our cities. I contend that the provision of water for rural purposes should be seen in a similar fashion. It would be reasonable to expect that Irrigation Corporations would expect the same as urban suppliers of water i.e. to maintain their profitability and have a strong cash-flow.

> *Our water policy is to ensure that Australia's water future is secure and sustainable. It is to ensure that we use a precious resource as efficiently and productively as we can.*
>
> *It is to ensure that wherever we can, and we know we cannot do it everywhere, but wherever we can, we drought proof our cities and communities.*
>
> *So why are we being told that water restrictions in our cities should be permanent? The water business has very high fixed costs and capital investment requirements.* ***The operating or variable costs are modest****. The marginal cost of a water utility selling an extra hundred gigalitres is very low. The dams are there, the pipes are there, all the way to our homes.*
>
> *Are water restrictions designed to conserve a scarce finite resource? Well, yes in the short-term they may be, but in the long-term, the principal contribution is* ***to preserve the profitability and cashflow, strong cashflows of water utilities****, and enable the*

postponement of investment, which would increase the cost base of that utility and either decrease profits, or force an increase in prices. *(Pers. Com. Malcolm Turnbull, June 06)*

The NCP – Third Tranche Assessment Framework (5th February, 2001, page 8.12) indicates that,

Jurisdictions endorsed the principle that constituents be given a greater degree of responsibility for the management of irrigation areas citing, as an example, the potential devolution of operational responsibility subject to the establishment of an appropriate regulatory framework.

In conducting the third tranche assessment, the Council will look for all impediments to devolution to have been removed and local management arrangements identified in the second tranche assessment to have been implemented.

In the case of NSW devolution led to privatisation with the respective water users taking over ownership of irrigation schemes. In the case of CICL this has seen considerable investment in infrastructure which was beyond the willingness of the Government of the day. In doing this the Coleambally Irrigation District was totally removed as a financial burden or risk to the State.

CICL's Operating Licence also states:

The Licensee must use its best endeavours to construct, maintain, manage and operate coordinated, adequate, efficient and commercially viable systems for supplying water from surface and subsurface sources……

Subsequent clauses in the Licence clearly state that Government shall bear no obligation in terms of the operation of the business.

It is imperative that in considering the validity and appropriateness of Exit fees that the Commission ensure they are judging like with like in terms of jurisdictions - for example, level of environmental and performance reporting, tax treatment, and ongoing drain on the public purse. I understand that some Government owned irrigation schemes are not meeting their full costs, and water charges are set to achieve political as opposed to business based outcomes. Under this environment one could reasonably expect to see a lesser Exit fee if Government from time to time is to make very substantial investment in scheme maintenance/upgrades and restructuring/reconfiguration.

The NCP – Third Tranche Assessment Framework (5th February, 2001, page 8.12) also indicates that in relation to the trade, *where restrictions remain, the benefits of the restriction outweighs the cost.* In addressing this element the Commission drew on work carried out by ABARE and presented in their report titled, "*Exit Fees and Interregional Trade, an analysis of the efficiency impacts of exit fees"* (June 2006). However I saw no evidence in either report of an attempt at costing the impacts of water trade out of regions, given that there are examples in Australia and overseas. The ABARE report (page 16) indicates that *exit fees represent a transfer of wealth from the entitlement sellers to the irrigators remaining in the system (via the water utility) as access fees for those remaining would stay the same as pre-trade levels*. Of course for this to be valid then it must also be true that the non-payment of an appropriate Exit or Access fee by the seller to irrigators remaining in the system (via the water utility) would result in a transfer of wealth from the remaining irrigators to those exiting.

The simple addition of a cost/benefit analysis would be instructive given that costs from those areas where water has exited a scheme would be able to be captured and compared against the economic

efficiency and benefits flowing from the water in the new district. This would add some rigor to what is otherwise modelled results.

The Coleambally Irrigation District is managed by a duel co-operative structure with CICL being responsible for the day to day operational matters whilst CIMCL (Coleambally Irrigation Mutual Co-operative Limited) is responsible to fund only irrigation infrastructure works by collecting and quarantining sinking fund levy contributions. The success of this arrangement is at the very heart of our irrigation community's future.

The Coleambally community voted to establish a dual co-operative structure to service the needs of the irrigation business. The dual structure provides a number of very specific benefits to CIMCL members, these being:

- a more stable financial structure for the irrigation scheme (the assets are not in the hands of an operating entity and subject to operating risks);
- introduces a series of checks and balances in relation to asset maintenance and renewal expenditure (the CIMCL board has a long term focus and are obliged to maintain the infrastructure for the long term and must not focus on short term operating considerations);
- addresses the issue of asset maintenance and renewal spikes and whilst maintaining equity for all generations of members.

The above objectives were also voted on by members in establishing the Rules to both Co-operatives. This in turn led to the establishment of interlocking contracts with each and every member of the Co-operatives that clearly spell out responsibilities in relation to the above and a wide range of other matters including commitment to environmental outcomes via the Land and Water Management Plan.

ATTACHMENT A

Jenni Mattila & Co

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June 7 2006

Australian Bankers' Association
Level 3
56 Pitt Street,
Sydney NSW 2000

Attn: Mr. Stephen Carroll

By facsimile: (02) 8298 0402
Pages:

Dear Mr. Carroll

ABA Draft Irrigation Corporation Policy

We refer to the ABA Draft Irrigation Corporation Policy circulated by Mr Kim Russell of ANCID to its members on 28 April 2006.

We act for Coleambally Irrigation Co-operative Limited (CICL). CICL has instructed us to comment on the Draft Policy on their behalf, in particular the section entitled "Existing Irrigation Corporations".

Our clients are concerned that the ABA's statement that "far greater risks for financiers associated with security over shares in an irrigation corporation as opposed to security over an actual water entitlement" shows a fundamental lack of understanding of the nature of irrigation corporations in the manner of operation and nature of the irrigator's interests in the irrigation corporation.

Background

CICL is an irrigation corporation for the purposes of Schedule 1 of the Water Management Act (NSW) 2000 and holds a range of access licences.

CICL is a trading co-operative and members hold one share per megalitre of water entitlement with respect to the access licences. CICL holds these access licences on behalf of its irrigator members. These licences are merely the total of the member's nominal water entitlements. The legal right is in CICL but the beneficial interest remains with the irrigator members. CICL

cannot legally deal with these "bulk licences" without the consent of all members as CICL is not the beneficial owner. Supplementary water does not have corresponding shares and nominal entitlements because there is no guarantee of its supply, it is however subject to members rights to this water. Again the beneficial ownership is in the members not CICL. Conveyance water is owned by CICL on its own account and is the amount of water needed to cover evaporation and seepage as well as the amount of water necessary to fill the channels to deliver the water to members and is not owned by the members themselves. (There are no shares issued against Conveyance water entitlements because the Co-operative cannot issue shares in itself)

Members receive a share certificate and stapled a certificate of nominal entitlements. Nominal entitlements are a contractual right whereby CICL is to supply a specified quantity of water to a member in accordance with the Rules of CICL. Each nominal entitlement corresponds to a stapled share. Nominal entitlements cannot be sold separately to the share within CICL. As in all other State owned irrigation corporations permanent transfers outside the scheme include the payment of exit fees or tagging. The shares in the sale outside the scheme are detached and cancelled in the CICL register. The value of the shares is therefore largely irrelevant they are merely a method of dealing with the member's shareholder rights within the scheme

Comments on draft policy regarding "Existing Irrigation Corporations"

We have commented on each of the dot points set out in the draft policy, in that same order.

In response to your comments regarding the outcome where members use their shares and nominal entitlement as collateral to secure a loan:

"value of the collateral used to secure loans will depend on the financial position and performance of corporation not just value of water entitlements"

- The value of the collateral is the value of the nominal entitlements, and therefore the underlying water entitlements in the market from time to time. The financial position and performance of the CICL would not have a detrimental effect on the value of the collateral as the water allocations underlying the shares will continue to be held by CICL unless the shares and water are traded out of the Coleambally Irrigation Area.

"value of collateral may also be limited by fees on sale of water entitlement outside of irrigation corporation"

- Exit fees are also charged by statutory corporations. By way of example I understand SunWater charges an exit fee of ten times the annual contribution.
- The value of collateral may be affected by fees on the sale of water entitlement outside CICL, however the most likely buyer of water entitlement from a CICL member would be another CICL member. Water traded out of the Coleambally Irrigation Area is not easily deliverable outside the area. It is important to note that where water is 'created' and made available for sale and use, the cost of 'creation' of that water (the infrastructure assets) must be recouped from the ongoing sale of that water. This is in compliance with the National Water Initiative (NWI) and is not a unique characteristic of irrigation corporations. Indeed the Victorian Government has until recently

prohibited the sale of water outside individual statutory corporations. At the present time the Victorian Government contrary to CoAG and NWI policy imposes on going "rates" on land if the water is sold outside the scheme. This may be construed as an Access Fee. The State and Federal Governments with the assistance of Irrigation Corporations in NSW are moving to engage the ACCC in looking at the applicability of all of these mechanisms.

- All irrigation corporations whether they are private or State owned need to address the problem of stranded assets. To single out private corporations ignores the fact that many statutory corporations impose higher barrier to trade than private schemes.

"ability to deal with the security is governed by corporations rules which can be changed by the shareholders"

- The ability to deal with the security is governed by the corporation's rules which can be changed by the shareholders. In CICL's case a change in the Rules requires a special resolution passed by the members. CICL's Rules have been drafted to ensure that encumbrances on the shares are duly recorded in accordance with the Co-operatives Act (NSW). CICL's members are unlikely to endorse a change in Rules which would be detrimental to their ability to borrow funds. Private schemes incorporated as companies have similar requirements in accordance with the Corporations Act (Cth) and their own Constitution.
- The NWI and the current Water Management Act also govern transfers.

"market for a shareholding maybe limited relative to the sale of a water entitlement"

- The market for a shareholding is not limited relative to the sale of a water entitlement. The share is stapled to the nominal water entitlement; it is an ancillary part of the transfer of the nominal water entitlement. If the Coleambally scheme were run by another type of legal entity or the Crown, sale of water entitlement within the Coleambally Irrigation Area would not change for practical purposes. In our discussion with operators of commercial water markets they have confirmed that the market does not distinguish between entitlements from a private scheme and a State owned scheme.

In a forced sale scenario, the tradability of a share and water entitlement will always be dependent upon the location of the water and its deliverability. The financial position of CICL, for example, would not affect the value of the water access licence held by it essentially on trust on behalf of its members. CICL's infrastructure is comparatively new compared to other NSW schemes and the irrigation schemes operated by the Victorian Government. CICL and CIMCL are unlikely to require significant loan funding as they operate a full cost recovery sinking fund. CIMCL raises irrigator funds based on long term capital replacement requirements using a 50 – 100 year asset profile. CICL raises funds for routine maintenance. As CICL and CIMCL are unlikely to ever require significant loan funds (due to CIMCL's sinking fund) the financial risk is significantly lower then Government owned irrigation schemes that are dependent on the year to year whims of Government. In particular the Government controls the "rates". If the rates are insufficient due to poor management and political expediency to undertake necessary maintenance and capital works there is little capacity to make up the shortfall through State Treasuries. Recent examples of this were the Eildon Dam in Victoria that until Commonwealth Government financial intervention could not be operated at capacity due to

years of inadequate maintenance, and the Hume Weir. The Hume Weir was not properly maintained over a long period of time resulting in significant structural faults and the risk of dam failure. In 1996 the NSW Government evacuated the area and was forced to do a controlled release, flooding farm land and destroying livestock, fortunately no-one was killed. The Government owned schemes do not hold sinking funds and this makes planned capital works and major maintenance difficult to manage – irrigator owned schemes can plan their maintenance and capital works requirements using long term renewals profiles that would be impossible in Government schemes.

It should also be noted that the NWI includes a requirement that trading rules may include a requirement as to deliverability. It is a basic principle of law that you cannot contract to sell goods that as the seller you know cannot be delivered. The contract itself would of course be unenforceable and there is a reasonable argument that such a transaction would probably be fraudulent.

We have the following comments on your suggested requirements of the rules of an irrigation corporation and how they apply to CICL:

"provided for the registration in their records of all security interests in their shares;"

- CICL's Rules require that members must inform CICL in writing within 14 days of the creation of any interest or dealing in their shares and nominal entitlement. CICL keeps a register of such interests and dealings in shares and nominal entitlement. CICL requires the written consent of any interest holder before shares and water entitlements are transferred.

"have a mandatory requirement for the issue of share certificates on the allotment of shares and that share certificates are to be produced in the event that a shareholder wishes to transfer their shares;"

- Share certificates are issued on the allotment of shares and these must be produced along with any other evidence the Board may require to prove the title of the transferor in the event of a transfer. As was the case prior to the abolition of share certificates for public listed companies, the Board of CICL may waive the production of any certificates upon evidence satisfactory to it of the loss or destruction of such certificates. Furthermore the Board may decline to register any transfer of shares if there is any interest or dealings listed on the register of interests and dealings in shares and nominal entitlement and the written consent of the holder of any such interest or dealing has not been obtained.

"define the way in which holders of security interests may deal with those shares instead of or on behalf of the shareholders;"

- CICL believes that the way in which holders of security interests in CICL shares may deal with those shares is dealt with in accordance with the common law. CICL distinguishes in its register whether the interest is a mortgage or a charge and the lender's rights are dealt with accordingly.

"remove certain barriers to shareholders transferring their water entitlements away from the corporation;"

- Section 71ZA of the Water Management Act compelled irrigation corporations including CICL to remove certain restrictions on dealings included in their Rules. CICL had already removed these restrictions prior to the enactment of that section. Resulting "barriers" to trade are in accordance with the NWI and as we said previously in many cases are lower than irrigation statutory corporations in Victoria and Queensland when considered in their totality (e.g. exit fee plus charge on flow capacity that remains attached to the land). The ACCC will provide additional clarity in this area in coming months.
- CICL's Rules set out a specific Transfer Assessment Criteria for the consideration and determination of any transfer application:

  (a) water delivery efficiency;
  (b) transmission losses;
  (c) environmental concerns;
  (d) channel capacity;
  (e) geographical location;
  (f) maintenance or operations;
  (g) suitable drainage and recycling facilities;
  (h) height of water tables or rapid water table rise;
  (i) soil salinity;
  (j) whether infrastructure improvements will be required;
  (k) the need for exit fees;
  (l) the number of nominal entitlements, or the volumetric allocation attaching to nominal entitlements, as the case may be, which will be available to the landholding of the transferor following the transfer; and
  (m) the number of nominal entitlements, or the volumetric allocation attaching to nominal entitlements, as the case may be, the subject of the transfer application.

"give holders of security interests the right to receive information about and to veto proposals that significantly gear the company, and change rules affecting how a mortgagee can deal with a share;"

- The power of veto of creditors is not supported in corporate law. Security holders are not shareholders and have no statutory right to vote. Mortgagees' rights are set out in the mortgage and they can be registered as the mortgagee. If mortgagees wished to attend CICL general meetings CICL would be happy to provide invitations to attend as observers. Mortgagees are not members or shareholders so they could not vote, neither company nor co-operative law provides voting for non-shareholders.

"include a negative pledge in the company's constitution so that it cannot deal with or encumber the bulk water allocations held by them. The negative pledge would be designed to overcome the possibility that the corporation could raise finance by providing a financier with security over its bulk water allocation which is likely its most valuable asset (notwithstanding the fact that other financiers hold equitable mortgages over the shareholders' shares)."

- A negative pledge in CICL's constitution would not be effective as CICL cannot deal with or encumber "bulk" water entitlements held by them. The bulk water entitlements are held on trust on behalf of the members. The value of the bulk water entitlements as recorded on CICL's balance sheet is nil. The value of the bulk entitlement is at best the surplus earned on delivery rights, not the value of the members' water entitlements.

Our clients would be happy to discuss any questions you have regarding private irrigation corporations to prevent misunderstandings of this nature and extent happening again. Your member banks deal with CICL on a regular basis and are familiar with CICL's operations as well as the operations of other private irrigation corporations. We have dealt with them on a number of occasions when they registered mortgages or charges over member's nominal entitlements and shares. CICL has always worked closely with the local banks. CICL understands the need for both the members and CICL to have harmonious working relationship with the banking community which is why CICL is so disappointed that the ABA did not approach any private irrigation scheme to discuss this policy prior to developing it to this stage. It was merely fortuitous that the matter came to the attention of Pioneer Valley Water Board who referred it to the peak irrigation body ANCID for circulation.

Please do not hesitate to call us if you need further clarification of the comments included in this letter or should you like to discuss the matter further.

Yours faithfully,

Jenni Mattila

ATTACHMENT B

The Inter-relationship between Water Entitlement Registers, Water Trading Exchanges and Trading Rules

Overview

There are three broad components to a discussion on water trading:

- **Water Entitlement Registers,**
- **Water Trading Exchanges; and**
- **Trading Rules**

Distinctions must also be drawn in relation to:

- **Regulated rivers (supported by irrigation infrastructure);**
- **Unregulated rivers; and**
- **groundwater**

As well as transfers:

- **within catchments;**
- **outside catchments;**
- **within irrigation schemes; and**
- **from or to irrigation schemes**

Water entitlements are legally best described as a chose in action i.e. “an intangible personal property right recognised and protected by the law, which has no existence apart from the recognition given by the law, that confers no present possession of a tangible object....”.

Water entitlements are not commodities in any sense, they are a bundle of legal entitlements that differ based on all the variables above as well as varying from jurisdiction to jurisdiction.

Irrigation water as a physical asset (as opposed to a water entitlement) is an input to production and it is as an input that irrigation water draws the basis for its underlying value. If there is no capacity to deliver water at the owner’s direction, water has no value, other than to speculators.

We therefore focus these comments on water intended for productive use.

The three key components of water entitlement registers, water trading registers and transfer rules often become muddled in discussions about market efficiency.

Irrigation Corporation Water Entitlement Registers

The criteria for an efficient Water Entitlement Register from the perspective of an irrigator and security holder should be:

- accuracy;
- timeliness of registration procedures

- cost effectiveness; and
- accountability.

As the Irrigation Corporation itself holds a licence from the State Government it is subject to the provisions relating to amendment and subdivision of its own licence when permanent trades are made out of or into the locally owned irrigation scheme.

Irrigation Corporations hold a licence from the relevant State Government called actually or colloquially a bulk entitlement. The sum of the licence or licences held by the Irrigation Corporation is the total of the irrigators entitlements and (where losses are not held as part of the irrigators entitlements) transpiration and evaporation losses owned by the irrigation corporation.

The Register of Members Shares and Water Entitlements (Members Register) held by the irrigation corporation is evidence at law of the ownership of the shares and water entitlements. Unlike the Crown, Irrigation Corporations may be sued if they are negligent in the keeping of the Registers leading to financial loss by a member or security holder. It is also possible for the Register to be amended (with notice to affected parties) if necessary.

Irrigation Corporations run the billing system using as its basis the information in the Members Register. There is therefore a cross check on the accuracy of the Members Register. Members respond quickly for a charge for water they do not own or if water they do own is not delivered. The system therefore, unlike the State operated system, is robust as it has an inbuilt cross check on accuracy.

Irrigation Corporation Water Trading Exchanges

Water Trading Exchanges operated by third parties in most cases need to be operated in accordance with exempt stock exchange rules and supervised by ASIC.

Irrigation Corporations are careful to avoid the need for costly regulatory requirements by not providing an active matching service but merely allowing members to advertise that they wish to buy or sell water and arrange the conditional sale amongst themselves (private treaty). The transfer is then referred to the irrigation corporation for approval pursuant to the trading rules and registration. The average approval time for a simple internal transfer is 24 to 48 hours, more complex transfers that do not fully comply with the trading rules may take up to 4 weeks. For permanent transfers members are required to lodge their transfer application with their original share and water entitlement certificates and approval by any registered security holder (usually the local bank).

Irrigation Corporations do not need to subdivide water entitlements as one share = one megalitre of entitlement. If an irrigator wishes to permanently transfer part of their water entitlement the Irrigation Corporation issues a new updated share and water entitlement certificate. It is not unusual for members to have separate share and water entitlements certificates for different parcels of water. A buyer within the scheme may simply accept an additional share and water entitlement certificate or may update an existing certificate.

Negotiations are currently underway so that CICL members may, if they wish, list their water entitlements for sale on independent water exchanges.

External permanent transfers requiring consent of third party governments or schemes will of course take longer subject to the external party's processes.

Temporary trades do not of course affect the Members Register and are dealt with by approval process. Care has been taken for annual and longer term temporary trades not to fall within the definition of a lease. Leases are of course subject to stamp duty. It is noted that in Queensland that the Water Act requires temporary trades to be categorized as a lease and are therefore subject to State stamp duty.

The local approval process also has direct accountability as local irrigators know who is handling their transfer and will follow up if there are delays. They can easily personally attend the office to follow up their transfer – the relationship is direct and accountability is unavoidable at a local level. It puts an additional check and balance on the system – it is much more difficult to perpetuate delays. Also the number of transfers being dealt with is limited by the size of the area and large backlogs are avoided by prioritising transfers that are usually time sensitive.

Trading Rules

CICL has the following trading criteria set out in its rules**:**

78.3 Every Transfer Application must be determined in accordance with the following criteria (the "Transfer Assessment Criteria"):

- *water delivery efficiency;*
- *Transmission Losses;*
- *environmental concerns;*
- *channel capacity;*
- *geographical location;*
- *maintenance or operations;*
- *suitable drainage and recycling facilities;*
- *height of water tables or rapid water table rise;*
- *soil salinity;*
- *whether infrastructure improvements will be required;*
- *the need for Exit Fees;*
- *the number of Nominal Entitlements, or the volumetric allocation attaching to Nominal Entitlements, as the case may be, which will be available to the Landholding of the transferor following the Transfer; and*
- *the number of Nominal Entitlements, or the volumetric allocation attaching to Nominal Entitlements, as the case may be, the subject of the Transfer Application.*

Permanent transfers are also subject to the consent of security holders where relevant and are subject to all payments owed to CICL being up to date. External permanent transfers are held in escrow until approved by the Ministerial Corporation (State Government) and are currently capped by legislation.

Summary - Water Transfers Irrigation Corporations

Irrigation Corporations provide a one stop shop for the sale and purchase of water within their schemes**.** Irrigators can have their transfer processed within 24 to 48 hours in the majority of cases. Advertising for sale or purchase, approval subject to the transfer rules and registration of transfer all happens in the same place. Amendments to the billing system take place at the same time.

The Irrigation Corporation system is more:

- accurate;
- cost effective;
- timely;
- accountable.

than a centralised State government operated registration system. It is comparatively easy to make the irrigation corporation registers searchable, by providing a nationally operated centralised computerised search system on the internet.

State Government Operated Water Entitlement System

Broad Summary of a Centralised Register and Approval System

In general a centralised register and approval system operates as follows:

- buyer and seller agree to transfer (permanent or lease) in principle:
- seller sends transfer application to capital city for approval;
- government officer sends application to local area manager or managers (if the local manager is not the same for the seller and buyer) to check for compliance with transfer rules under local water plan or plans;
- local manager(s) sends application back to capital city with approval or refusal;
- government official in capital city informs buyer and seller of outcome and if necessary registers transfer;
- billing system is separate to centralised entitlement register so notification sent to accounts for billing.

Water Entitlement Registers

State Government registers have the benefit of over time being searchable online and "indefeasible". In discussions of indefeasibility it became apparent the nature of indefeasibility in this debate is widely misunderstood. Indefeasibility is defined by Butterworth's Legal Dictionary as follows:

Indefeasibility of Title

A characteristic of Torrens Title that considers the interest of the registered proprietor as paramount and protected against all prior interests and estates existing in respect of land, except in the case of fraud or statutory exceptions Real Property Act 1900 (NSW) section 42. The concept of indefeasibility of title does not apply under old system title and holders of legal and equitable interests do not automatically have indefeasible title.

The "guarantee of title" relates to unregistered equitable interests - the government does not financially guarantee the title. You cannot sue the Crown for negligence, errors or for any damages that may arise from the negligence or error - the Crown does not "guarantee" the title in any financial sense. Torrens Title merely protects the registered proprietor and any ***registered interest holders*** rights from unregistered equitable interest holders and determines priorities as to the priorities of mortgagees (e.g. first and second registered mortgage). The registered proprietor or registered interest holder may enforce the registered rights through the courts.

The problem with indefeasibility is that it entrenches “errors” on the register that in some cases require legal action or in other cases are impossible to correct. Difficulties are caused (amongst other reasons) because the exception for “fraud” covers statutory but not most categories of equitable fraud. A common problem is that if the fraud took place on a prior title and the title has subsequently been transferred to a third party the third party’s title is protected by the law of indefeasibility.

The consequences of indefeasibility should be considered more carefully before it is promoted as a panacea for all of the concerns of third party interest holders.

Problems of Delay in Registration of Transfers

We note in the Draft Report that Emerald has experienced delays of up to six months in registration of transfers. At first we thought this may have been a typographical error. The delay is such that leases or temporary transfers would be almost pointless. We assumed the delay of that magnitude if not an error must have been rare. We therefore contacted irrigators in the small number of areas in Queensland where trading has commenced. They confirmed delays of six months were common and that there were also cases of delays of nine months. We subsequently contacted Queensland Farmers Federation (QFF) who advised that six month delays were common and that they had raised the problems of delays in their submission to the NCC. QFF we understand also expressed concern to the NCC that as more areas were opened to trading the delays would become even worse.

QFF advised us that there are currently delays of six months with the land registration system in Queensland so it would appear that the delays **are predominately at the registration level** and not as one would expect caused by the need to assess compliance with the transfer rules.

At the hearing on 28th June, 2006 we raised concerns that historically Governments had not adequately staffed registration functions leading to delay. In the case of land titles most States no longer fully checked all lodged documents leading to an error rate that would be unacceptable in a commercially operated and legally accountable organisation. Unlike private enterprise there is no direct link in Government between staffing levels and workload or even income generated by a particular sector of a government department.

Regular staff cut backs in the State public service (in all States) impact most on the people below management level, the people who are directly responsible for undertaking the registration function. Inadequate registry staffing levels are then compounded by increasing productivity demands with unrealistic turn around times on remaining staff.

Staffing levels go down and the error rate goes up. Management eventually recognises the impossibility of meeting productivity requirements with ever reducing staff levels and implements short cuts to meet those productivity demands. The risk associated with those short cuts falls in the case of water entitlements on the public and the problem is compounded by the impact of indefeasibility.

The lack of direct accountability at State Government level means that these problems are glossed over, ignored or simply denied.

On the establishment of locally owned irrigation schemes the registers were established using the land titles registers to cross check the members register. The error rate on land titles registers when cross checked is consistently between 10-20%.

Water Trading Exchanges

Commercially operated water trading exchanges operate in NSW, Victoria and South Australia. It is anticipated that they will develop more fully in Queensland over time. Water sales in Queensland are generally done by private treaty.

Trading Rules

State Government trading rules are usually set out in the Water Plans. However no State (including NSW) has water plans and trading rules that cover all irrigation systems.

Approval of transfers almost invariably needs to be done at a local level by a local manager familiar with deliverability, connectivity and environmental issues that in most cases are site specific to the buyer and seller.

Concerns have been raised that the rationale for unbundling is to separate the registration function from the transfer approval function thereby shifting the risk to the buyer and seller if the sale is subsequently refused under the trading rules. If this is correct the barrier to trade presented by a risky and unreliable transfer system will result in a significant barrier to trade. The law in normal circumstances would prevent such a situation – you cannot sell what you cannot deliver.

The proposal would protect the concept of a centralised registration system at the expense of the very purpose of a transfer system - that water purchased was actually capable of being delivered. The actual purpose of a transfer system i.e. the transfer and delivery of water seems to be potentially lost in the process of protecting a centralised system that appears to be inherently flawed due to inadequate staffing and a “clunky” transfer approval system.

The 1994 CoAG rural water principles provided for a move to local management recognising that the characteristics (as opposed to the conditions) of water entitlements were usually local and highly idiosyncratic. Transfers could most efficiently be dealt with at a local level. Transfers at a local level are usually a manageable number and can be prioritised. Where external permanent transfers

were to take place they could most efficiently be dealt with by the relevant local manager for the buyer and seller.

Summary

It is acknowledged that a number of States have already moved to a centralised registry system and that in the short term at least these registries are likely to remain. We anticipate that the problem of delay will be dealt with by transferring risk to buyers and sellers – this is Governments' consistent historic response to this problem.

As an alternative it is worth considering that applications for transfers be lodged at a local level to be approved against the trading rules and for the Department's local managers to have the capacity to amend the centralised register online.

Irrigation Corporations operate efficient registers with internal cross checks for accuracy. Irrigation Corporations are directly accountable to their entitlement holders for accuracy (they can be sued) and delay (entitlement holders have ready access to management staff running registers). The registration and transfer system is efficient, cost effective, timely and accurate.

It is suggested if a major consideration is to have a water entitlement system that is searchable from a centralised internet site. This is relatively easy to achieve subject to the development of consistent data management and the necessary internet links.

We are therefore strongly of the view that it is undesirable to replace the Irrigation Corporations efficient registration and transfer system with a centralised State Government operated system that has inherent structural problems.