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LAND & WATER  
CONSERVATION

Office of the  
Director-General

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Dear Dr McLeod

Enclosed is a final draft of the NSW submission on the Review of the Operation of the Cap.

While it is yet to be endorsed by the Premier as a whole-of-government position, this draft has the support of all relevant Government agencies. The endorsed whole-of-government submission is expected shortly.

This final draft has been forwarded in the interests of progressing the Review of the Operation of the Cap.

Yours sincerely

  
Bob Smith  
Director-General

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**NSW Submission in response to the  
Draft Overview Report of the Cap Project Board on the  
Review of the Operation of the Cap**

This submission responds to the Draft Overview Report of the Cap by of the Cap Review Project Board. The Government of NSW made an earlier submission to the review, but since that time a number of new recommendations have been published and new ideas introduced to the implementation and management of the Cap. This submission deals with these recent issues.

The Cap Project Board report covers two main issues: suggestions regarding the “next step” in moving from Cap management to sustainability; and operational refinements to ensure the efficacy of the Cap. While these are related issues, there are many reasons for continuing to consider Cap management as one of a number of tools needed to achieve sustainability.

Before considering this, however, it is important to acknowledge the institutional framework for the management of flows in the Basin, and the relative roles of the Commission and the states.

## ***1 GENERAL***

### **1.1 Roles of the States and the MDBC**

The states have the regulatory responsibility for the sustainable management of water resources in their sections of the Murray Darling Basin.

The Murray Darling Basin (MDB) Ministerial Council provides an integrating framework for the management of the Basin. It is assisted by the Murray Darling Basin Commission (MDBC) which works cooperatively with State Governments to manage the waters of the River Murray and to develop complementary programs for the Murray Darling Basin. The MDBC has a role in assessing sustainability at a Basin level and engendering the cooperation of the states in achieving sustainable river management outcomes.

In relation to the Cap, the Ministerial Council established the long-term diversion Cap for all states. The MDBC works with partner governments to implement the Cap for the River Murray, and monitors the states’ implementation of the Cap for other rivers. The MDBC has an important role in approving computer models for establishing annual diversion targets for the Cap.

The states monitor and report to the MDBC on Cap compliance, which is audited by an Independent Audit Group appointed by the MDBC. The distinction between state management roles and the monitoring role of the MDBC should be properly observed to avoid confusion within the community.

### **1.2 Role of the Cap**

The Cap is a critical response to the declining health of rivers in the Murray-Darling Basin. Its continuing value is as a minimum standard across the Basin. It should be complemented with environmental flow rules and regulatory measures, which are the responsibilities of the states, if it is to achieve sustainable outcomes.

Reference to ‘Setting the Cap’ (Report of the Independent Audit Group (IAG), November 1996) shows that the Cap alone was never intended to be the means for achieving sustainability:

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

The Cap per se, is only a means to an end. It is not the end in itself. The IAG recognises that the overall objectives can be achieved only by identifying environmental water requirements and flow regimes and by establishing a supporting management and institutional framework, including trading of water.

...At the individual valley level, final seasonally adjusted water diversion may, following environmental allocations, be below the Cap [this is the case in most river valleys in NSW]. The IAG however envisages that State compliance with the Cap will be assessed on a whole of State basis.

The IAG believes that once effective cap arrangements are in place, priority needs to be given to identifying more fully the environmental water requirements, including flow regimes.”

It is important that the Cap not be used to argue about matters other than level of diversions as agreed. Information from Cap audits based on the 1993/94 benchmark will provide important input to any review of sustainability, in addition to information on other management initiatives and outcomes.

The Cap has provided a strong complement to the water reforms in NSW. These reforms have included the introduction of environmental flows that are within Cap in most valleys. In this context the Cap has been important in:

- bringing about a general halt to growth in further water diversions;
- assisting NSW to implement more sustainable water management measures; and,
- providing downstream valleys with a basis upon which to plan.

NSW does not agree with the conclusion of the Companion Paper by the Cooperative Research Centre for Freshwater Ecology (CRC) (p.7) that “Over time, the Cap should be defined so that it both limits diversions and guarantees a minimum proportion of stream-flow for the environment.” While the protection of a minimum proportion of streamflow for the environment may be one aspect of an environmental flows program, this should not be confused with Cap management. Both will be critical in monitoring and achieving sustainable outcomes.

Additional measures are needed to ensure ecological sustainability and NSW supports the proposal for a Sustainable Rivers Audit. This should not be a Cap-type arrangement involving a compliance audit, however. This is discussed further in Section 2.2 Proposals for a Sustainable Rivers Audit below.

### **1.3 Nature of the Cap**

The Cap sets a ceiling on water withdrawal for each jurisdiction/valley so development can only occur through the redistribution of water amongst users. Cap management must be sufficiently flexible to allow changes such as ‘lateral’ movement of water through trading, changes in farming practices, location, etc to occur.

NSW is in a transition stage, having ceased to issue additional entitlements and now introducing new policies for water management, water allocation and operations (e.g. carry-over, continuous accounting). Many of these operational changes are not policy matters for the MDBC or other jurisdictions as they do not affect NSW’s long-term compliance with the Cap. It is acknowledged, however, that such operational and policy initiatives are important to consider in any review of the sustainability of the Basin.

## 1.4 Credibility of the Cap

Although the Cap is simple in concept, it is complex in application and relies heavily on technical models. Wherever possible, the methodologies used should be simple and cost effective so that the Cap remains credible and is both understood and supported by the community. If the Cap is perceived to be inequitably applied between jurisdictions, it may lose support in some jurisdictions.

## 1.5 State Perspectives on the Cap

State jurisdictions have different conditions, and therefore have differing responses and interests in the Cap. Factors relevant to jurisdictional interests in the Cap include:

- geographical and hydrologic features;
- laws and water rights systems;
- water management policies;
- operational policies and practices;
- water pricing structures;
- types of water user industry and enterprise, and,
- location in the Basin (particularly whether upstream or downstream).

These affect both the interests of each jurisdiction and the impact of the Cap in current water activity. The NSW perspective on the current status of water management in each jurisdiction is indicated below:

Issues	NSW	Qld	SA	Vic.	ACT
Significance of post-Cap growth in floodplain harvesting <sup>1</sup>	Moderate	High	Low	Low	Low
Environmental flow rules below Cap	Yes (in regulated rivers and Barwon-Darling)	Unresolved	No	No	Unresolved
Operational policies	Under review	Under review	Stable	Stable	Stable
Annual variability in total water use	High	High	Low	Moderate	Low
Water rights clearly defined	In process	In process	Yes	Yes	Yes
Significance of water quality	Moderate, increasing, especially in north	Low	High	Increasing	Low
Relative importance of high security diversions <sup>2</sup>	Moderate (south), Low (north)	Low	High	Moderate-High	High
Number of computer models submitted to MDBC for endorsement/required to determine Cap compliance <sup>3</sup>	1/10	0/5	0/2	2/4	1/1

<sup>1</sup> IAG 2000. *Review of the Operation of the Cap. Equity*. MDBC.

<sup>2</sup> MDBC 1995 *An Audit of Water Use in the Murray Darling Basin*. MDBC

<sup>3</sup> Note that NSW currently has long-term climate-adjusted simulation models operating for five valleys, monthly models for three and is using climate-diversion relationships for the remaining two (see Section 5.3 Compliance Reporting).

NSW must constrain future water access in order to comply with the Cap. This is because some valleys (Barwon-Darling and Lachlan) have a higher licensed entitlement than history of use. NSW is distinguished by having already introduced environmental flow rules on regulated rivers that in the long term would bring water use below the Cap. NSW also has more computer models to develop for Cap compliance than all other jurisdictions. Like Queensland, NSW:

- is dealing with significant floodplain harvesting issues;
- has highly variable water use from year to year due to climate and water user behaviour;
- is still in the process of defining water rights and reviewing operational policies; and,
- has a relatively small volume of water held under high security licences and a large volume held general security licences, particularly in the northern valleys.

All of these factors mean that there is a greater challenge for NSW in predicting demands for water use year-by-year than in other states.

Victoria has a relatively stable situation and there have been few direct consequences of the introduction of the Cap.

South Australia seeks to maximise flow across the South Australian border to maintain the quality of water for both irrigation and urban use, and to maintain the environment. The South Australian Government has called for the assessment of environmental flows in other states "such as wetting and drying of wetlands and changes to the flooding regime of the floodplain." It is not clear why South Australia is concerned by these within-state impacts, unless it is attempting to maximise through-flows to South Australia resulting from upstream environmental flow provisions. The Cap has provided South Australia with a water supply that is more secure both in volume and quality.

Queensland is still seeking a major expansion in water use for irrigation. NSW remains concerned that the Water Allocation and Management Planning (WAMP) process is seeking to identify minimum end-of-system flows rather than diversions. The identification and control of floodplain harvesting remains a major outstanding issue with implications for both the Cap and environmental flows in NSW.

ACT is yet to determine its Cap and NSW remains concerned that growth in extractions has been proposed. NSW is seeking consistency with the NSW Cap definition and a compatible trading system.

## **2 ECOLOGICAL SUSTAINABILITY OF RIVERS**

The Project Board considered the relationship between the Cap and sustainable levels of diversion from the rivers in the Murray-Darling Basin. NSW agrees with the Cap Project Board's principal conclusions, namely:

“...that 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.

...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.”

NSW does not agree, however that an adjusted Cap, or a Cap-type mechanism, is the way to achieve sustainability. Sustainability will come from a range of management initiatives, including improved environmental flow management, river and catchment planning and river operation, of which Cap management is a component.

### **2.1 Environmental Flows in a Basin Context**

Just as each jurisdiction decides the most effective and efficient routing of water for supply, each is also responsible for deciding the priorities and targets for environmental water provisions. The primary mechanism for designing and delivering environmental flows in NSW is the community-based planning process at the catchment level. Both the government and community stakeholders have invested considerable effort in this process. The Cap Project Board also notes that “the catchment scale is seen as the necessary spatial resolution to effectively manage our natural resource systems” (p.6).

To date, there has been no clear agreement about how the benefits of the Cap and environmental flows should be distributed throughout the Basin. South Australia has placed great emphasis on increased flows to the Murray mouth, while other jurisdictions have emphasised localised values such as floodplain inundation and instream habitat. Each view leads to different decisions at the operational level about how environmental flow rules should be applied.

South Australia has a legitimate interest in whether water management decisions by upstream jurisdictions lead to an increase or decrease in flow across the South Australian border, just as NSW has an interest in any change in flows from Queensland.

It is important, however, to separate Cap breaches from inter-jurisdictional environmental concerns and from upstream environmental flow provisions. Identification and review of downstream flow impacts and possible improvements are clearly a matter for the Murray-Darling Ministerial Council as any actions to improve flows may implicate upstream water access and river operations. Environmental flow rules which are designed to meet local environmental targets are the responsibility of state planning and management initiatives. Inter-jurisdictional involvement should be limited to the protection of through-flows and recognition of their contribution to downstream flow improvements.

### **2.2 Proposals for a Sustainable Rivers Audit**

The Project Board proposes that the Sustainable Rivers Audit “develop and monitor useful indicators that can clearly be understood by all sections of the Basin community.” (p.16). The IAG Implementation and Compliance Report and the CRC Sustainability Report discuss this

proposal in more detail, suggesting slightly different approaches. The IAG proposes a process for examining environmental issues from a ‘whole of Basin perspective’ which involves:

- identifying key environmental values (eg, Barmah Forest, Ramsar Wetlands, Murray mouth);
- defining criteria for protecting these values (eg, invertebrate population) and for monitoring; and,
- facilitating negotiations between jurisdictions through MDBC to integrate flow regimes.

NSW does not support a Sustainability Rivers Audit which is a Cap-type arrangement involving a compliance audit :

- states are providing for environmental flows in different ways due to differing hydrological characteristics of the rivers, different legislation, water rights systems and types of development;
- environmental values are complex and require different types of management actions in different reaches;
- water volume is only one characteristic of environmental flow;
- the necessary level of detail (i.e. below river valley level) is beyond the capacity of the MDBC;
- the data requirements would be onerous and expensive;
- a limited set of Basin-wide indicators would oversimplify environmental condition and skew management towards satisfying those indicators;
- the MDBC would effectively shadow-manage state water management, a costly exercise in duplication which is outside the role of the MDBC;
- environmental response times are long and surrounded by uncertainty, creating audit difficulties; and,
- NSW has already invested significant Government and community resources in a river management process to deliver environmental flows. An MDBC environmental audit would duplicate and could undermine this community partnership approach.

Given our current understanding of river management, it is very difficult to determine the environmental flows required to maintain particular environmental values. According to the CRC report (p.39):

“A number of programs have been undertaken across parts of the Murray-Darling Basin to determine environmental water requirements...The complexity of measuring the ecological effects of maintaining current levels of diversions with the variability and the long time periods for change to occur makes it unlikely an impact could be quantified over a five year period. Especially since there are few pre-Cap data against which to assess change. The focus should be on conserving ecosystem function, and developing tools and techniques for assessing whether this has been achieved.”

NSW has not, in general, attempted to define the environment’s needs. Rather, the program of environmental flows has been based on a presumption that restoring natural flow/wetting regimes in targeted zones and flow ranges is likely to be of greatest benefit to ecosystem processes and functions. The underlying scientific hypotheses and ecological responses are being tested through the Integrated Monitoring of Environmental Flows (IMEF) program.

### **2.3 Nature of a Sustainable Rivers Audit**

NSW supports the proposal for a Sustainable Rivers Audit to complement and support the state’s environmental flow initiatives.

In particular, the Audit should give emphasis to the identification and review of downstream flow impacts and possible improvements. It should also identify the through-flow components

of any upstream environmental flow rules and consider their contribution to downstream flow improvements.

The Audit should provide a basis for further discussions between jurisdictions about the coordination of their environmental flows. Specific proposals could be considered by the MDB Ministerial Council in the light of the information provided by each jurisdiction and the outcomes of the Audit.

It may be preferable for states to develop their own reports which are aggregated into a 'State of the Basin' report. This approach is described in *Environmental indicators for national state of the environment reporting – Inland waters* (Fairweather P. & G. Napier 1998, Department of the Environment, Canberra):

“Possibly the best way to allow local regional variation in monitoring is for each jurisdiction to set its own criteria for “acceptable”, “of concern” and “unacceptable” (or some other categorisation) as broadly comparable standards for states or trends. Then the number of places or cases falling into each of these categories can be tallied and displayed visually using a “traffic light” colour scheme (i.e. with green, orange and red, respectively; see Department of Land and Water Conservation (DLWC) 1996). It could be argued that a five-step scheme would allow more discrimination (e.g. excellent/good/fair/poor/bad) than the tripartite “traffic light”. Either format should be readily understood by the wider population.”

As a compliance audit in the strict sense is not supported, a different name may be appropriate, e.g. State of the Basin Report, Sustainable Rivers Assessment, Report or Review.

NSW believes that a steering committee of appropriate jurisdictional representatives be established as a matter of urgency to design and guide the Audit.

### 3 *ECONOMIC AND SOCIAL IMPACTS*

While the notion of balance is often interpreted to mean the sacrifice of environmental values for economic values (or vice versa), sustainable water use provides a stable foundation for both, therefore benefiting society. NSW believes that the Cap will provide significant social and economic benefits in the long term. Such long term benefits will include:

- improvements in the security of water supply at the valley level, particularly for water users in the downstream valleys, allowing a more certain base for long term investment;
- stopping growth in diversions while still allowing economic development through improved efficiency of water use;
- accelerated development of water trading markets, assisting higher value uses to obtain supply and highlighting the real value of water;
- benefits to the environment, which of course have significant economic and social value (although difficult to quantify); and,
- avoidance, in the long term, of increasing social disharmony within the water community as well as between the rural and urban sectors as a result of conflicts over sharing of Basin inflows.

It is noted, however, that these long-term benefits have been overshadowed in some valleys by the short term impacts. The introduction of both the Cap and environmental flows has accelerated industry changes which were already occurring as a result of increased competition for supply, the introduction of water trading and adoption of more flexible water account practices.

There is direct evidence, for example, that irrigators in the Macquarie valley are using increased inter-year carry-over provisions to reserve their allocated water for watering an increased areas of higher value summer crops at the expense of decreasing watering of lower value winter crops. This change has probably been spurred on by changes to the Macquarie Marshes Plan in 1996.

A number of NSW and Federal programs assist structural adjustment to the NSW water reforms and the introduction of the Cap, namely:

- Land and Water Management Planning
- WaterWise on the Farm
- Farming for the Future
- Salt Action
- Special Conservation Scheme (Rural Assistance Authority)
- Irrigated Agriculture Water Use Efficiency Incentive Scheme
- Tocal & Murrumbidgee Agricultural Colleges farm management & irrigation skills training
- Water Use Efficiency Advisory Unit
- Farm Bis
- Rural Financial Counsellors
- Advancing Agriculture Australia – Farm Family Restart Scheme & Financial Information Service, & Retirement Assistance for Farmers.

As there is significant adjustment underway in NSW, it is important that the implementation of the Cap does not hinder water users improving their use of water by such measures as:

- more flexible operational rules;
- trading; and,
- change in enterprise type.

The Marsden Jacob report notes that the benefits of the Cap are poorly understood in the community. NSW supports the proposal for a communication strategy, coordinated between

jurisdictions, to improve community understanding of the long term benefits resulting from the Cap. It is also essential that this communication strategy is developed in consultation with the states and seeks to progress the issues rather than revisit previous decisions.

#### **4 EQUITY**

A number of issues directly relevant to NSW were raised in the report.

In relation to Pindari Dam, NSW has determined a Cap and will be supplying a model and supporting studies to the IAG during the Cap audit later this year.

NSW remains concerned about the implementation of the Cap in Queensland. Although there have been significant changes in the Queensland administration, there is no evidence yet of any intention to implement a 1993/94 diversion Cap. Since 1993/94, development in the Condamine and the Queensland Border Rivers has been much greater than that in the Barwon-Darling, however there is no commitment by Queensland to reduce use or even to control further growth on the Condamine. To date Queensland has announced only an intent to implement a 1998/99 limit on the Border Rivers while allowing for some further growth in the intersecting streams. This falls some well short of an equitable Cap across jurisdictions.

For the ACT to develop and manage a Cap, it will need the flexibility of trading water with NSW so that is not unduly constrained. NSW accepts that interstate trade is necessary, and has embodied this principle in the NSW White Paper on water management legislation.

Through the Department of Land and Water Conservation, NSW is involved in discussions with the ACT about the conditions under which trade will take place. There should be no significant impediment to the ACT adopting a Cap figure in the near future. NSW has considered Cap options referred to the MDBC for consideration and endorses option 2. This option recognises that the ACT government introduced significant demand management prior to 1993/94.

##### **4.1 End-of-valley flows**

NSW has consistently argued that end-of-valley flows are not an appropriate mechanism for developing or auditing a Cap. The main reasons are:

- Auditing is impossible. Many of the factors which affect flow estimates are represented as averages in computer models when in fact they vary substantially from year to year. These averaging errors accumulate in any single year's assessment of end of system flow, making it impossible to audit by comparing a model's predicted end of system flow against the recorded end of system flow.
- Attribution of water use would be difficult. It would be impossible to separate the effect of any above or below Cap use in upstream systems from the effect of downstream use. This would result in downstream irrigators benefiting from any below Cap use in upstream systems – something which upstream irrigators would not tolerate – and having to pay for any above Cap use upstream – something which downstream users would not tolerate.
- Trading between rivers would be impossible. With diversion Caps it is relatively easy to trade between rivers by adjusting one river's Cap up and the other's down. With end-of-system flow Caps this could not be done.

NSW remains concerned that Queensland is developing a Cap outcome through the WAMP process that is based on end-of-valley flows. As the Implementation and Compliance report notes, there are difficulties "in measuring end-of-valley flows where there are multiple channels and where a substantial portion of the flows are on the floodplain or overland." This exactly describes the Queensland/NSW intersecting streams, a region in which diversions and flows impact directly on NSW and a Cap is yet to be determined.

NSW strongly supports the proposal to remove references to end-of-valley flows as a method of Cap compliance for the reasons outlined in the report. This approach will be crucial for credible compliance on the intersecting streams.

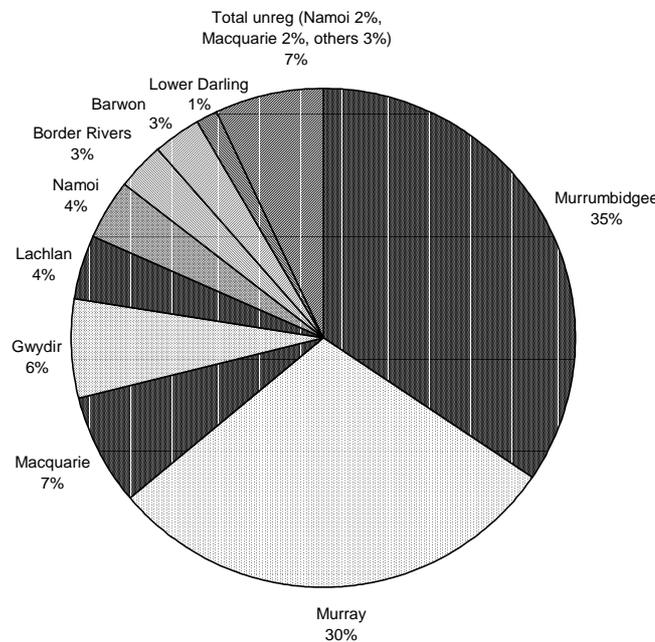
**4.2 Proposals to extend Cap Coverage**

**4.2.1 Assessing costs and benefits**

The report includes proposals to extend the coverage of the Cap to include groundwater, floodplain and overland flows, farm dams and tree plantations. NSW believes that the likely costs and benefits of trying to quantify these components should be carefully assessed. Appropriate management responses should be developed in the light of this assessment. In some regions this may involve actions to minimise water use, rather than to quantify and account for volumes of water.

It is important to note that NSW already considers floodplain diversions (which have grown considerably in some sections of the Basin in recent years) to be within the Cap. It is also noted, however, that the volumes diverted as a result of such works is not currently quantifiable. It is critical that the extent of on the ground works be determined and action taken to stop further expansion of these works.

It is vital that resources and effort are directed towards the areas of most risk. The diagram below shows that the majority of diversions in NSW come from the Murrumbidgee and Murray valleys, and that the unregulated rivers are estimated to account for about 7% of NSW total annual diversions. While not shown in this diagram, farm dams are considered to account for much less than even the unregulated rivers. It would be a retrograde step to divert resources from, say, completing good modelling in the southern valleys to focus on the unregulated valleys or indeed farm dams.



**4.2.2 Farm dams**

In January 1999 the NSW Government introduced a harvestable rights policy. The policy allows landholders to capture up to 10% of the runoff from their property. However dams which

capture larger amounts must be licensed and are embargoed. The new policy replaced the 1912 Water Act provision which allowed landholders to develop an unlimited number of farm dams provided each held less than seven megalitres and provided the water was only used for stock and domestic purposes.

The harvestable right:

- is typically defined as an allowable storage capacity but where it is claimed in addition to a Part 11 license it is defined as a harvestable volume which includes evaporative losses from storage;
- is primarily intended to satisfy essential farm needs though it may be used for other purposes also;
- recognises the variation in runoff across the state, but relates to regional runoff not property runoff characteristics;
- is a way of clearly and equitably defining the share of the total surface water resource available to landholders without a licence;
- must be captured from the land, not extracted from rivers, streams or groundwater;
- can be used for any purpose, e.g. house and gardens, stock watering, washing dairies, irrigation;
- is non transferable and is thus attached to the property and will be physically limited by the ability of that property to site a storage and capture the runoff;
- does not require a licence, compulsory registration, fees or metering of water extraction; and,
- does not apply to the Western Division.

The total allowable on-farm storage capacity is determined by:

- the harvestable right;
- the geotechnical characteristics of the area;
- current dam design practice; and,
- annual climatic variability.

Actions taken to date include:

- Maps have been published showing the allowable dam capacities per hectare of property;
- A technique for benchmarking and monitoring dam numbers and storage volume estimates using aerial photo interpretation and GIS technology has been developed in the Murray valley. A project to develop a farm dam licensing system using similar technology is currently underway in the same region;
- Mapping and assessment of the impact of farm dams on catchment hydrology using GIS and aerial photography is underway in the Murrumbidgee valley;
- A case study is underway in an area with an extremely high density of farms to assess the impacts of farm dams on total catchment hydrology;
- DLWC is developing a monitoring and compliance strategy for the harvestable rights policy;
- DLWC is planning to develop tools to allow the broad scale assessment of farm dam development across the state and detailed information on all regions; and,
- DLWC is cooperating with a MDBC SI&E funded project looking at the impact of farm dams in a number of Basin catchments.

In reference to farm dams the IAG report (p.6) says:

“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 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.”

NSW agrees with the principle that farm dam development be included in the Cap, however new farm dam development is not expected to significantly affect total water extractions at the state level. The cost of intensive monitoring of this very diffuse array of farm dams would be extreme. The value of such an exercise to the overall objectives of the Cap is questionable. NSW believes that no action should be taken to quantitatively include runoff harvesting into farm dams in the Cap until:

- the MDBC SI&E project is complete;
- the significance of the volumes involved is assessed;
- the costs of inclusion of such data are assessed and subjected to a cost-benefit study; and,
- sources of funds for monitoring are identified and committed.

#### 4.2.3 Floodplain harvesting

Until 1997, NSW exercised a discretionary policy for licensing floodplain harvesting. Extraction of water from floodplains was not licensed although, in some cases, the works being used were licensed for other purposes such as extraction from rivers or flood protection. This discretionary policy made sense at the time as there were no limits being placed on extraction of high flows from rivers during periods when off-allocation was declared. It made little sense however once the Cap placed a limit on all forms of water extraction and once limits were applied to off-allocation water extractions in each valley.

NSW has now adopted an approach to floodplain harvesting which involves:

- licensing;
- other related matters such as treatment of harvesting under the Cap; and,
- initial actions to forestall further harvesting development.

The following principles have been adopted:

##### General

- Floodplain harvesting works and activities should remain licensable.

##### Existing Works and Activities

- Diversions from floodplain works in place prior to 1994 will be considered to be additional to Cap.
- All licences issued under Part 8 of the Water Act, and all licences issued under Part 2 of the Water Act for works not already used for floodplain harvesting, should be amended to explicitly state that they do not authorise the use of the licensed works for floodplain harvesting purposes.
- All existing floodplain harvesting works and activities should be allowed to apply for licences.
- Diversions from Post 1994 works which are issued a licence must be ultimately accounted for from within the Cap.
- The Amnesty action, which included floodplain harvesting structures, should be supplemented with a more specific and comprehensive review and assessment process to both uncover existing floodplain works and inform farmers of their licensing obligations.
- Until this is done there should be no attempt to prosecute for existing works or for harvesting with those works.
- Each floodplain harvesting application should go through the same departmental Environmental Planning & Assessment Act review as would apply to an application for a new proposed work.

- Normal third party appeal rights to Land Boards with respect to these existing works will however be withdrawn and replaced by the right to lodge objections with the DLWC for consideration by an appeal board.
- Existing works with unacceptable environmental impacts should be altered or removed.

#### New Works and Activities

- No new works or expanded floodplain harvesting activities in the Murray Darling Basin will be authorised.
- Floodplain harvesting rights will be non-tradeable for the time being.

The staged program for implementing the NSW Floodplain Harvesting Policy will involve:

- modifying embargoes to allow applications for existing floodplain harvesting works while prohibiting applications for new works;
- adding specific reference to approvals not authorising water harvesting on all Part 8 licences on renewal;
- monitoring and acting on any new works to ensure there is no expansion in floodplain harvesting;
- designing and commencing a program for volumetric assessment of diversions resulting from floodplain harvesting works;
- including specific quantification of extractions associated with post June 1994 development in each valley;
- licensing all existing floodplain works;
- seeking in principle acceptance by the MDB Ministerial Council of 1994 levels of floodplain harvesting as an addition to each NSW valley's Cap;
- finalising guidelines for environmental impact review of flood harvesting works and ensuring necessary compatibility with Part VIII (Floodplain Works) review processes - including discussions with river management committees;
- commencing licensing processes for existing works, including metering; and,
- assessing the likely impact of approved works relative to the impact of 1994 works and, if greater, applying appropriate diversion offsets.

#### 4.2.4 Groundwater

NSW supports and is progressively implementing water management policies to sustain groundwater resources. At the national level, NSW is currently involved in implementing the 12 recommendations of *Allocation and Use of Groundwater. A National Framework for improved Groundwater Management in Australia* (COAG 1996) through the NSW water reforms.

At the state level, NSW has adopted a Groundwater Policy Framework. This framework involves three components, a State Groundwater Quality Protection Policy (complete), Groundwater Quantity Management Policy (dependent on the outcomes of the Water Management legislation White Paper), and the Groundwater Dependent Ecosystems Policy (which is currently under peer review). A fundamental principle of these policies is that groundwater should be managed within the limits imposed by the ecologically sustainable yield (ESY), which is based on recharge rates and environmental requirements.

Water management committees are using these principles and guidelines when developing groundwater management plans. They are also identifying groundwater/surface water interactions and considering them when developing management plans.

NSW does not support a Basin-wide Cap for groundwater. It is not logical due to the poor or non-existent interactions between aquifers at the Basin level. Most aquifers (including most of the Great Artesian Basin) would not interact with surface water to a degree that warrants linking

them with the Cap. Other aquifers have complex interactions with surface water, including instances where river systems are both fed by groundwater and make a significant contribution to groundwater recharge in different reaches. Given the scientific uncertainty in this area, accurate accounting for such complex systems would be expensive and inaccurate, and would be unlikely to involve significant water volumes at the Basin level.

NSW supports a policy approach which includes:

- identifying significant interactions between groundwater and surface water,
- identifying ecologically sustainable yields for all major aquifers;
- reviewing groundwater licence conditions and allocations in line with ecologically sustainable yield calculations;
- separating conjunctive licences into separate surface and groundwater components;
- adaptive management through the groundwater and river management planning process.

#### 4.2.5 Plantations

- Submissions have suggested that plantations are significant water users and this use should be accounted under the Cap. Substantial research findings have indicated that runoff will vary greatly with differences in landuse and vegetation.

While the impact of landuse change is more predictable at the small scale or property level, water entitlements, including harvestable rights, are calculated using regional runoff models which assume average landuse characteristics. This is done deliberately to avoid the potential for landholders to adopt poor land management practices in order to increase their harvestable right. Therefore reforestation of an individual property will not affect that property's legal harvestable "right" although it may impact on the actual volume of runoff which flows into the allowable farm dams on that property.

While there is a general acceptance of the impacts of landuse changes on water yields, the evidence has largely come from small, relatively homogenous catchments where the assessed land use change has dominated the area. As the scale of the catchment increases, the proportion of area affected by afforestation generally reduces. This is reflected in the hydrology, which is also less affected. In large catchments the land use changes are also typically a patchwork of negative and positive changes, therefore the net effect of all changes is unpredictable. In fact recent reviews of the research is indicating that the relationship between yield changes and the proportion of forested/deforested area has an correlation coefficient as low as 0.2.

Furthermore, because most land use changes effect baseflow and storm runoff differently, the effect on water supply and the environment is not uniform. In most unregulated catchments, for example, water demands and environmental damage is often greatest at low flow times. Therefore any reductions in high flows or total water yield as a result of afforestation is unlikely to be an issue while improvements in baseflow persistence may be a significant benefit.

In other catchments, such as those with large urban or irrigation dams, water supply reliability and environmental damage is related to reductions in high flows or total yields. Therefore any reductions in total yield as a result of afforestation is likely to be felt to some degree in water supply. However, where these catchments are large the previous comment about the insignificance and unpredictability of overall changes applies.

The evaluation of the impacts of afforestation becomes even more difficult when the land use change is desirable in managing salinity or water quality. Afforestation may actually lessen overall water supply costs for towns or help alleviate changes that are leading to declines in quality which are affecting agriculture.

Water supply impacts should not be considered in isolation from other resource and environmental goals such as forest conservation or carbon sequestration. The counterpoint to a debit system for reductions in water yield resulting from reforestation, would be credits for increases in water yields following land clearing or urbanisation. In extreme circumstances it could actually encourage undesirable land management practices that are not in the long term interests of the Basin.

DLWC is continuing to model and assess the implications of vegetation and other landscape changes on water yields and streamflow regimes at different catchment scales. This will help inform future landscape management initiatives.

At this stage, NSW believes that, because of the scale issues, the variability of the hydrological responses, and the complexity of the management objectives, it is neither appropriate nor feasible to attempt to account for the impact of landuse changes under the Cap.

### **4.3 Intrastate equity issues**

The report notes that many of the submissions from stakeholders addressed equity issues that concern the details of implementation within valleys and are therefore outside the jurisdiction of the MDBC and Ministerial Council processes. These submissions were referred to NSW.

NSW has considered all these issues in its White Paper on new water management legislation.

## **5 IMPLEMENTATION AND COMPLIANCE**

The management of the Cap must recognise the need for states to manage their water in a rational and flexible way. It should not impede progressive changes in both the nature of developments and water management rules.

The Cap is the first Murray-Darling Basin arrangement that requires jurisdictions to report at a level below that of the jurisdiction. Before the Cap was introduced, jurisdictions were accountable only for their impacts on other jurisdictions. Under the Cap they are required to report on their internal impacts also. As NSW has the most valleys in the Basin (10), this places a particular implementation and compliance responsibility on the state.

### **5.1 Register of Cap definitions**

The IAG recommends that the MDBC develop a register of Cap definitions as agreed by partner governments as they finalised their monitoring and compliance programs. NSW agrees that clearer definitions will help to improve both the implementation and community understanding of the Cap.

A degree of flexibility is needed in managing this register, particularly as there are significant policy and operational changes underway in NSW. The register should only refer to definitions that relate directly to Cap implementation, not other aspects of water management.

### **5.2 Quality Management System**

The IAG Implementation and Compliance Companion Paper recommends that each jurisdiction puts in place an appropriate quality management system for the management of metering, monitoring and reporting data.

NSW has comprehensive quality standards and guidelines in place for the collection and storage of both streamflow and metered usage information. Consequently NSW supports recommendation (viii) in the IAG Implementation and Compliance report, namely:

“Each jurisdiction puts in place an appropriate quality management system for the management of metering, monitoring and reporting data.”

An MDBC data quality assurance scheme would yield little in the way of improved flows, and NSW would not support such a scheme, should it be proposed.

### **5.3 Cap compliance reporting**

NSW has given a commitment to report on its approach to Cap management in the Barwon-Darling system.

NSW is making steady progress in developing long term climate adjusted simulation models such as the Integrated Quantity Quality Model (IQQM) for each valley. The complexity of these models and the large number needed for Cap compliance in NSW mean that they are not all expected to be satisfactory for auditing until late 2000 (see below). To date, one model has been submitted to MDBC for endorsement.

<i>Valley</i>	<i>Status of IQQM Suitable for 97/98 to 98/99 Cap Auditing</i>	<i>Current Auditing Tool</i>
Murray and Lower Darling (NB these are separate Caps covered by one model)	Existing monthly model available for 97/98 and 98/99 auditing. Upgraded monthly model for 97/98 to 98/99 auditing by June 2000.*	Existing model.
Murrumbidgee	IQQM available for 97/98 and 98/99 auditing by end 2000.	Climate-diversion relationship.
Lachlan	Upgraded model available for 97/98 and 98/99 auditing.	Upgraded IQQM.
Macquarie	Upgraded IQQM available for 97/98 and 98/99 auditing by September 2000.	Upgraded IQQM.
Peel	IQQM available for 97/98 and 98/99 auditing by end September 2000.	Climate-diversion relationship
Namoi	IQQM available June, 97/98 and 98/99 auditing by end 2000.	Monthly model
Gwydir	IQQM available for 97/98 and 98/99 auditing by September 2000.	IQQM
Border Rivers	Upgraded IQQM available for 97/98 and 98/99 auditing.	Upgraded IQQM
Barwon-Darling	IQQM available for 97/98 and 98/99 auditing.	IQQM

\* The status of the upgraded Murray and Lower Darling model will need to be confirmed with the Murray Darling Basin Commission.

There are particular challenges and complexities in preparing these models at a time when new management rules are being applied and the demand behaviour of water users is changing in response. The wide variation in climatic conditions and water user behaviour from year to year adds to these challenges. It is possible that the overall estimates of Cap and the performance of NSW in relation to Cap could change as the models are refined.

#### **5.4 Commencement date for auditing Cap**

The IAG and Project Board propose that audits for Cap commence in the 2000-01 year. This may coincide with the resolution of Cap arrangements for Queensland. NSW does not support this approach.

NSW strongly recommends that auditing continues to operate under the current arrangements, in which its accounting commences with the 1997-98 year.

Cap accounting to date has accrued credits in some valleys. To wipe these and start again would reduce commitment in these valleys to the Cap system. Conversely in valleys which are in Cap debit, a new start would give them an effective 'windfall'.

In the longer term, there is no disadvantage to states having different commencement dates. Since the NSW environmental flows policy has established the Cap as a benchmark, commencing in 1997-98, it would be disruptive to that process to change the commencement date.

#### **5.5 Remediating Cap exceedence**

NSW supports the amendment to Schedule F proposed in recommendation xiii of the IAG Companion Paper on Implementation and Compliance, namely:

“Clause 17 of Schedule F be modified to read

**Advice to Council on remedial actions**

17. (1) The Government of a State referred to in paragraph 16(a) must:
- (a) report to the next Ministerial Council after a declaration is made under that paragraph, setting out:
    - (i) the reasons why diversions exceeded the Murray-Darling Basin diversion cap; and
    - (ii) action taken, or proposed to be taken by it to ensure that cumulative diversions are brought back into balance with the cap; and
    - (iii) the valley model predictions of the period within which it is predicted that the cumulative diversions will meet the long term diversion Cap; and
  - (b) report to each subsequent meeting of the Ministerial Council on action taken, or proposed to be taken by it to ensure that cumulative diversions are brought back into balance with the cap in accordance with paragraph 17(1)(a), until the Commission revokes a declaration pursuant to sub-clause 17(2).
- (2) When the Commission is satisfied that a State in respect of which a declaration has been made under paragraph 16(a) has brought the cumulative diversions back into balance with the cap and is once more complying with the Murray-Darling Basin diversion cap in all respects, it must:
- (a) revoke the declaration; and
  - (b) report that fact to the next meeting of the Ministerial Council.”

To avoid any ambiguity, NSW understands this amendment to require a state to take action to ensure that long term average diversions are brought back in balance with the Cap. The proposal is supported as it is compatible with the environmental flow rules being used in NSW valleys and accommodates changes due to climatic variability and water user behaviour. The proposed approach is also consistent with adaptive management that is a fundamental principle of the NSW water reforms.

# NSW Response to the Review of the Operation of the Cap

## Summary

	Cap Project Board Position	Comment
<b>E c o l o g i c a l S u s t a i n a b i l i t y  o f R i v e r s</b>	<p>The Project Board has concluded that 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.</p>	<p>NSW agrees with this statement by the Project Board.</p> <p>The Cap is a critical response to the declining health of rivers in the Murray-Darling Basin. To achieve sustainability, however, future water management must be based on a combination of diversion limits, environmental flow rules and associated regulatory measures. The nature and objectives of environmental flow rules and regulatory measures must be based on valley specific objectives and opportunities, and are the responsibility of the states.</p> <p>The Cap has provided a strong complement to the water reforms in NSW. These reforms have included the introduction of environmental flows using the Cap as a baseline. In this context the Cap has been important in:</p> <ul style="list-style-type: none"> <li>• bringing about a general halt to further growth in water diversions;</li> <li>• assisting NSW to implement more sustainable water management measures; and,</li> <li>• providing downstream valleys and states with a basis upon which to plan.</li> </ul>

	Cap Project Board Position	Comment
	<p>However, the Project Board has concluded that 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 informs our management of the Basin’s resources, the level at which the Cap is set should continue to be refined to reflect our increased understanding. It is likely that such refinements may lead to the lowering of the level of the Cap in some valleys. Indeed, some jurisdictions have already increased the environment’s share, via access restrictions in addition to that required by the Cap, as part of their longer-term direction of improved water management.</p>	<p>NSW agrees “that there is no certainty that the Cap on diversions at its current level represents a sustainable level of diversions.”</p> <p>NSW does not agree, however that an adjusted Cap, or a Cap-type mechanism, is the way to achieve sustainability. Sustainability will come from a range of management initiatives targeted at achieving meaningful environmental improvements in each river system and taking into account the socio-economic impacts which might arise. This must be part of a broad water management planning process which provides for monitoring and review of the management rules and which engages the community in the process.</p>

	Cap Project Board Position	Comment
<p><b>E</b> <b>c</b> <b>o</b> <b>n</b> <b>o</b> <b>m</b> <b>i</b> <b>c</b></p> <p><b>a</b> <b>n</b> <b>d</b></p> <p><b>S</b> <b>o</b> <b>c</b> <b>i</b> <b>a</b> <b>l</b> <b>I</b> <b>m</b> <b>p</b> <b>a</b> <b>c</b> <b>t</b> <b>s</b></p>	<p>The Project Board considers that there is compelling evidence that the Cap has already delivered significant economic and social benefits to the Basin community and that the net benefit will increase over time.</p>	<p>NSW agrees that the Cap has provided significant social and economic benefits to date and that the net benefit will increase over time. However negative impacts and adjustments have reduced these benefits in the short term in some systems.</p>
	<p>The results of research conducted for the Review make it clear that, in the absence of the Cap, the erosion of security of supply for irrigators and other users would have been significant. These analyses were performed on several systems across the Basin reflecting diverse agricultural practices and climatic conditions.</p>	<p>Benefits of the Cap include:</p> <ul style="list-style-type: none"> <li>• improvements in the security of water supply to each river valley providing a more certain base for long term investment;</li> <li>• no growth in diversions while still allowing economic development through improved efficiency of water use;</li> <li>• accelerated development of water trading markets which has made it easier for new higher value uses to obtain supply and has highlighted the real value of water;</li> <li>• benefits to the environment, which of course have significant long-term economic and social value (although difficult to quantify); and,</li> <li>• avoidance, in the long term, of increasing social disharmony within the water community as well as between the rural and urban sectors as a result of conflicts over sharing of Basin inflows.</li> </ul>

	Cap Project Board Position	Comment
	<p>Through guaranteeing security of water 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.</p>	<p>While the Project Board's comments on security of supply are certainly true for downstream valleys, it should be acknowledged that there have been impacts in response to the introduction of the Cap, environmental flows and changed operational practices that give users individual flexibility. The changes have had both positive and negative socio-economic impacts and industry restructuring is occurring in response. The adjustment process in some systems will be a major one and will take some time to achieve.</p>
	<p>The Project Board considers that the Cap has provided a mechanism for restraining, in an orderly fashion, growth in diversions while enabling economic development to proceed.</p>	<p>The Cap is about stopping further growth in water use, not restraining economic development. As there is significant adjustment underway in NSW, it is important that the implementation of the Cap does not hinder water users improving their use of water by such measures as:</p> <ul style="list-style-type: none"> <li>• more flexible water account operational rules,</li> <li>• trading,</li> <li>• change in enterprise type</li> <li>• encouraging more efficient water use.</li> </ul>
	<p>The Project Board recognises that this strong positive conclusion will not be the perception of every stakeholder in the Basin. However, the Project Board concludes that the overall benefit of the Cap, especially from ensuring security of supply at a valley level and providing an environment within which water trading and related reforms could be developed, has been a positive one.</p>	<p>NSW supports the proposal for a communication strategy, coordinated between jurisdictions, to improve community understanding of the long term benefits of the Cap. It is important that any communications do not make unrealistic claims about short term benefits resulting from Cap. It is also essential that any communication strategy is developed in consultation with the states and seeks to progress the issues rather than revisit previous decisions.</p>

<p><b>E q u i t y</b></p>	<p>The Project Board identified several equity issues (notably Cap arrangements for Queensland and the ACT) of longstanding duration that require urgent resolution. In addition there are several more recently identified equity issues (floodplain and overland flows and diversions, farm dams and tree plantations) also requiring attention. The effective management of these issues will necessitate a total catchment management approach to water management that embraces both surface and groundwater resources.</p>	<p>In relation to Pindari Dam, NSW has determined a Cap for the NSW part of the Border Rivers and will be supplying a model and supporting studies to the IAG during the Cap audit later this year.</p> <p>NSW remains concerned about the implementation of the Cap in Queensland. Although there have been significant changes in the Queensland administration, there is no evidence yet of any intention to implement a 1993/94 diversion Cap. To date Queensland has announced only an intent to implement a 1998/99 limit on the Border Rivers while allowing for some further growth in the intersecting streams. This falls some well short of an equitable Cap across jurisdictions.</p> <p>NSW accepts that interstate trade is necessary for the ACT to develop and manage a Cap, and has embodied this principle in the NSW White Paper on water management legislation. NSW is involved in discussions with the ACT about the conditions under which trade will take place. NSW has considered Cap options referred to the MDBC for consideration and endorses option 2.</p> <p>NSW considers floodplain diversions in place prior to 1993/94 to be additional to its Cap determinations so far, and will soon attempt to quantify these. Diversions from post 1993/94 works, if issued a licence, will be accounted for within Cap.</p> <p>NSW agrees with the principle that farm dam diversions should be considered in the Cap. NSW understands that they have not been explicitly included in current Cap estimates by any state to date. This is because such estimates are extremely difficult and growth in farm dams is not expected to significantly affect total water extractions at the state level. NSW believes that work should continue to try to quantify the impact of farm dams and the significance of the volumes involved assessed.</p> <p>The practicality and costs of future audits of farm dam diversions should be assessed by the MDBC prior to a decision on its future inclusion.</p>
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		<p>NSW does not support a Basin-wide Cap for groundwater. It is not logical due to the poor or non-existent interactions between aquifers at the Basin level and between many aquifers and surface water systems. Accurate accounting for such complex systems would be expensive and unlikely to be accurate. Instead NSW supports an approach which includes:</p> <ul style="list-style-type: none"> <li>• identifying significant interactions between groundwater and surface water, identifying ecologically sustainable yields (ESY) for all major aquifers based on recharge rates and environmental requirements;</li> <li>• reviewing groundwater licence conditions and allocations in line with ESY calculations;</li> <li>• separating conjunctive licences into separate surface and groundwater components; and,</li> <li>• adaptive management through the groundwater and river management planning process.</li> </ul> <p>At this stage NSW does not consider it appropriate or feasible to attempt to account for the impact of landuse changes such as plantation establishment under the Cap. The impact of such changes are highly variable and unpredictable, especially at the Basin scale, and very difficult to quantify. Such an approach could also logically be extended to giving credits for tree clearing or urbanisation, something which is not in the long term interests of the Basin.</p>
	<p>The Project Board focused on equity issues arising from the implementation of the Cap between jurisdictions and between river valleys within States. In several cases, the submissions received by the Review of the Operation of the Cap raised equity issues that are about the details of implementation within valleys which are outside the jurisdiction of the Murray-Darling Basin Commission and Ministerial Council processes. The vast majority of such issues related to the recognition of licensed entitlement versus history of use, specifically in New South Wales (the “sleeper/dozer” issue). Such issues need to be dealt with by the particular jurisdiction concerned. In order that all submissions receive appropriate attention, these submissions and that of the CAC have been referred to the appropriate Government for consideration and reply.</p>	<p>NSW has considered these issues in its White Paper on new water management legislation.</p> <p>Implementing Cap in NSW has been a difficult, emotive and contentious process. There have been significant changes to water management in most systems, reducing the water available to some users. Some water users have sought water through the market. Many of these changes would have occurred anyway as a result of changes in water sharing accounting systems and increased competition for water as further licenses activated.</p> <p>Significant adjustment remains for the Barwon-Darling where the socio-economic impacts will be most significant.</p>

	Cap Project Board Position	Comment
<b>I m p l e m e n t a t i o n  a n d  C o m p l i a n c e</b>	<p>The work of the Independent Audit Group (IAG) on the ongoing implementation of the Cap and compliance of actual diversions with Cap target diversions has provided a clear direction for the finalisation of the implementation phase of the Cap. The Project Board generally supports the IAG recommendations.</p>	<p>NSW agrees with the recommendation that the MDBC develop a register of Cap definitions as agreed by partner governments as they finalise their monitoring and compliance programs. A degree of flexibility is needed in managing this register, particularly as there are significant policy and operational changes underway in NSW. The register should only refer to definitions that relate directly to Cap implementation, not other aspects of water management.</p> <p>NSW supports the recommendation that “Each jurisdiction puts in place an appropriate quality management system for the management of metering, monitoring and reporting data” and considers it has appropriate arrangements in place.</p>
	<p>Significantly, effective compliance tools (computer simulation models used to determine Cap target diversions) have not yet been developed and the Project Board recommends that a high priority be given to the finalisation of these models.</p>	<p>NSW expects to have models in operation for major regulated rivers which are adequate for Cap auditing purposes by end 2000.</p>

	<p>The Review has found that Victoria and South Australia have complied with the Cap, while Queensland and ACT are yet to complete the establishment of their respective Caps. Nevertheless, it is apparent that in Queensland there has been significant growth in storage which will impact on the water available for alternative consumptive and environmental uses. In New South Wales, the Cap has been breached in the Barwon-Darling system, with other valleys being within Cap limits.</p>	<p>NSW has given a commitment to achieving Cap on the Barwon-Darling and will be reporting on its approach to the next Ministerial council meeting.</p> <p>NSW remains concerned at the lack of progress in Queensland. Development in the Condamine and Queensland Border Rivers since 1993/94 has been much greater than that in the Barwon-Darling, however there is no commitment by Queensland to reduce use or even to control further growth on the Condamine.</p>
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	Cap Project Board Position	Comment
<p><b>S</b> <b>c</b> <b>h</b> <b>e</b> <b>d</b> <b>u</b> <b>l</b> <b>e</b> <b>F</b></p> <p><b>t</b> <b>o</b></p> <p><b>t</b> <b>h</b> <b>e</b> <b>M</b> <b>u</b> <b>r</b> <b>r</b> <b>a</b> <b>y</b> <b>-</b> <b>D</b> <b>a</b> <b>r</b> <b>l</b> <b>i</b> <b>n</b> <b>g</b></p> <p><b>B</b> <b>a</b> <b>s</b> <b>i</b> <b>n</b></p> <p><b>A</b> <b>g</b> <b>r</b> <b>e</b> <b>e</b> <b>m</b> <b>e</b> <b>n</b> <b>t</b></p>	<p>The most important challenge in Cap implementation is to finalise the arrangements under “Schedule F – Cap on Diversions” to the <i>Murray-Darling Basin Agreement</i>. This schedule is the primary tool for defining Cap arrangements especially those concerned with assessing compliance and its consequences.</p>	<p>This may well be an important challenge in Cap implementation, but on its own this is only an administrative tool. Perhaps more important are the development of each state’s policies for future management responses to counter any Cap exceedence and the publicising of these policies.</p>

	Cap Project Board Position	Comment
	<p>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:</p>	
	<ul style="list-style-type: none"> <li>Removal of references to end-of-valley flows as a method for Cap compliance.</li> </ul>	<p>NSW strongly supports the proposal to remove references to end-of-valley flows as a method of Cap compliance for the reasons outlined in the report. This approach will be crucial for credible compliance on the NSW/Qld intersecting streams.</p>
	<p>Arrangements for remedial actions in the case of Cap exceedence. The recommendation of the IAG is that States be required “<i>to ensure that cumulative diversions are brought back into balance with the cap</i>”.</p>	<p>NSW supports the amendment to Schedule F proposed in recommendation xiii of the IAG Companion Paper on Implementation and Compliance. To avoid any ambiguity, NSW understands this amendment to require a state to take action to ensure that long term average diversions are brought back in balance with the Cap.</p>
	<ul style="list-style-type: none"> <li>re-setting the commencement date for accounting for diversions under the Cap to start with the 2000/01 water year.</li> </ul>	<p>NSW does not support this approach. NSW strongly recommends that auditing continues to operate under the current arrangements, in which its accounting commences with the 1997-98 year.</p>

	Cap Project Board Position	Comment
<b>S</b> <b>u</b> <b>s</b> <b>t</b> <b>a</b> <b>i</b> <b>n</b> <b>a</b> <b>b</b> <b>l</b> <b>e</b>  <b>R</b> <b>i</b> <b>v</b> <b>e</b> <b>r</b> <b>s</b>  <b>A</b> <b>u</b> <b>d</b> <b>i</b> <b>t</b>	<p>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 regular Sustainable Rivers Audit which would 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 <i>Initiative</i>, a Sustainable Rivers Audit can be viewed as the next step in the process of achieving this objective.</p>	<p>NSW supports the proposal for a Sustainable Rivers Audit to review and support Basin-wide impacts of and priorities for environmental flows.</p> <p>However it is essential that all jurisdictions be party to the scoping and design of the audit and to its implementation. This is particularly important given that environmental flows and other operational improvements are the responsibility of states. Furthermore most states have already established water planning initiatives involving their communities. NSW has also been developing an environmental assessment program to inform environmental flow and decisions relating to sustainable water management. NSW will be keen to ensure that the Audit complements rather than duplicates this program.</p> <p>NSW believes that a steering committee of appropriate jurisdictional representatives be established as a matter of urgency to design and guide the audit.</p> <p>NSW believes that the primary purpose of the Audit should be to provide information for further discussions between jurisdictions through the MDB Ministerial Council about the coordination of their environmental flows particularly in respect to downstream outcomes and the protection of through-flows.</p> <p>NSW does not support a Sustainable Rivers Audit which is a Cap-type arrangement (involving a compliance audit).</p>

	Cap Project Board Position	Comment
<b>A n y  O t h e r  I s s u e s</b>	Are there any other issues raised in the draft report that you wish to comment upon?	