

**REVIEW OF THE  
OPERATION OF THE CAP  
EQUITY**

**REPORT BY THE INDEPENDENT AUDIT GROUP**

**FEBRUARY 2000**

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## EXECUTIVE SUMMARY

A number of equity issues were identified in the IAG's Setting the Cap report. This Review has highlighted to the IAG that there has been progress in clarifying the outstanding State and ACT equity issues.

**Queensland** argued in 1996 when the Cap was introduced that there was still scope for development and that water for diversion would be determined following a Water Allocation and Management Planning (WAMP) process. Queensland has advised that draft plans will be available for community consultation from mid March with advice presented to Council on Queensland's preferred valley Cap limits for most valleys in July 2000. This process will enable a Cap to be established for Queensland.

Queensland also propose to introduce legislation to manage the State's water resources including floodplain (overland) flows in line with COAG principles and Cap requirements.

In the case of **New South Wales** the Pindari Dam equity issue is expected to be finalised by June 2000.

**Victoria** is addressing its outstanding Lake Mokoan equity issue as part of its work on Bulk Entitlements for the Broken Valley. This will not be completed until June 2001.

The **South Australian** equity issue was addressed and resolved as a result of the IAG 1996 report 'Setting the Cap'.

The **ACT** commenced participation in the MDBC under a Memorandum of Understanding in 1998 and a Cap has yet to be established. The ACT argues that on equity grounds it is entitled to more water than that associated with the 1993/94 level of development used to define the Cap.

No major new interjurisdictional equity issues were raised during the Review.

Specific equity issues considered included farm dams, both for floodplain (overland) diversions and upper catchments. These are interjurisdictional and intra valley equity issues with downstream users impacted by lower security, reduced ability to manage environmental issues and the principle of whether extra use from dams should be included within Caps.

An emerging issue in some catchments is the increase in tree plantations. These reduce runoff and have similar impacts as upper catchment farm dams.

A number of stakeholders in their submissions raised equity issues. The vast majority related to New South Wales and intra valley issues particularly lack of emphasis on history of use in

distributing available resources under the Cap and the concurrent environmental flows initiative. These issues are outside the jurisdiction of the Commission.

The IAG have made a number of recommendations.

- i) *the MDBC note that the Cap component for Lake Mokoan is expected to be finalised by Victoria by June 2001.*
- ii) *floodplain and overland flows and diversions (where significant) be measured and included in the valley Cap;*
- iii) *a statutory basis for the management of floodplain and overland flows be provided in all jurisdictions with significant flows;*
- iv) *as a matter of principle, jurisdictions include farm dam water use in their Caps;*
- v) *each jurisdiction with significant growth in farm dams survey use and report on the expected quantum of use, cost of metering and reporting;*
- vi) *the MDBC in cooperation with member States and the ACT ascertain the extent of proposed tree plantation planting;*
- vii) *if tree plantations are expected to become significant, develop a strategy to manage the impacts on water flow, allocation, diversion and river health;*
- viii) *the MDBC note that the Cap component for Pindari Dam is expected to be finalised by New South Wales by June 2000;*
- ix) *the MDBC note that Council can expect to receive advice from Queensland on its proposed Cap limits for most valleys within the Basin by July 2000;*
- x) *the MDBC note that the Environmental Flows Technical Report for the Condamine-Balonne will be assessed by the Queensland EPA in line with terms of reference agreed between the EPA and the IAG;*
- xi) *the MDBC note that the Queensland government has proposed legislation to provide a statutory framework for water resource management that includes floodplain (overland) diversions and is consistent with the COAG and Cap principles;*
- xii) *the ACT submit to Council a firm proposal for a Cap for the ACT during the finalisation of the five-year Review of the Operation of the Cap;*

- xiii) the ACT proposal, in addition to testing against the six principles established by the IAG, consider downstream impacts on river health and diversions;*
- xiv) the ACT finalise negotiations on trading rules with New South Wales; and*
- xv) the individual stakeholder submissions and that of the CAC be referred to the appropriate State Governments for consideration.*

## 1. INTRODUCTION

The Murray-Darling Basin Ministerial Council at its June 1995 meeting made the strategic decision to introduce a Cap upon diversions of water from the Murray-Darling Basin.

A Cap on the volume of diversions associated with the 1993/94 level of development was seen as an essential first step in establishing management systems to achieve healthy rivers and sustainable consumptive uses.

The Council in resolving to cap diversions, saw the need to take account of any special circumstances and equity issues in examining the establishment of a Cap.

The IAG were appointed in 1996 and were required to examine ‘the special circumstances and equity issues previously noted by the Ministerial Council and advise on reasonable approaches to the Cap to take these into account’.

The particular equity issues addressed by the IAG included:

- a South Australian proposal to include an estimated 69 GL per annum of allocated but unutilised irrigation water and 50 GL for economic development within the South Australian Cap;
- Queensland’s proposals for further development;
- New South Wales proposals to include the enlarged Pindari Dam within the Cap limits for NSW;
- Victoria’s request for the consideration of the Lake Mokoan situation.

Following the participation of the ACT in the Murray-Darling Basin Commission in March 1998 there is also a need to consider an appropriate Cap for the ACT.

This report covers the status of each of these equity issues and additional strategic issues arising from the submissions. Intravalley equity issues have been referred to the respective State Government as they are beyond the role of the Murray-Darling Basin Commission.

## **2. TERMS OF REFERENCE**

The Murray-Darling Basin Commission (MDBC) provided the following terms of reference for the five-year Review of the Operation of the Cap:

To review the operation of the Cap (and, importantly, not the Cap itself) and provide suggestions for the more effective future operation of the Cap through obtaining independent assessments (involving the Independent Audit Group and partner governments to the initiative as appropriate) in each of the following areas:

### **Equity**

By addressing issues of equity that have arisen in the process of implementing the Cap (between river valleys within States and between States).

Main tasks:

1. Partner governments, and the CAC, are asked to identify any outstanding equity issues arising from the implementation of the Cap and may put at risk its future management:
  - (i) at a jurisdictional level (equity issues between jurisdictions that have arisen since the 1996 'Setting the Cap' report of the IAG);
  - (ii) within jurisdictions (equity issues between valleys that have now come to light);
  - (iii) between groups within valleys; and
  - (iv) in any other way that is relevant to the Cap.
2. The Independent Audit Group (IAG) will be engaged to review submissions received in this component of the Review, meet with partner Government representatives to discuss the submissions and providing independent advice on the equity issues raised.

### **3. REVIEW PROCESS**

The IAG has developed an open and accountable process in the conduct of its annual audits. A similar approach was utilised for this Review.

The IAG met with representatives of Commonwealth, States, the ACT and representatives of the Murrumbidgee irrigation area to discuss their respective submissions as they relate to the equity term of reference during the period 31 January to 3 February 2000. The IAG has also analysed the Community Advisory Committee's and individual stakeholder submissions for equity issues and possible options for addressing the issues.

Where equity issues raised were the clear responsibility of any one jurisdiction and outside the terms of reference for the IAG, the IAG has suggested the issue be addressed by that jurisdiction.

Following the meetings and review of submissions a draft report was prepared and circulated to the Commonwealth, States and ACT for comments on factual issues and preliminary findings. Such comments were considered by the IAG however all of the final findings and recommendations are solely those of the IAG.

## **4. EQUITY ISSUES**

### **4.1 Ministerial Council Decisions**

The Murray-Darling Basin Ministerial Council at its 6 December 1996 meeting addressed a number of equity issues and agreed on the following:

#### ***South Australia***

- i) the South Australian proposal to allocate an additional 50 GL per year for economic use not be approved as it is not compatible with water quality and river flow objectives;
- ii) the 69 GL per year increase in diversions expected from the uptake of water allocated for irrigation and previously used be included in the Cap.

#### ***Victoria – Lake Mokoan***

- i) the Lake Mokoan system qualifies for inclusion in the 1993/94 Cap;
- ii) the Cap be increased by the net consumptive use determined by an appropriate water allocation study;
- iii) on an interim basis, the Victorian Cap include 22 GL per year for Lake Mokoan.

#### ***New South Wales – Pindari Dam***

- i) in principle Pindari Dam qualifies for inclusion in the Cap; and
- ii) the Cap be increased by a net consumptive use determined by an appropriate water allocation study.

#### ***Queensland***

- i) agree, in consideration of the equity issues that the definition of the Cap allow for certain additional developments which have occurred since 1993/94 or which may occur and which are more fully discussed in ‘Setting the Cap’ report;
- ii) the Cap for Queensland be determined after the WAMP process is completed.

## **4.2 Progress in Implementation (Including New Issues)**

### **4.2.1 South Australia**

The South Australian equity issue has been finalised with 69 GL of water previously allocated for pumped allocation but not utilised included in the Cap. The only issue is the appropriate absolute definition for the pumped irrigation component which has historically been described as 90 percent of 489.6 GL. The 1998/99 IAG report recommended that this be set at 440.6 GL.

No new significant equity issues have been raised.

### **4.2.2 Victoria**

The Victorian submission raised a number of new issues including farm dams, and plantations.

#### ***Lake Mokoan***

Victoria argued successfully that the net consumptive use determined by a water allocation study be included in the Cap. On an interim basis 22 GL per year was included in the Victorian Cap.

The water allocation study is not yet complete but will be incorporated into the development of models and bulk entitlements for the Broken Valley. These are not expected to be completed before June 2001 as this has not been a priority as it accounts for less than one percent of the available resource.

#### ***Recommendation:***

- i) it is recommended that the MDBC note that the Cap component for Lake Mokoan is expected to be finalised by Victoria by June 2001.*

#### ***Farm Dams***

The farm dam issue was raised by a number of Victorian and New South Wales stakeholders. Particular issues raised included the perceived need for similar rules between States and the need to incorporate on-farm dam storage use in the Cap.

The IAG considers that there are two separate farm dam issues. The first relates to dams or tanks to harvest water from floodplain (or overland) flows. This is a common situation in the unregulated river valleys of New South Wales and Queensland. The second refers to farm

dams in the upper catchments of a number of valleys. Traditionally these have been used for domestic and stock water but increasingly are being constructed for irrigated agriculture.

### *Floodplain Harvesting*

There has been significant growth in floodplain harvesting in a number of Queensland and New South Wales river valleys since 1993/94. As the floodplain and river are contiguous, any increase in water harvesting from the floodplain reduces stream flow and the security of supply to environmental users. Floodplain harvesting in Queensland and New South Wales has not previously been recorded as a diversion and as a consequence is not part of the valley Caps. It also has historically not been measured or reported.

This issue has been recognised by both New South Wales and Queensland and there are proposals to include the floodplain flows and diversions into the models and allocation plans. Provision is also being made to provide a statutory basis for the allocation and management of floodplain flows.

A similar case can be made for overland flows.

### *Recommendations:*

#### *It is recommended that:*

- i) floodplain and overland flows and diversions (where significant) be measured and included in the valley Cap;*
- ii) a statutory basis for the management of floodplain and overland flows be provided in all jurisdictions with significant flows.*

### *Farm Dams*

The equity issue arising from increased diversions into farm dams upstream in catchments is the reduced runoff and flow to lower parts of the catchment. This reduces the level of security to downstream users and the ability to achieve environmental outcomes. This issue affects all States and the ACT but is of greatest interest to New South Wales and Victoria. Both States have either introduced legislation (New South Wales) or propose to provide a statutory basis for the allocation of water to off stream dams.

While it may be preferable to have uniform rules within each State and the ACT this is difficult to achieve. The issue of principle however for the Murray-Darling Basin Commission is that any increased use from farm dam diversions be included in the Cap limits. Implementation of the principle should however be dependent on the significance or otherwise of increased use as measurement and monitoring of use across a number of dams within valleys would be resource intensive. It would appear to the IAG appropriate for the

MDBC to accept the principle of water use being included within the Cap, to recognise that this may have downstream impacts and to encourage each jurisdiction to report on the magnitude of use from farm dams.

*Recommendations:*

*It is recommended that:*

- i) as a matter of principle, jurisdictions include farm dam water use in their Caps;*
- ii) each jurisdiction with significant growth in farm dams survey use and report on the expected quantum of use, cost of metering and reporting.*

***Plantations***

An emerging equity issue raised in submissions with the same implications as farm dams is the trend towards increased plantations. This trend follows a shift from native hardwoods to plantations and is generally focused on the higher rainfall component of catchments. It is generally accepted that plantations of most tree types significantly increase evapotranspiration compared to annual pasture with a reduction in runoff and accretion to groundwater. This could be seen as a beneficial impact in the control of salinity particularly dryland salinity or as significantly reducing riverflow thereby reducing security for downstream users and the ability to address river health issues. It has been estimated that 200,000 ha of plantations could reduce runoff by 400 GL per year. It would be appropriate for the MDBC in cooperation with member States and the ACT to ascertain the extent of proposed planting and to develop a strategy to manage the impacts (if significant) including decisions on water allocation for plantations and Cap inclusion.

*Recommendations:*

- i) it is recommended that the MDBC in cooperation with member States and the ACT ascertain the extent of proposed tree plantation planting;*
- ii) if tree plantations are expected to become significant, develop a strategy to manage the impacts on water flow, allocation, diversion and river health.*

**4.2.3 New South Wales**

***Pindari Dam***

The Ministerial Council agreed in principle to include Pindari Dam in the New South Wales Cap for the Border Rivers with the specific quantum to be determined following a water allocation study. This issue has not been a high priority to date but has now been included in

the IQQM model being developed for the Border Rivers. The ability to finalise the model follows agreement between the governments of Queensland and New South Wales that further growth in diversions in regulated streams of the Border Rivers will not be allowed.

It is expected that a specific Cap component for Pindari will be finalised by June 2000.

*Recommendation:*

- i) *it is recommended that the MDBC note that the Cap component for Pindari Dam is expected to be finalised by New South Wales by June 2000.*

***Environmental Flows***

New South Wales has raised the issue of equity between States arising from increased environmental flows. The IAG have discussed this issue in the report on 'Implementation and Compliance'.

**4.2.4 Queensland**

Following the Murray-Darling Basin Ministerial Council's earlier decisions the Cap is to be established following completion of the various water resource planning studies that will provide the basis for decisions on the balance between diversions and environmental needs.

These studies include a Flow Management Plan for the Border Rivers (in cooperation with New South Wales), a Water Allocation and Management Plan for the Condamine-Balonne and Water Management Plans for the Moonie and Warrego/Paroo/Nebine.

A comprehensive update of the status of these processes was provided as of September 1999 in the 'Review of Cap Implementation 1998/99'.

In this report an update of the status of the various processes is provided.

***Border Rivers***

The Border Rivers IQQM has been completed as has a report on 'Current Ecological Condition of the Border Rivers'.

New South Wales and Queensland have assessed water use and flow performance. This work indicated that the current level of water use may result in unacceptable long term ecological impact at the end-of-system at Mungindi.

As a result the governments of New South Wales and Queensland agreed in November 1999 that further growth in water use that leads to deterioration of the end-of-system flows would not be supported.

The draft Flow Management Plan is expected to be released for public consultation in late 2000 with a Queensland position available for Council's consideration by July 2001.

### ***Condamine-Balonne***

There has been significant progress in developing the Condamine-Balonne draft WAMP. The report of the Technical Advisory Panel has been finalised – 'Environmental Flows Technical Report'. The report indicated that while the Upper Condamine was generally in good to fair condition the lower Balonne was in poor to fair condition.

The draft WAMP is expected to be released in mid March for public consultation with advice to Council on this component of the Queensland Cap by July 2000.

### ***Moonie and Paroo/Warrego/Nebine***

As previously advised in the 1998/99 Review of Cap Implementation the Water Management Plans are expected to be sufficiently advanced by June 2000 to provide estimates of sustainable diversions. Refinement may be required once detailed hydrological models are available.

Advice on this component of the Queensland Cap is also expected to be available for Council in July 2000.

### ***Audit of the WAMP, WMP's and FMP***

Council agreed that the planning process and its outcomes be audited by the IAG. The IAG has agreed with the Queensland EPA on terms of reference for a review of one key component of the Condamine-Balonne WAMP. The review of the Environmental Flows Report will be conducted by the Queensland EPA with a copy of the review provided to the IAG. The IAG also expects to comment on the finalised plans as part of the process leading to Council consideration of the Queensland Cap components.

The IAG has previously supported the WAMP and associated processes as an appropriate basis for balancing diversions and environment. In doing so the IAG noted that it must include:

- in-stream use in Queensland and downstream;
- licensed diversions from streams and the currently unlicensed floodplain and overland unlicensed water harvesting;

- a management regime that includes pricing, property rights, measurement (metering) and reporting;
- assessment of downstream flows and diversion impacts;
- application of the precautionary principle.

The Queensland Government has released an exposure draft bill which will provide a comprehensive statutory framework for the management of the State's water resources including proposals to license floodplain and overland diversions.

While WAMP and other plans will establish the proposed limits to diversion and end of valley flows operationalising of these plans will be via Resource Operation Plans and full implementation could take up to a further 18 months.

### ***Conclusions***

Substantial progress within the last 12 months is expected to result in the draft WAMP for the Condamine-Balonne being released for public consultation in April, the draft Water Management Plans for the Moonie in March and Warrego/Paroo/Nebine by mid May and the draft Flow Management Plan for the Border Rivers by late 2000.

Council can expect to receive advice from Queensland on the proposed Queensland Cap and most of its valley components by July 2000.

The test that will need to be applied is whether the proposed Cap provides a balance between diversion and environmental objectives and downstream impacts. Proposed legislation will provide the statutory basis for the management of the State's water resources in line with COAG principles.

The perceived slow rate in completing WAMP and the other planning studies and the growth in storages and diversions was of major concern to a number of stakeholders as reflected in submissions from throughout the Basin.

### ***Recommendations:***

*It is recommended that the MDBC note that:*

- i) Council can expect to receive advice from Queensland on its proposed Cap limits for most valleys within the Basin by July 2000;*
- ii) the Environmental Flows Technical Report for the Condamine-Balonne will be assessed by the Queensland EPA in line with terms of reference agreed between the EPA and the IAG;*

- iii) *the Queensland government has proposed legislation to provide a statutory framework for water resource management that includes floodplain (overland) diversions and is consistent with the COAG and Cap principles.*

#### **4.2.5 Australian Capital Territory**

The ACT became a participant in the Murray-Darling Basin Commission under a Memorandum of Understanding in March 1998. At that time the ACT Government undertook to participate in the Cap initiative. There has been no decision on the ACT's Cap.

The IAG in its 'Review of Cap Implementation 1998/99' examined four options for the Cap under consideration by the ACT. At that time the IAG considered that two options – 29 GL per year representing the 1993/94 level of water use in the ACT; and 172 GL per year which was the residual water available after allowing for environmental flows were not appropriate options when compared with the principles and procedures arising from Cap decisions for other urban centres. In turn the IAG recommended that:

- i) the ACT bring forward a considered proposal on the Cap in the context of six principles used to set the Cap in other jurisdictions as part of the five-year Review of the Operation of the Cap.
- ii) For a Cap to be effective in the ACT, the ACT must have access to a broader water trading environment and that arrangements for water trading between the ACT and NSW be agreed as part of the Cap finalisation process.

The ACT in their submission to the Review analysed four options against the six principles or 'tests' used to set the Cap in other jurisdictions. The ACT has argued that by establishing a Water Resource Management Plan water has been allocated to the environment as a first priority as opposed to other constituencies where there has been a need to 'claw back' diversions for environmental purposes.

The ACT also argues that it would be inequitable for the surplus net volume of some 138 GL to be utilised downstream for irrigation while requiring the ACT to acquire additional water from trade with NSW. It is estimated that some 53 percent of the Murrumbidgee River average annual Cap flow at Wagga Wagga is used for irrigation.

The IAG was not required as part of its terms of reference to address setting of an ACT Cap.

The IAG notes however that implementation has progressed sufficiently in each State for a modified Schedule F to be finalised. This would then provide the basis for ongoing Cap management including monitoring, reporting, auditing and remedial action (if appropriate).

In this context it would be appropriate for the ACT to submit a detailed proposal including its preferred option while the five-year Review of Operation of the Cap is finalised. This would enable Council to consider the proposed ACT Cap at the same time as Schedule F and the Queensland Cap proposals.

In view of the ACT submission to the Review the IAG recommends that any such proposal consider the downstream instream and diversion impacts of their proposal and that the previous basis for setting Cap limits for other urban centres be considered.

### ***Conclusions***

Net ACT consumption is only 0.3 percent of overall Basin water use. Despite this it is important that a Cap be established for the ACT.

The ACT has to date considered four options ranging from 29 to 172 GL per year.

The ACT has commenced negotiations with NSW over a possible framework for trading between the ACT and NSW although these have not progressed to the extent that would provide the ACT with the necessary confidence to establish Cap limits.

### ***Recommendations:***

*It is recommended that the:*

- i) ACT submit to Council a firm proposal for a Cap for the ACT during the finalisation of the five-year Review of the Operation of the Cap;*
- ii) ACT proposal, in addition to testing against the six principles established by the IAG, consider downstream impacts on river health and diversions;*
- iii) ACT finalise negotiations on trading rules with New South Wales.*

### ***Stakeholder Submissions***

In addition to specific jurisdictional equity issues arising from the Commonwealth, State and ACT submissions (see Table 1) a number of submissions were received from a range of stakeholders.

Table 1: Equity Issues Raised by the Commonwealth, States and ACT								
		Commonwealth	NSW	VIC	SA	QLD	ACT	Where dealt with: ("I&C Report": Implementation and Compliance Report)
1	Private Storage/Farm Dams	X		X	X			Section 4.2.2
2	Cap arrangements in Queensland		X	X		X		Section 4.2.4
3	Lake Mokoan			X				Section 4.2.2
4	Land use changes (effect on runoff)			X				Section 4.2.2
5	ACT Cap / Urban Use		X	X			X	Section 4.2.5
6	Groundwater	X		X				I&C Report 5.1
7	Accounting for Environmental Flows							I&C Report 5.1 and 5.2
	▪ Savings to the environment	X						
	▪ Consumptive use included in Cap				X			
	▪ Consumptive use separate to Cap		X					
8	Snowy River (reduced transfers matched by reduced Cap or losses)			X				I&C Report 5.1
9	Lower Murray Swamps				X			I&C Report 5.1
10	Water Trading	X	X	X				I&C Report 5.1
11	Scientific research (relationship between diversion and environment)				X			I&C Report 5.2

The Community Advisory Committee (CAC) of the Murray-Darling Basin Ministerial Council presented a detailed submission incorporating many of the comments made by individual stakeholders.

The CAC has provided a summary of the equity issues raised in these submissions and these are attached as Appendix I.

The IAG reviewed all submissions and in addition met on 1 February with representatives of the Ricegrowers' Association of Australia, the MIA Council of Horticultural Associations and Murrumbidgee Irrigation.

The vast majority of submissions were from NSW stakeholders and the most common issue raised was that of intra-valley equity particularly the failure to take account of history of use in distributing available resources .

This issue and others have been referred to the respective State Government for consideration in the context of their water industry reform programs.

One strategic principle comes out of the submissions and that is the need for appropriate public involvement and communication in implementing major change.

Implementation of the Cap across a range of valleys has been a particularly complex and resource intensive task. In the case of NSW the IAG has in a number of its reports identified the need for additional resources to develop the models and implement the changes including consultation with affected stakeholders. Concurrent implementation of environmental flow rules has added further complexity.

The need for improved public participation and communication with stakeholders has been recognised in a number of jurisdictions and has resulted in changes in communication with stakeholders.

### ***Conclusion***

A number of intra valley equity issues remain that lie outside of the Murray-Darling Basin Commission's jurisdiction.

The general principle that can be drawn from these is the need for public participation and communication in introducing major change programs such as the Cap.

### ***Recommendation:***

- i) it is recommended that the individual stakeholder submissions and that of the CAC be referred to the appropriate State Governments for consideration.*

## **5. CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Conclusions**

The outstanding equity issues raised in the IAG's 1996 report 'Setting the Cap' have progressed to the stage where Queensland can be expected to provide advice on most of its valley by valley Cap targets to Council in July 2000.

The outstanding finalisation of Cap provisions for Pindari Dam and Lake Mokoan can be expected to be resolved by June 2000 and 2001 respectively.

No major new interjurisdictional Cap equity issues have been raised during the Review.

There were a number of subsidiary equity issues raised including the impact of farm dams including those for floodplain (overland) and upper catchment diversions and use. The concern related to equity between upstream and downstream users and the principle of whether increased water use from these dams should be included within valley Caps. Similarly the impact of increased tree plantations in upper catchments was seen as having a possible impact on downstream users.

Intravalley equity issues were of concern to a number of New South Wales stakeholders who considered that inadequate attention had been paid to history of use in establishing valley caps and distributing available resources. The submissions in the view of the IAG were symptomatic of inadequate public consultation in managing the introduction of the Cap and the concurrent initiative of environmental flows.

These issues are however outside the jurisdiction of the Commission (and this consultancy) and can best be directed to the appropriate state jurisdiction with a recommendation that the issues be considered.

### **5.2 Recommendations**

The IAG have made a number of recommendations:

- i) the MDBC note that the Cap component for Lake Mokoan is expected to be finalised by Victoria by June 2001.*
- ii) floodplain and overland flows and diversions (where significant) be measured and included in the valley Cap;*
- iii) a statutory basis for the management of floodplain and overland flows be provided in all jurisdictions with significant flows;*

- iv) *as a matter of principle, jurisdictions include farm dam water use in their Caps;*
- v) *each jurisdiction with significant growth in farm dams survey use and report on the expected quantum of use, cost of metering and reporting;*
- vi) *the MDBC in cooperation with member States and the ACT ascertain the extent of proposed tree plantation planting;*
- vii) *if tree plantations are expected to become significant, develop a strategy to manage the impacts on water flow, allocation, diversion and river health;*
- viii) *the MDBC note that the Cap component for Pindari Dam is expected to be finalised by New South Wales by June 2000;*
- ix) *the MDBC note that Council can expect to receive advice from Queensland on its proposed Cap limits for most valleys within the Basin by July 2000;*
- x) *the MDBC note that the Environmental Flows Technical Report for the Condamine-Balonne will be assessed by the Queensland EPA in line with terms of reference agreed between the EPA and the IAG;*
- xi) *the MDBC note that the Queensland government has proposed legislation to provide a statutory framework for water resource management that includes floodplain (overland) diversions and is consistent with COAG and Cap principles;*
- xii) *the ACT submit to Council a firm proposal for a Cap for the ACT during the finalisation of the five-year Review of the Operation of the Cap;*
- xiii) *the ACT proposal, in addition to testing against the six principles established by the IAG, consider downstream impacts on river health and diversions;*
- xiv) *the ACT finalise negotiations on trading rules with New South Wales; and*
- xv) *the individual stakeholder submissions and that of the CAC be referred to the appropriate State Governments for consideration.*

## **6. FURTHER READING**

- Setting the Cap, Report of the Independent Audit Group, November 1996;
- Review of Cap Implementation 1996/97, Report of the Independent Audit Group, August 1997;
- Review of Cap Implementation 1997/98, Report of the Independent Audit Group, November 1998;
- Review of Cap Implementation 1998/99, Report of the Independent Audit Group, November 1999.

## **APPENDIX 1: SUMMARY OF CAC EQUITY ISSUES**

### **SUMMARY OF CAC SUBMISSION ON EQUITY**

A summary of the Equity issues raised in the submission of the Community Advisory Committee (CAC) is provided below:

Who: Australian Conservation Foundation

What: consumptive users have resource security and priority of supply, the environment has neither

Why: anomalous

Options: —

Who: Australian Conservation Foundation

What: off-allocation use should be abolished

Why: it should be available to the environment as a natural flow

Options: all water used for irrigation must come from allocation

Who: Australian Conservation Foundation

What: ‘high’ security water should be subject to ‘skeleton’ water regimes in extremely dry years

Why: high security water should not be 100% secure. Activation of high security sleepers means the Cap has failed to safeguard the interests of the environment

Options: ‘skeleton’ water regimes, and environmental flow assessments

Who: Australian Conservation Foundation

What: volumetric conversions of standard and high security water are overly generous and have compounded the impact of sleeper activation

Why: —

Options: volumetric conversions should be based on a combination of soil types and recognised standards of best practice

Who: Australian Conservation Foundation

What: water trade between States and over long distances

Why: lack of adequate conversion factors (and loss factors) will create equity problems and further erode the environment’s share

Options: —

Who: Australian Conservation Foundation

What: security of supply for urban areas

Why: drought restrictions should equate to standard security annual announcements

Options: water for gardens should be standard security

Who: Australian Conservation Foundation

What: capping of urban centres at 1993/94 levels

Why: urban centres should purchase water like any other user if population or consumption increases

Options: Cap for urban centres and water trading

Who: Australian Conservation Foundation

What: public funding of water efficiency savings

Why: —

Options: savings should be taken from the Cap and added to the environment's share

Who: Batlow Unregulated Streams Water Users Committee NSW

What: unregulated streams have no final information on where they stand as part of water reform

Why: —

Options: not specified

Who: Central West Catchment Management Committee NSW

What: start date for Cap reporting in Macquarie River

Why: dry year, in combination with a carryover and wildlife allocation

Options: not specified

Who: Coleambally Irrigation NSW

What: reduction in allocation from 94% to 85% and access to less than 50% of off-allocation (also being phased out), plus further reductions for environmental flows and potentially the Snowy

Why: significant change implemented too quickly, impacting on ability to fund and implement the Coleambally Land and Water Management Plan

Options: need access to COAG structural adjustment mechanisms

Who: Coleambally Irrigation NSW

What: history of use has not been considered in the Murrumbidgee Valley. Plus activation of sleeper and dozer water results in a lower allocation for history of use water

Why: activation of sleeper/dozers is facilitated by water markets, ignores economic benefits of existing infrastructure and also has environmental impacts

Options: —

Who: Coleambally Irrigation NSW

What: 248GL of high security not accounted in the Cap (detail provided within this chapter)

Why: 120GL was set as High security in the Cap. Why has this fundamental inequity not been addressed in four years of discussion?

Options: not specified

Who: Coleambally Irrigation NSW

What: continuous accounting model is not suited to the Murrumbidgee valley and is inequitable in its effect, and also does not recognise history of use

Why: continuous accounting works where the total Dam volume is many times the total water allocation, this is not the case in the Murrumbidgee. If introduced, some users will receive more access and Coleambally will get reduced access

Options: capacity sharing

Who: Condamine Catchment, Qld

What: sharing of overland flow between irrigators and the environment

Why: growth in storage capacity will impact on the Cap's goals and legitimacy of the Cap and WAMP

Options: regulatory regime

Who: Cotton Australia

What: changes in Queensland Government priorities and view of river health, particularly for the Condamine-Balonne

Why: changed view from pro-development (Developmental Incentive Scheme providing grants for irrigation infrastructure) to stressed catchment (DIS on hold, licensed entitlement may need reduction). Paucity of understanding of inland rivers makes appraisal of river health difficult. Queensland Government is using questionable and inadequate base information for environmental assessment and lack of rigour to ensure rural livelihoods and viability of communities is safeguarded

Options: more cogent and rigorous scientific assessment

Who: Hay Water Users Association NSW

What: dependence on off allocation flows as part of private diverters allocation was encouraged by NSW Government during introduction of the Cap. Ignoring history of use and now transferring capital from efficient irrigators to inefficient irrigators

Why: use of off allocation flows required capital expenditure and now water must be purchased on the temporary market

Options: application of the Cap needs to be modified to ensure fair and reasonable equity between all irrigators

Who: Lower Murray Darling Catchment Management Committee NSW

What: increasing water use in Queensland

Why: impact on lower States and potentially the Murray-Darling Basin Agreement

Options: not specified

Who: Lower Murray Darling Catchment Management Committee NSW

What: accounting of permanent trade between valleys

Why: trading between States with different allocation methods, which allocation applies to the traded water?

Options: not specified (Editor: greater community awareness of the accounting rules, exchange rates, environmental clearance requirements, etc would be of benefit)

Who: Lower Murray Darling Catchment Management Committee NSW

What: lack of volumetric measurement of all water usage

Why: inequities

Options: measure all water usage

Who: Macquarie/Cudgegong River Management Committee NSW

What: joint consideration of the Macquarie valley and Cudgegong valley

Why: differences in level of water use and level of development make this joint consideration unworkable, as the Cudgegong valley is capable of 100% allocation each year, compared to the Macquarie where licences exceed average flow

Options: administer the Cudgegong valley under separate rules from the Macquarie

Who: Macquarie/Cudgegong River Management Committee NSW

What: cap of 2500MLs representing only 12% of prior licensed entitlement

Why: investments made based on prior security of supply

Options: —

Who: Macquarie/Cudgegong River Management Committee NSW

What: definitions of active, sleeper, dozer licences and their rights

Why: very high level of sleeper licences in the Cudgegong valley

Options: not specified

Who: Mallee Catchment Management Authority, Victoria

What: access to the new tradeable sales product by irrigators downstream of Nyah

Why: to accommodate those who wish to use sales

Options: needs to be made available as soon as possible

Who: Maranoa-Balonne Catchment Management Association, Qld

What: undeveloped areas in northern catchment may not be able to equitably develop

Why: through having to compensate for an over committed southern area and to maintain sustainability of the system at their cost

Options: not specified

Who: Murray Darling Association

What: illegal works on river systems; unregulated catchments versus downstream users; not all water is volumetrically measured and concerns re accuracy of measurement; sleeper and dozer licenses and inequity of benefits; storages for recycling water may be used to store water

Why: —

Options: —

Who: MIA Council of Horticultural Associations NSW

What: trading (or capacity to trade) existing prior to 1993/94 should be included in Cap

Why: the Murray valley was the recipient of the water and obtained an increased Cap; the Murrumbidgee was disadvantaged due to the water not being activated in the 1993/94 year due to it being a wet season

Options: adjust the Cap upwards for the Murrumbidgee

Who: MIA Council of Horticultural Associations NSW

What: the Cap did not fully take into account DLWC “fixed commitments” (ie. system losses, town water, stock and domestic, etc), instead relying on level of development

Why: DLWC takes this water out of the available resource as a contingent liability

Options: the full amount of fixed commitments existing in the 1993/94 year should either be fully included in a larger Cap or left completely outside the Cap

Who: MIA Council of Horticultural Associations NSW

What: Murrumbidgee Cap structure is unclear, especially in construction of the Cap for high security entitlement

Why: high security allocation was not recognised in the Cap construction; “total volume of high security and other sleeper and dozer licences was in fact included in the Cap”

Options: needs to be reviewed

Who: MIA Council of Horticultural Associations NSW

What: high security water users have never had access to of allocation flows or system savings, present restriction on trade is a hollow argument

Why: —

Options: —

Who: MIA Council of Horticultural Associations NSW

What: high flow licences have not been taken into account in Cap

Why: — these can be activated under certain circumstances and may or may not be metered

Options: need separate Caps for high flow licences, conjunctive licences, Lowbidgee and groundwater

Who: MIA Council of Horticultural Associations NSW

What: unregulated rivers and streams

Why: licences on unregulated sections of rivers are not currently under the Cap

Options: a separate Cap or the current Cap be expanded to include them

Who: MIA Council of Horticultural Associations NSW

What: farm dams

Why: extractions and use should have a separate Cap and should be metered if used for other than stock and domestic

Options: a separate Cap

Who: MIA Council of Horticultural Associations NSW

What: multiple valley Caps – a Cap including two or more valleys where an average could be established may resolve some of the current difficulties

Why: would provide more flexibility in valley compliance

Options: multiple valley caps

Who: MIA Council of Horticultural Associations NSW

What: water trading restrictions involving a discount between buyer and seller have been introduced as it is affecting the management of the Cap. Also has impact on income production.

Why: this is of concern because it does not follow COAG principles and may discourage efficiency improvements

Options: the Cap should not impede development of a properly functioning water transfer market; and compensation should be paid to those impacted by water reform processes

Who: MIA Council of Horticultural Associations NSW

What: those who did not participate in permanent water trade now have a penalty for complying with Government reforms

Why: —

Options: —

Who: MIA Council of Horticultural Associations NSW

What: development, particularly on unregulated rivers, and new farm dams policy and how this will be considered in the Cap

Why: these developments should not have been allowed to extract water if they had never previously extracted water

Options: all water should be sourced from the market

Who: MIA Council of Horticultural Associations NSW

What: restructuring package needs to be developed to address equity issues, including resources and a licence buy back for over committed rivers

Why: the Government issued the licences and therefore enabled their market value

Options: Government to be responsible for reducing the extractive capacity of licences and to recognise the inherent capital value

Who: Murrumbidgee Irrigation NSW

What: potential for inter valley transfers in 1993/94 was not included in the Cap. 100,000 ML was approved for transfer from Murrumbidgee to the Murray in 1993/94

Why: did not occur due to climatic conditions

Options: —

Who: Murrumbidgee Irrigation NSW

What: impact of high security activation on general security availability not included in the Cap and the impact of environmental flow rules. High flow licences when activated cause the

Cap to be exceeded, disadvantaging other users. Farm Dams Policy and activation of volumetric allocation for unregulated streams have not been accounted in the Cap and will impact general security users

Why: because the full high security commitment was not included in the Cap, any activation over 53% by high security is at the expense of general security availability. Reforms have not been included in the Cap, impacting on security.

Options: not specified

Who: Murrumbidgee Irrigation NSW

What: EC credits resulting from water reforms have not gone to those who earned them.

Why: —

Options: —

Who: North East Catchment Management Authority, Victoria

What: entitlement to sales water

Why: creation of 'medium security right' for irrigators will eliminate potential development in areas other than amongst existing irrigators

Options: not specified

Who: North-West Catchment Management Committee, NSW

What: water should not be traded outside the Namoi valley, also transfer between regulated and unregulated streams

Why: long term equity problems

Options: —

Who: Ricegrowers Association of Australia

What: fixed water commitments were not included in the Cap (only 160GL of fixed commitment allocation of 311GL was included in the Cap)

Why: this places an inequitable burden on general security users

Options: not specified

Who: Ricegrowers Association of Australia

What: ability of high security users to use/trade 100% of entitlement results in a potential 100-200GL reduction in general security resource set. Failure to include capacity for inter-valley trade creates further inequities

Why: —

Options: not specified

Who: Ricegrowers Association of Australia

What: NSW Government action to issue licences to capture/extract water post Cap implementation and cumulative effect of farm dams policy is not understood

Why: to treat these developments as being outside Cap creates further inequities

Options: treat outside the Cap or increase the Cap volume

Who: Ricegrowers Association of Australia

What: history of use has not been recognised as part of a nominal property right

Why: HOU should be recognised due to encouragement by Governments and investment in capital infrastructure

Options: recognise HOU within current rights through access to off allocation flows and creation of a separate right for off allocation in development of definitive property rights. The Independent Audit Group established a key principle that history of use of entitlement must take precedence over no history of use of entitlement

Who: Riverland, SA

What: adherence to Cap by upriver States

Why: suspicions

Options: ongoing audit system to be open and comprehensive

Who: Tumut River Landowners Association NSW

What: Snowy scheme impact on conduit rivers

Why: loss of soil, water logging, high watertables, and landowners are limited to primitive forms of agriculture

Options: Cap is one measure to control this inequity, and part of measures taken to rationalise water use in Australia

Who: Western Catchment Management Committee NSW

What: Barwon-Darling inflexible approach to Cap; economic and social impacts; active and inactive licences; variation in definition of Cap; impact of Queensland Cap

Why: socio-economic impacts unknown; Cap for Queensland is unknown and 37% of water comes from that State

Options: not specified

Who: Yanco Creek and Tributaries Advisory Council

What: inequities between those who have invested in irrigation development and those activating sleeper/dozer licences. Also concerns in restricting access to off allocation to those with a history of use.

Why: those who have invested are being penalised

Options: not specified. Consistent guidelines for determining and announcing off allocation needs to be developed

Who: Yanco Creek and Tributaries Advisory Council

What: amount of the Cap

Why: should be increased by 100GL to reflect the high security activation that did not take place in 1993/94 due to seasonal conditions

Options: increase volume of the Cap by 100GL