



Minister for Water Resources

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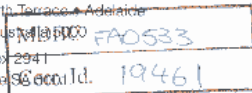


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33/0983

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Dear Sir

Review of the Operation of the Cap

Please find attached a submission from the South Australian Government in response to the draft report on the Review of the Operation of the Cap. The submission draws together the views of all relevant agencies and emphasises the importance we place on the Cap as a significant step towards sustainable use of the Murray-Darling system.

If you have any queries on this matter please contact Mr Paul Harvey on (08) 8204 9137.

Yours Sincerely

HON MARK BRINDAL MP
MINISTER FOR WATER RESOURCES
MINISTER FOR EMPLOYMENT AND TRAINING
MINISTER FOR YOUTH

23 / 7 / 2000

Enc.

**Department for Water Resources
South Australia**

**COMMENT ON THE REVIEW OF
THE OPERATION OF THE CAP 2000**

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1. INTRODUCTION

This report presents a consolidated submission from the South Australian Government to the Review of the Operation of the Cap.

This report outlines comments in response to the Project Board positions as listed in the response sheet of the Draft Report and addresses other issues of specific interest to South Australia.

Overall, South Australia's access to water resources from the Murray-Darling system will be protected by the implementation of the Cap, and we are probably already benefiting from its effects. Limits on diversions in the upper parts of the catchment benefit downstream users by increased security of supply and improvements in water quality.

South Australia firmly believes that the full implementation of the Cap should occur as soon as possible but accepts the recommendation for Cap accounting to begin with the 2000/01 water year subject to the condition that implementation includes "payback" of Cap overuse.

Despite the positive effects of Cap implementation, it is seen as only one part of a larger picture, which needs to be addressed if the continuing decline in river health is to be effectively prevented and the sustainability of the Basin land and water resources are to be maintained. Catchment issues that have not been resolved and included within the Cap will continue to cause a reduction in the security of water supply and a decrease in quality. Possible activities which are not covered by the Cap on diversions as it is currently implemented and threaten the security of supply and quality of water for downstream users include:

- changes to the land use in upper catchment areas, such as tree plantations, resulting in a reduction in yield;
- increases in the total volume of farm dams in the upper catchment;
- increased use of groundwater in the upper catchments, leading to reduced summer stream flows;
- increased diversion of overland and floodplain flow, resulting in lower flow peaks and annual average flows downstream and
- increased diversion of water for environmental purposes.

South Australia would be in favour of any program aimed at maintaining Basin sustainability and acknowledges the potential need for cuts in water use, among other programs, to achieve this.

As more information emerges our ability to ascertain sustainable limits can only improve. Indeed, anecdotal evidence at present strongly indicates we are using the resources of the Murray-Darling Basin beyond its sustainable limit. While there is a limited understanding of the long term effects of high diversion levels in the Basin and a current lack of quantifying data to support or negate our current diversion limits, it would be fair to assume that Cap limits are not likely to increase into the future.

2. RESPONSE TO CAP PROJECT BOARD POSITION

The comments in this section relate to the specific position outlined by the Project Board on issues related to implementation of the Cap.

Board Position

The Cap has been an essential first step in providing for the environmental sustainability of the river system of the Basin. Without the Cap, there would have been a significantly increased risk that the environmental degradation of the river system of the Murray-Darling Basin would have been worse.

South Australian Response

The Cap is vital for South Australia to provide security of both flow and quality of water in the lower reaches of the River Murray. Without the Cap, there is no doubt the quality of water in the River Murray, especially salinity, would become a far more serious problem than at present in terms of environmental impacts, treatment requirements and associated costs to both agriculture and urban development.

The average salinity of water entering South Australia in the River Murray is already 400 EC and is predicted to approach the level at which impacts on horticultural crops start to occur (650 EC) by the year 2100 unless remedial action is taken. This prediction assumes that the Cap on diversions is fully implemented. This increase in salinity would be exacerbated if the Cap was not implemented and there would be a significant potential for serious impacts on the profitability and viability of horticultural industries in South Australia.

In addition as the water supply for Metropolitan Adelaide and associated country areas is reliant on the River Murray to supplement an average 50% of the supply (100% in other rural centres such as the *Iron Triangle*), the quality of water in this end of the river is vital to the South Australian community. The fact that water from the river is used not only for irrigated agriculture but also to sustain significant urban populations present an added complexity to the necessity of the River Murray in this State. Such complexities are not an issue in the upstream States where other opportunities exist to capture water resources in more suitable geographic environments to support urban populations.

South Australia very strongly supports the maintenance of the Cap.

Board Position

There is no certainty that the Cap on diversions at its current level represents a sustainable level of diversions – the level at which it is set being that which existed at the time when it was decided to introduce a Cap. Further, the Project Board recommends that as better information becomes available, the level at which the Cap is set should continue to be refined to reflect our improved understanding.

South Australian Response

Given the precautionary principle and the fact that anecdotal evidence suggests our current diversion levels are already likely to be too high, limits on diversions are more likely to decrease than increase. However, considering the Project Board recommendation that the Cap should reflect our continually improved understanding of sustainable diversion limits, South

Australia agrees that future increases or decreases in Cap limits should reflect this understanding.

Considering that South Australia has had an effective capping policy within this State since the 1970s, which was aimed at restricting water use to a sustainable limit, this recommendation is not likely to have as many implications for South Australia as it may have for upstream States.

However, South Australia potentially stands to benefit from increases in flow and water quality if more water is to be left to the environment from upstream catchments.

Board Position

There is compelling evidence that the Cap has already delivered significant economic and social benefits to the Basin community and that the net benefits will increase over time.

South Australian Response

There have been a number of benefits to the Lower Murray-Darling Basin and to the people who are reliant on its water resources through the introduction of the Cap. Security of supply and water quality are two concerns which, as a result of the introduction of the Cap, have been protected from further degradation. It would be reasonable to estimate that these concerns would have deteriorated further if the Cap not been set in place.

However the lag effects of past land and water practice develop, further environmental degradation is yet to be fully realised.

Further, the true benefits of the Cap may not be obvious until the whole of the Murray-Darling Basin is brought into compliance with the Cap. It is difficult to see the benefits when diversions upstream have increased so significantly since 1994.

Board Position

Results of research performed on several systems across the Basin reflecting diverse agricultural practices and climate conditions make it clear that, in the absence of the Cap, the erosion of security of supply for irrigators and other users would be significant.

South Australian Response

South Australia has only high security licences where water users can expect to receive 100% of their allocation every year.

While security of supply is considered safe in this State, the Cap is seen as a further protection measure to prevent future erosion of this security. However far more importantly the Cap provides a measure of protection to the above entitlement flows to South Australia.

Board Position

Through guaranteeing the security of supply at the valley level, the Project Board views the Cap as having provided a more certain climate for long-term investment and development, particularly in high value agriculture and value adding processing, as well as providing benefits to the environment.

South Australian Response

Through the firming up of supply security, the Cap has provided a development climate conducive to long-term investments. While much development has occurred as a result of water efficiency savings, there will come a point in time where development is more likely to occur as a result of trade. Any developments in water trading arrangements will need to be closely monitored. However, in the current economic and environmental climate, high value agricultural development has delivered many social and economic benefits. Irrigators need to engage in optimum land and water management practices to effectively compete in the market place and to ensure the long term viability of their business. The environment also benefits.

As South Australia deals primarily with high value horticulture, long term sustainability and business viability are significant issues in this State. Therefore protection of supply security is guarded with vigour. However, it is likely that water quality will prove to be a more significant issue in this State in the not too distant future.

Board Position

The Cap has provided a mechanism for restraining, in an orderly fashion, growth in diversions while enabling economic development to proceed.

South Australian Response

Through focussing on water efficiency and water trading opportunities, economic development has been encouraged while still restraining overall growth in diversions. South Australia strongly supports this position.

Board Position

The Project Board recognises that a strong positive conclusion regarding the Cap is not perception of every stakeholder in the Basin. However, the Project Board concludes that the overall benefit of the Cap, especially for ensuring the security of supply at the valley level and for providing an environment within which water trading and related reforms can be developed, has been a positive one.

South Australian Response

South Australia considers the overall benefit from the implementation of the Cap as very positive. The benefits of increased security of supply and the maintenance or potential improvement in water quality into the future compared with a 'no Cap' situation provides some peace of mind for the South Australian community. While some costs may be foreseen where water may have to be purchased into the State, it is thought the long-term sustainability benefits that have been initiated by the implementation of the Cap outweigh any potential costs.

Board Position

Equity issues (notably Cap arrangements for QLD and the ACT) of long standing duration require urgent resolution. In addition, other recently identified equity issues (floodplain and overland flow diversions, farm dams and tree plantations) also require attention. The effective management of these issues will necessitate a total catchment management approach that embraces both surface and groundwater resources.

South Australian Response

The inclusion of floodplain and overland flows in the Cap is likely to involve an improvement to water quality for South Australia, especially during high flow events. Due to routing of the flow downstream, there should also be an increase in the total annual volume of water flowing through the lower River Murray.

Farm dams also impact on the quantity of runoff from catchments that would otherwise reach the river channel. Unfortunately there are insufficient data at this stage to include this volume of water in the limit to diversions in the upper catchments, and if left unchecked, this will significantly reduce flows, and water quality in the Murray-Darling Basin.

Similarly, an increase in tree plantations with high water requirements and interception rates in the upper catchments have the effect of decreasing the volume of water that reaches the river. Tree plantations within the lower catchment where rainfall is significantly lower may be beneficial by lowering the groundwater table, and possibly reducing the salt loads that enter the river. Any reduction in salinity from tree plantations in the lower Murray, however, is only expected to be evident in the longer term.

Groundwater use is not a significant issue within the Murray-Darling Basin in South Australia. However, overuse of groundwater resources in the upper parts of the basin may significantly reduce base-flow and therefore summer flows in the River Murray, potentially increasing problems with algal blooms and salinity. South Australia considers the inclusion of groundwater use in the implementation of the Cap essential.

Increasing diversions for environmental purposes (eg the Edward – Wakool Rivers Floodplain Management Strategy proposals to increase the frequency of flooding of over 2 000 Ha) will impact on above entitlement flows, particularly flood flows, to South Australia. Effectively activities such as these will affect the “security” of environmental flows within South Australia.

South Australia strongly supports the extension of the Cap to include floodplain and overland flow diversions, farm dams, increased environmental diversions, groundwater use and revegetation programs.

Board Position

Where equity issues have been raised outside the scope of the Review of the Operation of the Cap the issues have been referred to the relevant jurisdiction for consideration and reply. (i.e. implementation of the Cap within valleys. Particularly, NSW raised the issue of licensed entitlement versus historical use where water use needs to be reduced).

South Australian Response

Not applicable. There were no intra-state equity issues raised in South Australia.

Board Position

The work of the Independent Audit Group (IAG) on the ongoing implementation of the Cap and compliance of actual diversions with Cap diversions has provided a clear direction for the finalisation of the implementation phase of the Cap. The Project Board generally supports the IAG recommendations.

South Australian Response

South Australia supports the IAG recommendations.

Board Position

Effective compliance tools (computer simulation models) have not yet been developed and the Project Board recommends that a high priority be given to the finalisation of these models.

South Australian Response

South Australia agrees that the implementation of the Cap is dependent on the finalisation of compliance tools, therefore the sooner these computer models are completed, the sooner diversions under the Cap can be accurately accounted.

Board Position

Victoria and South Australia have complied with the Cap, while Queensland and the ACT are yet to complete the establishment of their respective Caps. It is apparent that in Queensland there has been significant growth in storage that will impact on the water available for alternative consumptive and environmental purposes. While in New South Wales, the Cap has been breached in the Barwon-Darling system.

South Australian Response

South Australia has strong views on the perceived level of action and compliance regarding the Cap, particularly in NSW and Queensland. While Queensland has had a moratorium on the provision of new licences, development in that State has surged ahead since 1994 through activation of "sleeper" licences and new diversions which do not require licences. This development has generated obvious concern from downstream States. The recommendation by the IAG to prohibit further growth in diversions from Queensland valleys while arrangements to clarify the Cap are being made is strongly supported by South Australia.

South Australia is of the view that NSW should "make good" (as defined in Schedule F) their Cap breach in the Barwon-Darling system. However, it seems there is some confusion over exactly what "make good" means. At a recent Water Audit Workers Group meeting (Tatura, 21 June 2000) NSW expressed that they will attempt to meet their Cap commitments the following year without returning the deficit they were responsible for in the previous year. This view seemed to be at odds with the views of other States. It is South Australia's firm belief that any deficits accrued in breach of the Cap should be fully accounted for and repaid to the River.

Board Position

The most important challenge in Cap implementation is to finalise the arrangements under "Schedule F – Cap on Diversions" to the Murray Darling Basin Agreement. This schedule is the primary tool for defining Cap arrangements especially those concerned with assessing compliance and its consequences.

South Australian Response

Schedule F to the *Murray-Darling Basin Agreement* defines Cap arrangements, especially those concerned with assessing compliance and its consequences, and therefore the

finalisation of arrangements under Schedule F is fundamental to the implementation of the Cap. South Australia strongly supports the finalisation of arrangements under Schedule F including “payback” provisions to allow convincing implementation of the Cap as soon as possible.

Board Position

With the intent of improving the operation of the Cap through the development of fair and meaningful compliance arrangements, the Project Board invites comments on the following modifications to Schedule F which have been recommended by the IAG.

South Australian Response

- **Removal of references to end-of-valley flows as a method for Cap compliance.**

It is considered that quantifying a River Valley Cap in terms of an end-of-valley flow regime is not practical, as there is currently no effective measure of performance against which annual diversions could be assessed. It is considered that the Cap should be assessed in terms of actual diversions in the first instance even if suitable end-of-valley flow performance measures are developed in the future.

South Australia agrees that references to end-of-valley flows should be removed from Schedule F.

- **Arrangements for remedial actions in the case of Cap exceedence. The recommendation of the IAG is that States be required “to ensure that cumulative diversions are brought back into balance with the Cap.”**

South Australia contends that the implementation of remedial actions in case of Cap exceedence is essential for effective Cap implementation. With no enforcement of compliance, when the Cap is exceeded there is little incentive to correct past breaches if the notion of exceedence amounts to little more than a “slap on the wrist”.

- **Re-setting the commencement date for accounting for diversions under the Cap to start with the 2000/01 water year.**

South Australia is keen to have implementation finalised as soon as possible and believes that jurisdictions should be held accountable for actions since the Cap was first agreed. However it is recognised that significant modelling packages have to be developed and Cap arrangements finalised for other States before diversions can be fully accounted.

South Australia supports the resetting of the commencement date for Cap accounting to begin with the 2000/01 water year on the condition that implementation includes “payback” of Cap overuse. In addition it should be made clear that further extensions to the commencement of Cap accounting should not be permitted.

Board Position

With the implementation of the Cap nearing completion in most jurisdictions, there is now the opportunity to take the “next step” and to consider the environmental outcomes of the Cap from a whole of Basin perspective. The Project Board supports the introduction of a “Sustainable Rivers Audit” which could cast the Cap as an input to Basin health, rather than an outcome in itself. Whereas the Cap is seen as the first step towards achieving the longer-term objective of the

'Initiative', a "Sustainable Rivers Audit" can be viewed as the next step in the process of achieving this objective.

South Australian Response

An environmental audit of the Murray-Darling Basin will result in a much greater understanding of the basin as a whole, and it is likely that this understanding will be reflected in a lowering of the Cap in some valleys. On the whole, this may lead to an improvement in water quality and increased flows in the lower reaches of the River Murray. It is accepted that such an environmental audit may result (in the long term) in reductions to allocations in South Australia.

It is also recognised that anticipated benefits resulting from such an audit will be derived in the longer rather than short term. The cost of a regular Sustainable Rivers Audit could be substantial and care will be needed to ensure relevant, reproducible and cost effective indicators are selected.

However South Australia strongly supports the concept of a sustainable rivers audit.

3. OTHER COMMENTS

Comments on other issues raised in the report.

South Australia agrees with the Project Board that stakeholders need to be better informed and engaged regarding major policy initiatives concerning the implementation of the Cap, particularly where water trade is concerned.

South Australia supports the six principles against which equity and consistency issues are to be assessed:

- *No further change be made to flow regimes that would contribute to deterioration of water quality and environment protection;*
- *Water allocations be made with extreme sensitivity to the effects on the environment;*
- *Water is allocated to the highest value use;*
- *Statutory and agreed property rights be recognised;*
- *Water management processes be transparent and auditable; and*
- *A system of administration be implemented which is easily understood and which minimises time and cost.*

Equity issues should be resolved in a way that is sensitive to the environment. South Australia, as the ultimate downstream user of the River is arguably most sensitive to any impacts, therefore, any measures that maintain or improve water quality and provide for environmental protection are supported, in principle, by this State.

South Australia has some concerns regarding the Snowy River transfers. A matter which the IAG has identified as being most appropriately dealt with by the participating States, namely Victoria and NSW. However, any diversions from the River Murray into the Snowy River will also have an affect on downstream users, including South Australian water users. It is recommended that the phrase "*individual participating States, namely NSW and Victoria*" be changed to read "*individual participating States, and other affected States, namely NSW, Victoria and South Australia.*" This may allow further comment from South Australia on this matter.

The IAG recommends that the States and the Australian Capital Territory, through the Murray-Darling Basin Commission, establish a set of trading rules to enable free trade within and between valleys and, within and between States. South Australia supports this recommendation on the understanding that the trading rules take into account issues such as losses and routing along the main channels and impacts on downstream water quality of inter-basin transfers (eg between the Murrumbidgee and Darling Rivers).

4. CONCLUSIONS

South Australia strongly supports the Cap and the position of the Project Board.

South Australia considers that implementation of the Cap must be viewed as an extremely high priority and that a comprehensive environmental audit which is aimed at taking the Cap "to the next step" should be initiated as soon as possible.

As the ultimate downstream user of the Murray-Darling Basin and considering the diverse range of uses of River Murray water in this State, South Australia has a very strong focus on the sustainability of the River system. While security of supply in terms of quantity is very secure in this State, quality issues are in a more precarious state.

In summary South Australia supports:

- the statements that the Cap has brought and will bring further economic benefit to the Murray-Darling Basin and the people dependent on it for water supply;
- the stakeholders in further discussions of the Cap;
- the inclusion of floodplain and overland flow diversions, land use changes resulting in a decrease in yield, farm dams and groundwater use in the Cap as a means of regulation;
- finalising the modelling tools to allow accurate accounting of diversions as soon as possible;
- prohibition of further growth in diversions while Queensland finalises its Cap arrangements;
- establishment of fair trading rules within and between States in association with the MDBC;
- the completion of Schedule F including the three specified changes; and
- the establishment of a regular Rivers Audit of the Murray-Darling Basin.