

**Murray Irrigation Limited**

**A.C.N. 067 197 933**

***Response to the Review of the Operation of  
the Cap***

***July 2000***

## **Executive summary**

Murray Irrigation Limited agrees that limiting diversions to 1993/94 levels of development is an important step towards protecting river health and water security for existing licence holders.

Murray Irrigation Limited is not confident the Cap has successfully limited diversions in the Murray-Darling Basin to 1993/94 levels of development.

The Cap in South Australia is set at a level higher than their 1993/94 level of development. Water storage infrastructure in Queensland has increased dramatically since 1993/94. Diversions in some NSW river valleys exceed the Cap and Cap management has not addressed floodplain harvesting and increased diversions from unregulated streams.

The priority for the MDBC and jurisdictions to enhance the Cap's contribution to ecological sustainability should be;

- An equitable state by state Cap implementation framework enforced by the Murray-Darling Basin Agreement;
- Cap compliance at an individual valley level;
- Identifying actions and investment that will result in improved environmental outcomes but do not reduce water available for consumptive use;
- Improving the management of existing environmental allocations and instream flows to ensure they achieve worthwhile and high priority environment outcomes; and
- To ensure decision-making is based on the best available science.

Murray Irrigation Limited does not support any further reduction in water extractions without appropriate off sets or compensation to existing entitlement holders.

Murray Irrigation Limited considers the water market has an important and legitimate role in sharing water between competing uses including the environment.

Defining sustainability is inherently problematic. Murray Irrigation Limited questions the definition of sustainability proposed and recommends that the administration of the Cap be based on tangible and measurable objectives.

Murray Irrigation Limited recommends the MDBC and jurisdictions develop as far as possible practical measurable outcomes for each valley, for example salinity targets. A transparent and rigorous approach for involving the community in setting these outcomes is also required.

Murray Irrigation Limited consider there is not yet sufficient evidence to demonstrate the Cap has had a positive economic impact and created a more certain investment climate.

NSW water users are experiencing a complex and uncertain water policy environment. It is not possible to dissociate the impact of the Cap from these other water policy decisions.

The implementation of a property rights regime, which provides water users with certainty that water security will not be eroded without appropriate compensation or offsets is necessary to improve the investment climate.

Murray Irrigation Limited recommend that the MDBC and jurisdictions focus on developing a better understanding of the factors that influence investment in irrigated agriculture at both a micro and macro level. MDBC and jurisdictions developing a mechanism that usefully includes the knowledge and skills of the private irrigation sector to support public sector policy development could achieve this.

Murray Irrigation Limited recommends the MDBC and jurisdictions review the extent of trade barriers and make enforceable recommendations to remove impediments.

Murray Irrigation Limited recommends the Ministerial Council require jurisdictions put in place a fair and equitable process for resolving intra-valley conflicts. This process should;

- Provide the multiple parties involved with equal opportunity to influence resolution of the conflict;
- Include an independent mediator;
- Require the provision of robust information that is understood by the parties involved; and
- Require the development and implementation of a comprehensive communication plan.

Murray Irrigation Limited supports the Project Board's recommendation that higher priority be given to finalisation of models for measuring Cap compliance. Greater emphasis needs to be placed on ensuring these models are robust.

Murray Irrigation Limited request the Independent Audit Group reporting of Cap compliance by jurisdictions be more transparent.

Increased diversions from unregulated streams is likely to be significant and consideration should therefore be given to requiring Cap compliance to be based on separate regulated and unregulated water use targets.

Murray Irrigation Limited recommend water diversions be used to measure Cap compliance and that Cap compliance should involve no erosion of end of system flows or third party impacts.

Murray Irrigation Limited recommend the Project Board investigate Cap compliance benchmarks that also include the Salinity and Drainage benchmarks for tributary water use and salinity contributions.

Murray Irrigation Limited do not support the removal of end of system flows from Schedule F until it is proved that each valley has an adequate model for evaluating compliance and is able to measure diversions including water harvesting to guarantee no erosion of end of system flows.

Murray Irrigation Limited supports continuation of Cap compliance to be based on cumulative Cap credits.

Murray Irrigation Limited does not support re-setting the Cap commencement date for accounting for diversions to start with the 2000/01 water year.

The proposed River Audit should not duplicate the monitoring and evaluation of the NSW environmental flow policy. In the Murray a comprehensive program, independently audited and conducted through the MDBC is necessary.

Murray Irrigation Limited looks to the Murray-Darling Basin Ministerial Council to lead robust decision-making that is based on the best available information; transparency and fair recognition of existing water users investment.

The Review of the Operation of the Cap is an opportunity for the Ministerial Council to require jurisdictions improve their management of Cap implementation and compliance.

Failure to grasp this opportunity will reduce the effectiveness of the Murray-Darling Basin initiative.

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## **1. Introduction**

Implementation of the Cap is a difficult issue in the NSW Murray Valley and for our shareholders. This review is an important opportunity for the Ministerial Council and jurisdictions to improve the operation, management, and community support for the Cap.

This submission contains Murray Irrigation Limited's views on the Review of the Operation of the Cap and its companion papers.

Recommendations are made that if adopted will lead to a more effective and transparent approach to Cap management.

## **2. Background to Murray Irrigation Limited**

Murray Irrigation Limited is a private irrigation company formed in March 1995 when the NSW Government Murray Irrigation Area and Districts were privatised and ownership transferred to irrigators.

Murray Irrigation Limited provides irrigation and drainage services to 2,400 farms owned by 1,600 family farm businesses in the southern Riverina. Our area of operation stretches from Mulwala in the east to Moulamein in the west covering almost 800,00 ha of farmland.

On behalf of its shareholders Murray Irrigation Limited holds the largest single private irrigation licence in the Murray-Darling Basin. Murray Irrigation Limited's entitlements of 1,450 GL is 75% of NSW general security water entitlements or 67% of NSW Murray entitlements.

Irrigation development in the previously Government owned Murray Irrigation Limited area has been strongly influenced by past Government policy, in particular development policies in the 1970s and 1980s. Analysis of Murray Irrigation Limited's shareholder water use shows that the farm business water use for two thirds of our shareholders' businesses is above 87% of entitlements, the target Cap diversion figure for the NSW Murray Valley. This means the decision by the NSW Government to implement the Cap on the basis of licenced entitlement will disadvantage a significant number of our shareholders.

Murray Irrigation Limited is regulated by Government through its Environment Protection Licence with the NSW Environment Protection Authority and Water Management Works Licence with the Department of Land and Water Conservation (DLWC). Compliance conditions for our licences include significant responsibility on Murray Irrigation Limited to minimise any negative environmental impacts of our operation on the environment. Proposed changes to our Water Management Works Licence place further environmental accountability on the Company.

Murray Irrigation Limited is also the implementation authority for the Murray Land and Water Management Plans (LWMPs). The Murray LWMPs are a major integrated natural resource strategy developed by the Murray community, in partnership with Government between 1991 and 1995. The Murray Plans aim to protect the environmental, social and economic values of the region. They are a leading example of how a genuine partnership between the community and Government can address complex environmental issues on a regional scale. The Murray Plans involve a total investment of \$498 M over 30 years shared between the regional community (\$382 M) and Government (\$116 M).

The Murray Irrigation Limited area has a regional population of 25,000. The prosperity of the regional economy is dependent on irrigated agriculture. In the Murray Irrigation Limited area, agriculture has an annual farm gate value of over \$300 M. The main products grown from irrigation in the region are, rice, milk, meat and annual vegetables such as tomatoes and potatoes. Irrigated agriculture drives a demand for services resulting in significant social and economic benefits.

### **3. Ecological sustainability of rivers**

#### *Cap compliance*

Murray Irrigation Limited agrees that limiting diversions to 1993/94 levels of development is an important step towards protecting river health. It is also important for protecting water security for existing licence holders.

Murray Irrigation Limited agrees that over time, if consistently applied and supported by improved river management the Cap will make an important contribution to decreasing the risk of environmental degradation in the Murray-Darling Basin.

However, Murray Irrigation Limited is not confident the Cap has successfully limited diversions in the Murray-Darling Basin to 1993/94 levels of development. For example;

- The Cap in South Australia is set at a level higher than their 1993/94 level of development (and probably higher than their record use);
- Water storage infrastructure in Queensland has increased dramatically since 1993/94;
- Diversions in some NSW river valleys exceed the Cap; and
- The Cap has not adequately addressed floodplain harvesting and increased diversions from unregulated streams.

Total on farm storage in the Queensland part of the Murray-Darling Basin has increased from 360 GL in 1993/94 to 1,050 GL in 1998/99

(MDBC 1999). The Murray Darling Basin Commission Water Audit (1995) records South Australian water use for 1988/89 – 1992/93 as 574 GL, the water use reported for 1998/99 is 662 GL (MDBC 1999).

Also anecdotal evidence and observations by Murray irrigators suggests there has been significant irrigation expansion in South Australia, New South Wales and Victoria. It is difficult to reconcile this expansion completely with increased water use efficiency and reduced diversions to the established irrigation areas.

In addition the southern valleys have been largely resource constrained for the last two seasons. It is difficult to support the Project Board's position that without the Cap there would have been significantly increased risk of environmental degradation in the Murray-Darling Basin when the largest users in the Basin have been largely resource constrained by drought.

The issue for the Ministerial Council through its member Governments is to ensure the Cap does limit diversions in a fair and equitable way across the Murray-Darling Basin.

### ***Reducing diversions***

The review argues that the Cap is set at a level which contributed to the current degradation so there is no confidence that the Cap on its own will result in a sustainable river system.

**Murray Irrigation Limited believes the priority for the MDBC and jurisdictions to enhance the Cap's contribution to ecological sustainability should be;**

- **An equitable state by state Cap implementation framework enforced by the Murray-Darling Basin Agreement;**
- **Cap compliance at an individual valley level;**
- **Identifying actions and investment that will result in improved environmental outcomes but do not reduce water available for consumptive use;**
- **Improving the management of existing environmental allocations and instream flows to ensure they achieve worthwhile and high priority environmental outcomes; and**
- **To ensure decision making is based on the best available science.**

**Too great an emphasis cannot be placed on the significant adjustment pressure the Cap already places on our shareholders.**

Murray Irrigation Limited does not support any further reduction in water extractions without appropriate off sets or compensation to existing entitlement holders. If, in the future and as better information informs jurisdictions and the community it is necessary to reduce the



Cap this should only be done with equitable sharing of the costs of this change.

Governments advocate water trade as the vehicle for water users to adjust their water requirements. Murray Irrigation Limited considers the water market has an important and legitimate role in sharing of water between competing uses including the environment.

Just as the Cap is a logical consequence of water trading, the extension of trading to encompass greater interstate trade and environmental flows is a logical consequence of the Cap.

### *Definition of sustainability*

The review proposes the following definition of sustainability as it refers to the establishment, operation and performance of the Cap as the indefinite preservation of:

- A functional and diverse ecosystem which, as well as meeting aesthetic and ethical requirements, provides a natural resource suitable for (all) human uses and production; and
- A socio-economic system capable of using the natural resource productively to the maximum good of the current and future communities.

Murray Irrigation Limited considers attempting to define sustainability is problematic and sustainable development is an oxymoron. There will always be differences between people and interest groups concerning the meaning of statements that attempt to define sustainability.

**Murray Irrigation Limited recommends that the MDBC and jurisdictions develop as far as practical measurable outcomes for each valley, for example salinity targets. A transparent and rigorous approach for involving the community in setting these outcomes is also required.**

Murray Irrigation Limited also considers it needs to be recognised that providing a natural resource suitable for (all) humans uses and production will require intervention and involve significant social and economic costs. Historically some rivers have not achieved this objective even with Government intervention.

The risk to water quality across the Murray-Darling Basin is outlined in the Salinity Audit (MDBCb 1999). This report shows that water quality in the Loddon and Avoca Rivers already exceeds the World Health Organisation standard of 800 EC for drinking water desirability. The report also identifies the scale of salt mobilisation across the Basin and the significant contribution of salt from the dryland Mallee zone, particularly in South Australia, to salinity in the Murray River.

**Murray Irrigation Limited recommends the definition proposed by the review and administration of the Cap be based on tangible and measurable objectives not meaningless catchphrases and nebulous concepts like sustainability.**

#### **4. Economic & social impacts**

Murray Irrigation Limited reject the conclusion of the Project Board and Marsden Jacob & Associates that there is compelling evidence that the implementation of the Cap has had a positive economic impact. Murray Irrigation Limited consider there is not yet sufficient evidence to support this conclusion.

**Murray Irrigation Limited recommends the Project Board critically analyse the basis for Marsden Jacob & Associates conclusions.**

Murray Irrigation Limited considers the report is superficial and contains assertions rather than evidence.

Murray Irrigation Limited is more interested in the legal issues associated with prior rights versus history of use rather than Marsden Jacob and Associates' opinion.

##### ***Erosion of security***

Murray Irrigation Limited's analysis of the impact of the Murray-Darling Basin Cap reinforces the importance of the Cap to protecting water security. However, this benefit has not been realised because of low water resource availability in the southern Murray-Darling Basin and failure to limit diversions in Queensland and northern NSW. By doing nothing about floodplain harvesting in northern New South Wales and Queensland, the Cap imposes an unreasonable burden on southern irrigators on regulated rivers.

Marsden Jacob & Associates have assumed that potential future benefits of Cap implementation on water security have been realised. Murray Irrigation Limited consider this assumption is incorrect.

##### ***A more certain investment climate***

Murray Irrigation Limited strongly rejects the proposition that the Cap has created a more certain investment climate for long-term investment.

This may be the case in South Australia, which will benefit from a limit on diversions in the upstream states at the same time as their Cap is set a level higher than their 1993/94 level of development and (probably) record use.

However, in NSW water users are currently in the midst of a complex and uncertain water policy environment. The Cap was the first of several water policies affecting water security. These policies have resulted in an **uncertain investment climate**. It is not possible to dissociate the impact of the Cap from these other water policy decisions and conclude it has created a more certain investment climate. Permanent water prices have recently fallen in NSW and the Victorian Murray.

In addition the way the Cap has been implemented in NSW has created significant hostility towards both the Cap and the NSW Government from the irrigation community. This conflict has acted to erode the farming sector's appreciation of any potential benefits of the Cap. If the broader NSW irrigation community were aware of the low levels of Queensland Cap compliance and the high South Australian Cap relative to 1993/94 water use there would be overwhelming rejection of the Cap. This outcome would be to the detriment of the health of the Murray-Darling Basin.

The extent of the water policy decisions that will affect the security of Murray Irrigation Limited's entitlements is outlined below;

- NSW environmental flows policy;
- MDBC environmental flows for the Murray River;
- *Water Administration Bill 2000*;
- Corporatisation of the Snowy Mountains Scheme;
- Environmental flows for the Snowy River;
- NSW Small Dams Policy; and
- Cap compliance in Queensland, NSW and Victoria.

In addition the water availability to Murray Irrigation Limited shareholders is also reduced by the following water policies;

- Implementation of the Cap on the basis of entitlement not history of use – two thirds of Murray Irrigation Limited's shareholders have a history of water use above the Murray Valley Cap.
- Unfair trade restrictions that are in conflict with the with the Council of Australian Government's (COAG) water reforms, often endorsed by the state jurisdiction have been identified but no action has been taken to remove them; and
- The blunt introduction of carryover for individual licence holders which minimises the socialisation of water entitlements between years.

The implementation of a property rights regime, which provides water users with certainty that water security will not be eroded without appropriate compensation or offsets is necessary to improve the investment climate.

It also needs to be recognised that one of the consequences of reduced water availability to existing farm businesses is a reduced capacity and

willingness to make long-term investments to improve management of the farm's natural resources. In the irrigation areas failure to control groundwater rise will have long-term negative impacts on Murray River salinity.

Murray Irrigation Limited considers that the continued investment in irrigated agriculture, which is also driving regional development is a reflection of the opportunities and potential returns offered by irrigated agriculture relative to dryland agriculture, not a result of the implementation of the Cap.

**Murray Irrigation Limited recommend that the MDBC and jurisdictions focus on developing a better understanding of the factors that influence investment in irrigated agriculture at both a micro and macro level.**

Water is one of a number of inputs to farm businesses. A robust analysis and understanding of these factors will improve the Project Board's and jurisdiction's ability to make sound policy decisions.

**Murray Irrigation Limited recommends both the MDBC and jurisdictions develop a mechanism that usefully includes the knowledge and skills of the private irrigation sector to support public sector policy development.**

Murray Irrigation Limited recommends the MDBC and jurisdictions review the extent of trade barriers and make enforceable recommendations to remove impediments.

## 5. Equity

In the NSW Murray Valley, Government and the community have devoted significant resources (both human and financial) to the conflict associated with Cap implementation. Existing irrigators are disadvantaged relative to sleeper/dozer licence holders by the Cap implementation rules.

Further failure to adequately address the equity issues in the NSW Murray Valley will place significant adjustment pressure on Murray Irrigation Limited's shareholders. This will result in a reduced ability to manage the impact of reduced water availability that may be associated with environmental flows in the Murray River.

The failure of the NSW Government and the Murray-Darling Basin Ministerial Council to put in place a suitable process to resolve the intra-valley equity issues is a significant obstacle to establishing constructive relationships between jurisdictions, water users and the MDBC. Failure to address this issue at a Ministerial Council level will result in continued lack of trust and cooperation between jurisdictions and water users, reducing the effectiveness of the Murray-Darling Basin initiative.

This review was an opportunity for the Project Board to recognise the scale and importance of intra-valley equity issues. It also provided an opportunity to the Project Board to recommend to the Ministerial Council that jurisdictions be required to put in place a better process to resolve intra-valley equity issues.

**Murray Irrigation Limited recommends the Ministerial Council require jurisdictions put in place a fair and equitable process for resolving intra-valley conflicts. This process should;**

- **Provide the multiple parties involved with equal opportunity to influence resolution of the conflict;**
- **Include an independent mediator;**
- **Require the provision of robust information that is understood by the parties involved; and**
- **Require the development and implementation of a comprehensive communication plan.**

## 6. Implementation and compliance

The Independent Audit Group report is an audit of the jurisdiction's Cap compliance mechanisms. It is not an audit of water users.

**Murray Irrigation Limited recommends the Independent Audit Group and the MDBC emphasise this point when communicating with stakeholders including the media and politicians.**

The MDBC also need to be more explicit in the different ways the Cap has been applied in each State and within valleys and the consequences of the different methods on water users.

For example;

Cap compliance in South Australia will not involve existing water users entering the water market to maintain 1993/94 water use. In contrast Cap compliance in the NSW Murray Valley will require Murray Irrigation Limited shareholders entering the market to maintain 1993/94 levels of development.

A knowledge of these differences explains why the Cap is perceived as a significant and often negative issue in the NSW Murray Valley.

**Murray Irrigation Limited supports the Project Board's recommendation that a higher priority be given to finalisation of the models for measuring Cap compliance.**

**Murray Irrigation Limited recommend the MDBC and the Independent Audit Group place greater emphasis on ensuring the models being used by jurisdictions are robust.**

Anecdotal evidence of irrigation developments in Victoria does not support the alleged exemplary performance of Victoria as reported in the Independent Audit Group report (MDBC 1999). In light of the widespread drought in the Victorian Goulburn and Murray catchments the Independent Audit Group report on Victorian compliance, borders on sycophancy. Observations from Queensland question why the facade of compliance is even audited by the Independent Audit Group.

**Murray Irrigation Limited request the Independent Audit Group reporting of Cap compliance by jurisdictions be more transparent.**

The current arrangements for Cap compliance are also likely to place all the pressure for adjustment that results from increased diversion on unregulated rivers on regulated water users.

In some valleys increased diversions from unregulated streams is likely to be significant, especially when viewed against 1994 benchmark levels.

**Murray Irrigation Limited requests the Project Board further investigate the need for Cap compliance based on separate regulated and unregulated water use.**

## 7. Schedule F

Murray Irrigation Limited supports the importance of finalising Schedule F. An effective tool for measuring Cap compliance on a valley by valley basis is essential and should be necessary to meet Government due diligence requirements.

It is a travesty of administration that the Cap is not properly measured.

Increased diversion and non-Cap compliance in individual river valleys will have third party impacts on downstream river valleys and on the security of other water users in the Murray-Darling Basin.

**Murray Irrigation Limited recommend water diversions be used to measure Cap compliance and that Cap compliance should involve no erosion of end of system flows.**

**Murray Irrigation Limited recommend the Project Board investigate Cap compliance benchmarks that also include the Salinity and Drainage Strategy benchmarks for both tributary water use and salinity contributions.**

Consideration should be given to the salinity targets currently being developed by the MDBC and NSW being linked to Cap compliance.

**Murray Irrigation Limited do not support the removal of end of system flows from Schedule F until it is proved that each valley has adequate modelling to evaluate Cap compliance and measurement of diversions including water harvesting to guarantee no erosion of end of system flows.**

**Murray Irrigation Limited supports continuation of Cap compliance to be based on cumulative Cap credits.**

In NSW the only valleys with a cumulative Cap credit are the Murray and Lower Darling, all other valleys have Cap debits.

**Murray Irrigation Limited does not support re-setting the commencement date for accounting for diversions under the Cap to start with the 2000/01 water year, to do so raises the obvious question why not 2010.**

Murray Irrigation Limited support remedial actions where the Cap has been exceeded to bring the valley to cumulative diversions that are in balance with the Cap.

Murray Irrigation Limited recognises that Cap compliance measures need to provide the rigour necessary to ensure the jurisdiction is committed to achieving Cap compliance. Murray Irrigation Limited

considers the Project Board should make a strong recommendation on non-compliance.

However, it needs to be recognised that Cap compliance is likely to involve significant adjustment at a farm business level. Sufficient time and resources need to be provided to water users by jurisdictions to support adjustment to the new water resource sharing arrangements that are necessary to achieve Cap compliance within individual valleys.

## **8. Sustainable rivers audit**

The proposed River Audit is likely to duplicate the monitoring and evaluation of the NSW environmental flow policy. The Murray-Darling Basin Ministerial Council and jurisdictions should require that resources invested by Government and communities in monitoring river health are used effectively and combined to produce valuable and comparable data.

**In the case of the Murray this would be best achieved by one comprehensive program that is independently audited and conducted through the MDBC.**

Where it is necessary to have two programs it is essential that the MDBC and jurisdictions ensure the programs are consistent so they add value to each other but avoid duplication.

It is also essential this process is transparent, involves independent scientific assessment and includes clear definition of the parameters being audited. Timely reporting is also necessary.

Murray Irrigation Limited has initiated discussions with the Prime Minister, State Premiers and Natural Resource Ministers to gain support for an independent audit of Murray River health. This proposal is currently being developed and is particularly relevant to the proposed sustainable rivers audit.



## 9. Conclusion

Managing competing needs for water, a finite but renewable resource is a complex and difficult task. The consequences of water policy decisions made by Governments on both regional communities and the environment are significant. The potential for political expedience is high.

Murray Irrigation Limited looks to the Murray-Darling Basin Ministerial Council to lead robust decision-making that is based on the best available information, transparency and fair recognition of existing water users investment.

The Review of the Operation of the Cap is an opportunity for the Ministerial Council to do this by requiring jurisdictions improve their management of Cap implementation and compliance including a mechanism for resolving intra-valley conflicts, greater transparency and provision of better information. Failure to grasp this opportunity will reduce the effectiveness of the Murray-Darling Basin initiative.

Murray Irrigation Limited continues to be concerned that the Cap will be rigorously applied in the NSW Murray Valley whilst diversions continue to grow in other states and other NSW river valleys. This review provides Murray Irrigation with little confidence this situation will be addressed in the future. Murray Irrigation Limited considers this situation unacceptable and needs to be addressed by the Ministerial Council as a priority.

## References

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(MDBC 1995). An audit of water use in the Murray-Darling Basin. Murray-Darling Basin Commission: Canberra.

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(MDBC<sub>b</sub> 1999). The Salinity Audit of the Murray-Darling Basin. Murray Darling Basin Commission: Canberra.