

## WHO PROTECTS VICTORIA'S RIVERS?



Approximately 200 Murray cod were killed in Broken Creek during November 2002

**SUBMISSION TO THE NATIONAL COMPETITION COUNCIL**

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## KEY RECOMMENDATIONS

1. Environment Victoria (EV) recommends that the NCC ascertain what the Victorian Government considers an “adequate” environmental flow. This information should be made available to the public.
2. EV recommends that the NCC direct Victoria to place copies of all reports relating to existing environmental flows in Victoria in the DSE library
3. EV recommends that the NCC direct Victoria to make future environmental flow study reports available on the DSE web site
4. EV recommends that NCC direct the Department of Sustainability and Environment to make available to the public a list of:
  - the scientific methods used to determine environmental flows for all of bulk entitlements
  - systems that achieved a “full environmental flows” referred to in *The Health of Our Catchments Fig 21*
  - systems where there was “no improvement ” as referred to in *The Health of Our Catchments*
  - systems where there was a “partial environmental flow” as referred to in *The Health of Our Catchments, Fig 21*
  - for systems with a “partial improvement” in environmental flows, what was the percentage improvement achieved compared against the flow determined by scientific investigation
5. EV recommends that in preparation for the 2004 assessment of Victoria’s water reforms, the NCC should direct the Victorian Government to
  - Engage an independent auditor to examine the delivery of all environmental flow allocations
  - Collect and assess biological data on the ecological health of river systems with environmental flow allocations
6. EV recommends that the NCC make public the criteria it uses to assess the adequacy of environmental flow regimes in Victorian rivers.

7. EV recommends that the NCC direct the Victorian Government to

- Remove control of environmental water allocation from water authorities
- Resource Catchment Management Authorities to take responsibility for environmental flows
- Reform the Catchment and Land Protection Act to reflect the CMA's role as river stewards
- Reform the *Victorian Water Act 1989* to impose a duties on all persons involved in the allocation and management of water resources to comply with ecologically sustainable management principles; impose a duty on all persons involved in the allocation and management of water resources to rehabilitate degraded aquatic ecosystems; Environmental water allocations should be clearly specified, holders of environmental allocations should be clearly demarcated, and they should give account of their performance; Members of the public should be able to claim a right to access information, and with appropriate safeguards, be able to enforce public rights
- Allocate funds for the management and monitoring of environmental allocations created by investments in water efficiency projects
- Establish annual audits of environmental flow allocations. These audits should be tabled Parliament.

8. EV recommends that the NCC directs Victoria to report on:

- the proportion of regulated and unregulated rivers and streams where scientifically determined environmental flows have been determined
- details on environmental flows actually allocated in comparison to the scientifically determined environmental flows
- details on actual environmental flows delivered each year in comparison with the allocated environmental flows.
- Review the ecological response of systems with environmental flow allocations every 3 years. Outcomes of the reviews should be tabled in Parliament

9. EV recommends that the NCC direct Victoria to abandon the policy of negotiated environmental flows and adopt a policy that ensures delivery of scientifically determined environmental flows

## Background to the 2003 Assessment

### The Council of Australian Governments

In 1994 the Council of Australian Governments (CoAG) began developing a strategic framework for reforming Australia's water industries.

In April 1995, CoAG agreed to link National Competition Policy (NCP) payments by the Commonwealth Government to the States on the basis of their implementation of the 1994 agreement.<sup>1</sup> The Victorian Government receives about \$115 million in NCP payments each year.

Under the COAG agreement, state governments were to reform their water businesses and allocate water resources in accordance with *The National Principles for the Provision of Water for Ecosystems*.<sup>2</sup> The CoAG agreement committed Victoria to integration of the *National Principles* into the reform of the Victorian water industry.

<i>The National Principles For The Provision Of Water For Ecosystems</i>	
<b>Goal</b> The goal for providing water for the environment is to sustain and where necessary restore ecological processes and biodiversity of water dependent ecosystems	
<b>Principle 1</b> River regulation and/or consumptive use should be recognised as potentially impacting on ecological values	<b>Principle 7</b> Accountabilities in all aspects of management of environmental water provisions should be transparent and clearly defined
<b>Principle 2</b> Provision of water for ecosystems should be on the basis of the best scientific information available on the water regimes necessary to sustain the ecological values of water dependent ecosystems	<b>Principle 8</b> Environmental water provisions should be responsive to monitoring and improvements in understanding
<b>Principle 3</b> Environmental water provisions should be legally recognised	<b>Principle 9</b> All water uses should be managed in a manner which recognises ecological values
<b>Principle 4</b> In systems where there are existing users, provision for the environment should go as far as possible to meet the water regime necessary to sustain the ecological values of aquatic ecosystems whilst	<b>Principle 10</b> Appropriate demand management and water pricing should be used to assist in sustaining ecological values of water resources

<sup>1</sup> Council Of Australian Governments, *The Agreement to Implement the National Competition Policy and Related Reforms*, COAG, 1995

<sup>2</sup> Council Of Australian Governments, *Communiqué from the Meeting of 25 February 1994*, COAG, February 1994, s. 4(c)

recognising the existing rights of other users	
<b>Principle 5</b> Where environmental water requirements cannot be met to existing uses, action (including reallocation) should be taken to meet environmental needs	<b>Principle 11</b> Strategic and applied research to improve understanding of environmental water requirements is essential
<b>Principle 6</b> Further allocation of water for any use should only be on the basis that natural ecological processes and biodiversity are sustained (ie. ecological values are sustained).	<b>Principle 12</b> All relevant environmental, social and economic stakeholders will be involved in water allocation planning and decision-making on environmental water provisions

Environment Victoria (EV) argues that Victoria is failing to implement reforms that are consistent with the *National Principles for the Provision of Water for Ecosystems*.

#### The Condition of Victoria's Rivers

The Victorian Government's performance in protecting and restoring aquatic ecosystems should be measured against the current condition of the state's rivers, lakes, wetlands, floodplains and estuaries.

- Only 27% of Victoria's rivers are good or excellent condition
- Native fish are an indicator of overall river health. 65% of Victoria's native fish are threatened with extinction
- Native fish populations have been reduced by 90% in the Murray Darling Basin
- 35% of Victorian wetlands have been lost, 44% of estuaries have been significantly modified
- In catchments such as the Glenelg, 75% of wetlands have been destroyed
- Algal blooms have increased by over 100% in the last 10 years
- Of the 100 000 ha of Murray River floodplain, up to 76 000ha are predicted to be affected by salt by 2050.
- Salinisation of rivers, wetlands and estuaries is likely to increase significantly in coming decades in line with the predicted increase in the area affected by dryland salinity.

(A snapshot of some of Victoria's degraded rivers are provided in Attachment A)

The degradation of aquatic ecosystems has been occurring for a century. For most of that time concerned residents, fishers and others have been raising concerns about the destruction of rivers and floodplains. Sixty-odd years ago a fisherman noted that:

The decline of the [Murray] cod was noticed some five or ten years ago. It has become pronounced as the conservation of water [behind dams and weirs] proceeds. So that, since the conservation began, we have been living on the principal and not the interest of our fish heritage.<sup>3</sup>

The degradation witnessed by the fisherman in the 1930s still continues and has resulted in native fish populations being reduced by 90% within the Murray Darling Basin.

The Victorian Government has controlled who is able to gain access to water and how much they are able to take for their private benefit since 1886. Over the last 117 years the Victorian Government's water allocation policies, combined with land use practices ill-suited to the Victorian landscape, have eroded the health of catchments, and degraded or destroyed many of Victoria's rivers, lakes, wetlands and estuaries. The policies of the Victorian Government have been, and continue to be, the largest and most significant influence on the health of Victoria's rivers.

Generations of Victorian Governments have acted as stewards of the irrigation industry. For 117 years Government policy towards rivers has focussed on how best to extract, store and deliver water for the benefit of irrigated agriculture. During the 1880s Alfred Deakin, the father of Victorian irrigation, wrote that "if Victoria is to progress in the settlement of her people upon lands and the multiplication of her resources by the conquest of areas hitherto regarded as worthless...it must be by means of irrigation. No price, it may be said, is too high for such a promise of progress".<sup>4</sup> The replacement value of Victoria's water infrastructure has been estimated at \$30 billion.<sup>5</sup> Irrigated agriculture accounts for 77% of Victoria's water use.

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<sup>3</sup> Sinclair, P., *The Murray: A River and its People*, Melbourne University Press, Melbourne 2001, p. 155.

<sup>4</sup> Alfred Deakin quoted in Powell, J. M., *Watering the Garden State: Water Land and Community in Victoria, 1834-1988*, Allen and Unwin, Sydney, 1989, pp. 108-9

<sup>5</sup> Infrastructure Planning Council, *Final Report August 2002, Part A: Overview and Recommendations*, 2002, p. 24

Successive Victorian Governments have made Deakin's dream a reality – rarely have the environmental costs of degradation inhibited the exploitation of the state's rivers.

The service the Victorian Government has provided to irrigated agriculture has been outstanding.

#### Who Pays the Costs of Degraded Rivers?

Alfred Deakin had no idea what the real price Victorians would pay for turning rivers into drains and channels to deliver irrigation water. The landscapes that Deakin considered worthless actually maintained a complex and subtle natural balance that kept salinity at bay, maintained the stability of the soil, regulated climate, kept water clean, disposed of wastes and maintained a biological diversity found nowhere else on Earth. No technology can provide these services as cheaply or efficiently as healthy ecosystems. Economists now call these processes “ecosystem services” – without them there will be no agriculture, no cities and no life worth living. The Earth provides these services for free. The CSIRO has estimated that the value of ecosystem services in Australia to be worth \$1327 billion each year.<sup>6</sup>

When Alfred Deakin predicted that Victorians would pay any price to turn rivers into irrigation channels, he did not consider the costs of slowing, stabilising and repairing land and water degradation. These debts will be repaid for at least another hundred years. The Australian Conservation Foundation and the National Farmers Federation have estimated that it will cost \$65 billion to repair the damage caused by salinity alone. Other recent public investments in land and water repair include:

- Over the past two years the Victorian Government has invested \$10 million into assisting Landcare tackle local degradation issues
- The Commonwealth Natural Heritage Trust invested \$200 million across Victoria to protect ecosystems and address the causes of degradation.
- Since 1990 the Victorian Government \$257 million on salinity management activities

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<sup>6</sup> *The Health of Our Catchments: A Victorian Report Card 2002*, State of Victoria, Victorian Catchment Management Council, 2002, p. 4.

- In 2001 the Commonwealth and Victorian Governments agreed to jointly spend \$1.4 billion over 7 years to combat dryland salinity, water quality and biodiversity decline<sup>7</sup>

### The Victorian Water Allocation Framework

Despite clear evidence of continuing over-exploitation of the state's rivers, the Victorian Government has strengthened unsustainable allocations of water through its Water Allocation Framework. Bulk entitlements are the most significant part of the Water Allocation Framework, and their primary purpose is to "clarify the rights of existing users".<sup>8</sup> It is this existing use of water that has over-exploited the state's rivers.

Bulk entitlement project groups, and other processes like the streamflow management planing project groups and groundwater management planning groups, are continuing to allocate water in a way that is running down Victoria's commonly owned biodiversity and water resource assets for private and commercial gain.

Bulk entitlement project groups, streamflow management planing project groups and groundwater management planning groups are dominated by private and public water users who have a direct financial interest in maintaining the water-allocation regimes that are degrading river systems. It is in the financial interest of water authorities to diminish any potential water allocation designed to protect and restore aquatic ecosystems.<sup>9</sup>

Research done by Associate Professor Brian Finlayson and Dr Tony Ladson from the Co-operative Research Centre for Catchment Hydrology has found that over the history of Victoria's bulk entitlement conversion process that there was:

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<sup>7</sup> *The Health of Our Catchments*, p. 5

<sup>8</sup> *Healthy Rivers, Healthy Communities and Regional Growth: Victorian River Health Strategy*, Department of Natural Resources and Environment, Melbourne, August 2002, p. 61

<sup>9</sup> The Parliamentary Inquiry into the Allocation of Water Resources (2001) observed that it is a statutory requirement in farming districts for a majority of the Groundwater Management Plan Consultative Committee's to be farmers, and that the Victorian Farmers Federation advise the Minister on which farmers will be nominated. The Inquiry found that a consequence of the imbalance in the GMP project group membership is that: "There certainly is potential for the interests of consumptive users, particularly irrigation, to be given priority over other consumptive and non-consumptive users. The potential for bias could undermine the legitimacy of the process and broad acceptance of the outcomes", Environment and Natural Resources Committee, *Parliamentary Inquiry into the Allocation of Water Resources, Inquiry Report November 2001*, State of Victoria, 2001, p. 196.



- a decrease in the amount of environmental monitoring required as part of the granting of bulk entitlements;
- the establishment of internal Government procedures to review environmental requirements rather than seeking input from external scientific experts;
- restrictions on the water extracting authority's responsibility for any environmental damage;
- restrictions on third party rights, in particular, restricting the ability of waterway management authorities to address environmental concerns that arise from the extraction of water granted under a bulk entitlement;
- decreasing reporting requirements of authorities that are granted a bulk entitlement;
- reductions in the requirement for the setting of management objectives as part of the bulk entitlement process; and
- reductions in the need to specify objectives for environmental flow events.

Finlayson and Ladson list a number of possible reasons for why these changes occurred. There may have been a fear amongst the economic reformers that environmental issues would delay the introduction of bulk entitlements. These reformers may have considered it better to introduce the reforms and then address any environmental issues later if they engendered public concern. It is also possible that the reform agenda was captured by production interests keen to maximise the amount of water that could be extracted and to limit their liability for any environmental damage.<sup>10</sup>

The first Bracks Government continued the environmentally retrogressive work of bulk entitlement conversions established by the Kennett Government. The first Bracks Government:

- Continued to allocate water to water authorities on the principle that the “the more you used in the past the more you’ll get in the future”. Unsustainable water allocations made in the past, have been strengthened by of bulk entitlements
- Failed to establish environmental flow regimes capable of protecting and restoring rivers

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<sup>10</sup> Ladson, T. and Finlayson, B., “Rhetoric and Reality in the Allocation of Water to the Environment: A Case Study of the Goulburn River, Victoria, Australia”, *River Research and Applications*, (in press)

- Presented misleading information to the public on Victoria's performance in establishing environmental flow regimes
- Compounded the legislative disregard for aquatic ecosystems enshrined in *Victorian Water Act 1989*

#### Issues Affecting the 2003 Assessment of Water Reform in Victoria

In 2002 the NCC raised concerns about the track record of water allocation project groups and their failure to adequately consider the environmental costs of their recommendations. The Victorian Government's response to this concern was:

that the community has agreed to accept a higher level of environmental risk and/or certain level of environmental degradation as a consequence [of not providing appropriate environmental flows to rivers].<sup>11</sup>

This statement is misleading, and represents an abdication by the Bracks Government of its obligations to protect and restore the natural assets of Victoria.

Do project groups that determine environmental flow regimes represent the community?

Water allocation project groups are required to have 50% of their members drawn from primary producers. In 1970 there were 50 Victorians for every one farm in the state. Today there are 175 Victorians for every one farm. Modeling suggests that over the next 20 years the number of Australian farmers will decline by somewhere between 40% and 60%. The potential future adjustment suggests there will be 400 Victorians for every farm in the state by 2021.<sup>12</sup>

It is possible for organisations that dominate water allocation project groups to allocate water to themselves for their commercial benefit, while transferring the environmental and economic costs of over-use onto the broader community.

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<sup>11</sup> National Competition Payments Assessment, 2002, p. 3.73

<sup>12</sup> *The Health of our Catchments*, pp. 95-6.

In the Upper Wimmera River region for example, a stream flow management plan will soon allow Wimmera Mallee Water to sell water saved by the Northern Mallee Pipeline. This water will be captured in new catchment dams that will impact on the critical summer flow regime of the river. This section of Wimmera River is the last section in reasonable condition and is a refuge for threatened species of flora and fauna. This flora and fauna could re-colonise the lower reaches of the degraded lower Wimmera after environmental flows are created by the \$150 million Wimmera Mallee Pipeline project. The risks associated with these new water allocations in the Upper Wimmera will be carried by the environment in both the upper and lower reaches of the river.

Does the Victorian public have access to accurate information about the high levels of environmental risk being placed on rivers by the Victorian Government?

A citizen concerned about the degradation of the state's rivers would have great difficulty finding out how well commonly-owned aquatic ecosystems and water resources are protected because the Victorian Government presents misleading information on the provision of environmental flows.

Last year the Victorian River Health Strategy reported that “Whilst a BE conversion process is primarily aimed at clarifying the rights of existing users, in 82% of these negotiations some improvements to environmental flow regimes have been achieved”.<sup>13</sup> EV has found no publically available data that allows any assessment of whether many of the 82% of bulk entitlements quoted in the River Health Strategy actually met the ecological needs of river systems.<sup>14</sup>

In the 1999 NCC assessment of Victoria’s water reforms, figures provided by the Department of Natural Resources and Environment showed that flow levels remained inadequate in 42 of the 73 systems where bulk entitlement conversion had occurred.<sup>15</sup> Of the 31 systems deemed to have “adequate” environmental flows, 27 already had these flows in place before the bulk entitlement

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<sup>13</sup> VRHS, p. 61.

<sup>14</sup> The Victorian River health Strategy states that a key component of an environmental flow regime is to “maintain the ecological assets of a river, including those linked with floodplains and downstream estuaries an/or terminal lakes, and maintain the river in ecologically healthy condition”, p. 67.

<sup>15</sup> National Competition Council, Second Tranche Assessment of Governments’ Progress with Implementing Policy and Related Reforms, Commonwealth of Australia, June 1999, p. 404.

conversion process commenced – which leaves 4 river systems from a total of 73 that achieved an improved environmental flow regime under the bulk entitlement process. This means that only 5.5% of bulk entitlements had “adequate” environmental flows.

There is no indication of what the Department of Sustainability and Environment thinks is an “adequate environmental flow”.

On page 3.28 of the 2002 NCP assessment it is stated that environmental flow study reports will be made available on the web to ensure that the wider community has access to this information.

EV is concerned about the accessibility of environmental flow study reports to the wider community. Most of the environmental flow study reports that have been used as the basis for bulk entitlements and stream flow management plans have not been lodged in the Department of Sustainability and Environment (formerly DNRE) library or on the web.

The results of a computer search undertaken by EV (Attachment C) of the DNRE library catalogue has shown that only 11 of the 29 environmental study reports used in the preparation of bulk entitlements and stream flow management plans have been lodged in the departmental library.

It appears that no environmental flow study reports have to date been placed on the departmental web site. The Cooperative Research Centre for Freshwater Ecology has however placed three environmental flow reports that it has conducted on its own web site.

**EV recommends that the NCC ascertain what the Victorian Government considers an “adequate” environmental flow. This information should be made available to the public.**

**EV recommends that the NCC directs Victoria to place copies of all reports relating to existing environmental flows in Victoria in the DSE library**

**EV recommends that the NCC directs Victoria to make all environmental flow study reports available on the DSE web site**

In 2002 the Victorian Catchment Management Council (VCMC) published *The Health of Our Catchments: A Victorian Report Card 2002*. Material provided to the VCMC by the Catchment and Water Division of the Department of Sustainability and Environment discusses different categories of environmental flows including “full environmental flows” and “partial environmental flows”. It also implies that there were some bulk entitlements that did not seek to increase environmental flows.<sup>16</sup> On 20 December 2002 EV asked the Department of Sustainability and Environment to provide further information on the scientific basis of these phrases. As of 31 March 2003 EV had not received a response to its request. It is highly likely that the categories of environmental flows referred to in *The Health of Our Catchments* have no scientific basis, but are the personal opinion of officers of the Victorian Government. It would appear that Victoria is continuing its practice of relabeling passing or minimum flows that fail to meet the ecological needs of rivers as environmental flows.<sup>17</sup>

It is of great concern that the NCC relies on this misleading and confusing information provided by the Victorian Government to assess how much progress has been made towards sustaining and restoring the ecological processes and biodiversity of water dependent ecosystems.<sup>18</sup>

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<sup>16</sup> *The Health of Our Catchments*, p. 36.

<sup>17</sup> Nevill, *Freshwater Biodiversity*, p. 43.

<sup>18</sup> *National Principles for the Provision of Water for Ecosystems*, Agriculture and Resource Management Council of Australia and New Zealand and Australian and New Zealand Environment and Conservation Council, 1996, p. 5.

**EV recommends that NCC direct the Department of Sustainability and Environment to make available to the public a list of:**

- **the scientific methods used to determine environmental flows for all bulk entitlements**
- **systems that achieved a “full environmental flows” referred to in *The Health of Our Catchments Fig 21***
- **systems where there was “no improvement” as referred to in *The Health of Our Catchments Fig 21***
- **systems where there was a “partial environmental flow” as referred to in *The Health of Our Catchments Fig 21***
- **for systems with a “partial improvement” in environmental flows, what was the percentage improvement achieved compared against the flow determined by scientific investigation**

**In preparation for the 2004 assessment of Victoria’s water reforms, the NCC should direct the Victorian Government to**

- **Engage an independent auditor to examine the delivery of all environmental flows allocations**
- **Collect and assess biological data on the ecological health of river systems with environmental flow allocations**

**EV recommends that the NCC make public the criteria it uses to assess the adequacy of environmental flow regimes in Victorian rivers.**

## Victoria's Commitment to Stressed Rivers



This hole has been cut in the Loddon Weir to provide domestic and stock water to farmers downstream of the weir flow to the Loddon River. The Loddon is one of Victoria's most stressed rivers. It does not have an environmental flow.

Victoria is yet to meet its commitments for action on environmentally stressed rivers. In the 2001 assessment Victoria provided a three-year timetable for improving the health of priority stressed rivers.

The 2002 assessment found this program to be on track against the overarching Victorian River Health Strategy. In 2003 the NCC will assess the individual river health strategy plans against the 2001 timetable to ensure the environmental outcomes are being delivered.

- Development of the first round of five stressed river plans (Thomson, Macalister, Maribyrnong, Badger Creek, & Lerderderg) will be assessed against stage 1 and stage 2 mechanisms in the river health strategy

The 2001 NCP assessment provided a comprehensive three-year program to improve the health of eleven priority stressed rivers in Victoria. In the 2002 NCP assessment Victoria advised that the program will need to be reviewed after the Victorian River Health Strategy and Regional River Health Strategies are complete.

The three key commitments in the Victorian River Health Strategy that are crucial to development of a specific program are:

- *Guidelines for the development of regional river health strategies will be completed by September 2002. **These had not been released by February 2003.***
- *A decision support framework to assist in setting priorities for river protection and restoration will be developed. **This key component in the preparation of regional river health strategies had not been released by February 2003.***
- *Regional river health strategies will be completed in all regions by June 2003*

EV asserts that the Victorian Government is behind schedule in meeting key commitments in the Victorian River Health Strategy and in the preparation of Regional River Health Strategies. As a result Victoria has not published a revised program for improving the health of priority stressed rivers. Hence the 2003 NCP assessment of Victoria's progress on meeting commitments for action on environmentally stressed rivers will yet again be against a non specific program.

While draft guidelines and a draft decision support framework have been made available for regional groups preparing regional river health strategies neither of these has been released for public scrutiny. Some regions have started using the draft guidelines and decision support framework to prepare their regional river health strategies. Most regions are however well behind



schedule and will not complete their strategies until well after the target date of June 2003 and hence after the conclusion of the 2003 NCP assessment.

Victoria is continuing the practice of moving the goal posts for stressed rivers further into the distance and making it difficult to assess progress on commitments on stressed rivers

EV is concerned that the regional river health strategies will not adequately address the needs of stressed rivers. The priorities in the Victorian River Health Strategy and the regional river health strategies are based on protecting high value reaches, enhancing river reaches in good condition and protecting them from damaging developments.

The five-year Regional Implementation Targets in the draft Glenelg Hopkins River Health Strategy does include a target to finalise negotiations with all stakeholders for environmental flows in the Glenelg River. EV is concerned that the regional river health strategy does not detail specific actions or a program to implement this. Hence this strategy does not provide any basis for future reviews of progress on stressed rivers.

#### **NATIONAL PRINCIPLES FOR PROVISION OF WATER FOR ECOSYSTEMS**

The 2003 National Competition Policy Assessment Framework for Water Reform will examine

- *Victoria's progress in implementing the three year action plan on stressed rivers will be assessed against principles 4, 5 & 9.*
- *In particular Council will look for Victoria to invest in proposals to improve environmental health on stressed rivers with rivers with priority consideration being given to rivers nominated on the stressed rivers program.<sup>19</sup>*

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<sup>19</sup> National Competition Policy Assessment Framework for Water Reform, 2003, p. 37.

#### **Principle 4**

*In systems where there are existing users, provision of water for ecosystems should go as far as possible to meet the water regime necessary to sustain the ecological values of aquatic ecosystems whilst recognising the existing right of other water users*

The 2001 NCP assessment noted that while the bulk entitlement and streamflow management plan processes make provision for the environment, Council came to the conclusion that these provisions are insufficient and that principle 4 is not being met.

The 2001 Assessment noted that clause 4d of the CoAG agreement requires “appropriate allocations to the environment in order to enhance or restore the health of river systems”. The following paragraph from the 2001 NCP assessment set out the requirements of clause 4d.

*The requirements of clause 4d of the CoAG agreement note that failure to deliver adequate flows for a ‘flow regime that is below that required to maintain long term environmental health’ still leads to degradation. Clause 4d requires ‘appropriate allocations to the environment in order to enhance or restore the health of river systems’.*

EV asserts that principle 4 will not be met in Victoria while the “negotiated environmental flow” policy is in place.

EV maintains that continued application of the negotiated environmental flow policy will result in some rivers not being allocated the scientifically determined environmental flow and hence will continue to be degraded.

The process of determining bulk entitlements in regulated rivers in Victoria is set out in section 6.2.1 in the Victorian River Health Strategy. The primary aim of the process is to clarify previously poorly defined rights of existing users. Each regulated system is reviewed in a negotiation process between irrigators, water authorities, environmental managers and other groups with the aim of improving environmental flows where possible. In practice the result of

this process is that the environmental flow equates to what is left over after other requirements have been satisfied.

EV contends that the deficiency in this process is being masked in the latest information that has been published on the extent to which environmental flows have been achieved in Victoria. This is set out on pages 36 and 37 in *The Health of our Catchments*.

The report uses a surrogate indicator which identifies the number of bulk entitlements and streamflow management plans that achieve an environmental flow outcome. The report uses this surrogate indicator because relatively few scientific studies have been done into environmental flows in Victoria's rivers. The report refers to another surrogate indicator, change to natural flow which is being developed for the index of stream condition.

Rather than pursuing these deficient surrogate indicators EV contends that in future Victoria should in future report progress against the three basic steps in achieving adequate environmental flows. i.e.

- the proportion of regulated and unregulated rivers and streams where scientifically determined environmental flows have been established
- details on environmental flows actually allocated in comparison to the scientifically determined environmental flows
- details on actual environmental flows delivered each year in comparison with the allocated environmental flows.

**EV recommends that the NCC directs Victoria to report on:**

- **the proportion of regulated and unregulated rivers and streams where scientifically determined environmental flows have been determined**
- **details on environmental flows actually allocated in comparison to the scientifically determined environmental flows**
- **details on actual environmental flows delivered each year in comparison with the allocated environmental flows.**

## **Principle 5**

*Where environmental water requirements cannot be met due to existing uses, action (including reallocation) should be taken to meet environmental needs*

The Victorian Government has no policy that details how water will be returned to stressed rivers.

In the 2002 NCP assessment for Victoria the NCC expressed the view that the bulk entitlement and stream flow management plan process alone will not be sufficient to meet this principle.

Victoria agreed that the consultative committees may simultaneously consider and recommend stage 2 proposals for stressed rivers of high value identified in regional river health strategies.

Continuation of the above flawed policy of aiming for negotiated environmental flows is still evident in the October 2002 draft of the Glenelg Hopkins Regional River Health Strategy. Targets 5.01 and 5.02 in this strategy still refer to negotiated environmental flows.

Stage 2 proposals relate to stressed rivers and identify environmental flow improvements required, how these could be best achieved, habitat restoration and cost sharing arrangements.

If clause 4d of the CoAG agreement is to be satisfied the policy on negotiated environmental flows has to change. The process must be about negotiating how the scientifically determined environmental flow will be achieved rather than how much of the scientifically determined environmental flow will be allocated.

It appears to EV that the Glenelg Hopkins Regional River Health Strategy does not really embrace the concept of a stage 2 proposal.

**EV recommends that the NCC directs Victoria to abandon the policy of negotiated environmental flows and adopt a policy that ensures delivery of scientifically determined environmental flows**

## **Principle 9**

*All water uses should be managed in a manner which recognises ecological values*

The 2001 NCP assessment noted that the main outcomes of the SMP and BE conversion program has been management rules that aim to minimise the impact on the environment. The assessment noted that the BE process provides some long term protection for existing aquatic values and that further clawbacks of environmental water will be needed

EV asserts that current arrangements for allocating water resources in Victoria are not ensuring that ‘clawbacks’ that are achieved actually finish up as improvements to environmental flows. The inadequacy of current responsibilities was highlighted in allocations made this year to the Glenelg and Wimmera Rivers. The state and federal governments have invested significant financial resources into the Northern Mallee Pipeline Project to free up water for the environment. Currently Wimmera Mallee Water has responsibility for allocating water for the environment in these two rivers.

The upper reach of the Glenelg River has high conservation significance and has been declared a representative reach through the Victorian River Health Strategy. The significant species reliant on adequate environmental flows include:

- eight freshwater fish species listed under the *Victorian Flora and Fauna Guarantee Act 1988*;
- four freshwater fish species listed on the List of Threatened Australian Vertebrate Fauna;
- three species of decapod crustaceans, two of which are rare and the other is threatened/endangered;
- fifteen threatened flora species and twenty threatened bird species that rely on the in-stream environment for their survival.

This year Wimmera Mallee Water allocated 1000 ML for environmental flows and zero for compensation flow to the Glenelg River. Compensation flows are made to compensate for the decrease in flows that resulted when Rocklands Reservoir was constructed in 1953. In 1998 an agreement was struck between the Wimmera and Glenelg catchments that should have resulted,

under the current drought conditions, in a minimum flow of 2500 ML for the environmental and compensation.

While EV recognises the very difficult task that water managers have in balancing allocations between different demanding uses during droughts, we are of the opinion that this responsibility should not be vested in a water authority. EV maintains that responsibility for water allocation should be with independent resource managers such as the Catchment Management Authorities. EV is concerned that the commitments of water authorities to paying customers could impact on decisions about allocations of environmental water.

### **Who Protects Victoria's Rivers?**

The current water allocation framework is failing to protect and restore aquatic ecosystems.

- Environmental flows are not recognised in legislation, their purpose and obligations are not stated or included in the charters or operating licensing of water authorities
- Existing environmental flows can be amended administratively
- Effective mechanisms for enforcement of flow rules such as operating licenses are lacking, and no auditing or licensing arrangements exist to ensure compliance
- Responsibility for monitoring the environmental condition of rivers is not set out by statute
- Minimum flow rules don't hold in practice and have never been enforced or prosecuted
- There is no monitoring of environmental outcomes in rivers with flow regimes
- Victoria's key environmental regulator, the EPA, has a mandate that includes water quality however it is not resourced to be involved and represent the flow needs of rivers<sup>20</sup>

Government owned water authorities continue to be unaccountable for the damage they are causing to the state's rivers.<sup>21</sup> Few other industries are able to degrade publically owned natural assets with as much immunity as water authorities.

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<sup>20</sup> Nevill, *Freshwater Biodiversity*, p. 43.

<sup>21</sup> The NCC incorrectly reported in its 2003 Policy Assessment Framework for Water Reform that water service agreements had been signed by rural water businesses. These agreements were supposed to increase transparency, accountability and remove conflicts between service provision and regulation. As of March 2003 service agreements had not been signed with rural water businesses.

The Victorian Parliamentary Inquiry into the Allocation of Water Resources (2001) noted that rights and obligations under bulk entitlements are *theoretically* enforceable by law. Water authorities are required to report on the extent to which they have met obligations. The Inquiry found that bulk entitlement obligations have been broken by water authorities yet there had been no prosecutions by July 2001. The Inquiry concluded that “Independent auditing of water authorities compliance with their legal obligations under Bulk Entitlement Orders would be desirable”.<sup>22</sup>

This finding has been ignored by the Victorian Government.

Water authorities continue to operate without sufficient regard to the environment because of their close relationship with Government “regulators”. Material supplied to the VCMC from the Catchment and Water Division of DSE explains that:

“The Bulk Entitlement Conversion Project is an evolving process, with the current focus on setting limits (or caps) to growth in water diversions for all regulated streams. As BE’s are negotiated, the focus will shift towards compliance monitoring. Up this point in time there have been only a small number of non-compliance reports. Over time, as demands for water grow, the incidence of non-compliance is expected to increase”.<sup>23</sup>

It is extraordinary that water authorities, who over the last 13 years have been allocated 83% of the state’s surface water through BE processes, are still able to evade environmental regulation.

The failure of the government to create an accountable institutional structure that protects and delivers environmental water allocations for the benefit of Victoria’s rivers has wide ranging implications.

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<sup>22</sup> *Inquiry into the Allocation of Water Resources*, p. 189.

<sup>23</sup> *The Health of Our Catchments*, p. 56.

The Bracks Government has funded a number of projects to make water delivery systems more efficient. It is likely that the Victorian Water Trust will fund more such projects. Flow stressed rivers should be allocated the water saved by this public investment. Under the current regime, the environmental benefits created by the public investment in water saving projects will be undermined by the commercial interests of water authorities.

A dangerous precedent has been set by Wimmera Mallee Water's (WMW) control of the environmental water allocation created by the Northern Mallee pipeline. WMW have imposed harsher restrictions to the environmental allocation than to domestic and stock allocations. Water has been "borrowed" from the environment to supply domestic and stock users. This water will be paid back in wet years when the environment has less need for its allocation.

The current drought has highlighted how little power the environment has to enforce its right to water. The Government's failure to protect aquatic ecosystems during the drought will have long-term consequences for river health. In February 2003 the Cooperative Centre for Freshwater Ecology explained to readers of its newsletter that:

environmental flows should continue to be released [during drought], to protect stream refuges and habitats downstream of dams. Large dams [like Rocklands Dam that stores Wimmera and Glenelg River water]...prolong the drought for the river downstream. The dams empty during drought and it can take months or years until they fill and spill again. Periodic releases of water, as base flows and pulses, can help the downstream aquatic communities survive and recover from drought".<sup>24</sup>

Without these pulses rivers that are already chronically ill will have less chance of recovering when the drought breaks.

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<sup>24</sup> Jones, Gary, "Recovering from the Drought", *Watershed*, CRC for Freshwater Ecology, February 2003, pp. 1-2.



Without stronger legal and institutional protection, environmental flow allocations will be misappropriated by water authorities to increase the security of supply of existing commercial users or sold to feed increasing demand.

**EV recommends that the NCC direct the Victorian Government to**

- **Remove control of environmental water allocation from water authorities**
- **Resource Catchment Management Authorities to take responsibility for environmental flows**
- **Reform the Catchment and Land Protection Act to reflect the CMA's role as river stewards**
- **Reform the *Victorian Water Act 1989* to impose a duties on all persons involved in the allocation and management of water resources to comply with ecologically sustainable management principles; impose a duty on all persons involved in the allocation and management of water resources to rehabilitate degraded aquatic ecosystems; Environmental water allocations should be clearly specified, holders of environmental allocations should be clearly demarcated, and they should give account of their performance; Members of the public should be able to claim a right to access information and with appropriate safeguards, be able to enforce public rights**
- **Allocate funds for the management and monitoring of environmental allocations created by investments in water efficiency projects**
- **Establish annual audits of environmental flow allocations. These audits should be tabled Parliament.**
- **Review the ecological response of systems with environmental flow allocations every 3 years. Outcomes of the reviews should be tabled in Parliament**

## **Attachment A**

### SNAPSHOT OF SOME OF VICTORIA'S DEGRADED RIVERS

#### **Murray River**

- 73% of the Murray's flow taken out for water supply and commercial use
- Victoria uses 35% of the water diverted out of the Murray River system
- Native fish populations reduced by 90%
- Of the 100 000 ha of Murray River floodplain, up to 76 000ha are predicted to be affected by salt by 2050.
- Under natural conditions there was no flow at the Murray mouth 1 in 20 years. Today there is no flow at the Murray mouth 1 in 2 years.

#### **Avoca River**

- *One the biggest salt carries in Murray Darling Basin*
- Water quality is deteriorating
- The Avoca Marshes, an internationally recognised Ramsar wetland, is dying.
- Development in upper catchment reducing river flows

#### **Campaspe River**

- Lacks environmental flows
- Erosion of river banks and gullies
- Salinity and water quality big issue
- Estimated that less than 10% of large native fish like Murray cod, Silver Perch, Yellow belly and Catfish are left

#### **Loddon River**

- Needs environmental flows
- Declining water quality
- Increasing salinity

- Estimated that less than 10% of large native fish like Murray cod, Silver Perch, Yellow belly and Catfish are left
- Large sections river not fenced and stock still degrading river and its banks
- Internationally recognised Ramsar wetlands at the end of the river in poor condition

### **Goulburn River**

- Has no environmental flow allocation
- Rated as being in poor to very poor condition
- No native fish found for the 138km between Eildon and Seymour because of cold water released from Eildon Dam
- Wetlands that flooded annually now receive water 3 out of 10 years
- 54% of rivers flow is taken agriculture and water supply
- 94% of the Goulburn's diverted waters used in irrigation
- River banks still being degraded by stock

### **Broken River**

- Broken system was the site of a major Murray cod kill 2002
- Water quality problems caused by run-off from farms
- Erosion and a lack of river bank vegetation
- River is silting up
- Has no environmental flows

### **Ovens River**

- Last unregulated Victorian river that Murray cod breed in
- Bushfires have had a massive impact on water quality and native fish

### **Glenelg River**

- 86% upper Glenelg river captured by Rocklands and Moora Moora Dams
- lacks environmental flows
- Drought conditions increasing salinity problems

- Sand slugs kilometres long are silting up the river
- Large flows that sustain red gum forests in upper reaches have been reduced from 1 in 2 years to 1 in 13 years
- 75% of wetlands have been destroyed
- European carp are threatening to enter the river for the first time

### **Wimmera River**

- 48% Wimmera River diverted for commercial and water supply use.
- Lake Albacutya, a Ramsar listed wetland, used to get a flood in 20 years – now 1 in 100 years. Unique red gum forest around the lake is dying.
- Lacks environmental flows
- Land clearing has impacted on water quality
- River bank and gully erosion a continuing problem
- Habitat for native plants and animals severely degraded
- Salinity continues to be a major threat to land and water quality

### **Yarra River**

- Flow into Yarra from its upper catchment was terminated at upper catchment with construction of Upper Yarra Reservoir in 1957
- Flows at the lower end of the Yarra are reduced by 50%
- Biological systems indicate mild stress throughout, some components are considerably degraded – riparian vegetation and in stream invertebrate communities
- Water quality deteriorates downstream as run-off from agricultural and urban areas enters the river.
- Extensive lengths of Yarra have been desnagged reducing habitat for fish
- Many wetlands destroyed by draining

### **Maribynong River**

- No management of the head waters
- No management of river banks including no stock controls, no rehabilitation plan

- Significant erosion in upper reaches
- Severe water quality issues – nitrogen and phosphorous from sewerage, storm water and industrial pollutants
- No regional drainage authority to manage pollution problems
- Lacks adequate environmental flow

### **Badger Creek**

- Flows reduced by Melbourne Water diverting water
- Risk of septic tanks contaminating water
- Limited fencing of riparian zone, problems of stock access
- River bank in danger of erosion
- Weirs are blocking fish movement

### **Thomson River**

- Melbourne water use significantly reduces health of the Thomson
- Flows severely changed – 50% of flow removed for irrigation and urban water use
- Lower reaches in Macalister Irrigation District are in poor or very poor condition
- Decreased numbers of native fish
- Declining water quality that is impacting on the Gippsland Lakes

### **Macalister River**

- Natural flows have been reversed
- Substantial clearing of riverbank vegetation
- Wetlands are highly degraded, either permanently dry or permanently waterlogged
- Cold water releases from Lake Glenmaggie affect native fish populations
- Decreased abundance and distribution of native fish
- Declining water quality that is impacting on Gippsland Lakes

### **Snowy River**

- Flow reduced to 1% of natural
- Dying of thirst – stagnant, choked with weeds and sand
- Very little native vegetation remains along the river banks
- Wetlands are degraded by salinity and nutrients
- Fish habitats degraded by low flow conditions
- River silting up
- Sewage still entering the river

## Attachment C

### Availability of Scientific Reports Relating to Environmental Flows in DSE Library

<i>Streamflow Management Reports</i>	<i>Copy in DSE Library</i>
<p><i>Kiewa</i> An Assessment of Environmental Flow Requirements for the Kiewa River: An Input to the Development of the Kiewa River.</p>	No
<p><i>Hoddles</i> (a) An Assessment of Environmental Flow Requirements for Hoddles Creek. MAFRI</p>	No
<p>(b) Reassessment of Fish Habitat Availability and the Status of River Blackfish Populations in Hoddles Ck.. PF&amp;F</p>	No
<p><i>Yea</i> Environmental Flows Study of the Yea River Catchment. – Report prepared for Goulburn Murray Water</p>	No
<p><i>King Parrot</i> KPC: An Assessment of Environmental Flows – Report prepared for Goulburn Murray Water. Aust Water Technologies</p>	No
<p><i>Diamond Creek</i> (a) An Assessment of Environmental Flow Requirements for the Diamond Creek Catchment. MAFRI – Freshwater Ecology Division</p>	No
<p>(b) Towards Defining Sustainable Limits to Winter Diversion Requirements in Victoria Aust Jour Water Res. Vol. 5</p>	Yes

<i>Merri River</i> Preliminary Environmental Flow Recommendations for the Merri River (Unpublished) DNRE Freshwater Ecology Section.	No
<i>Gellibrand</i> A Study of Environmental Flows Necessary to Maintain Fish Populations in the Gellibrand River and Estuary DNRE, ARI	Yes
<i>Upper Latrobe</i> (a) Preliminary Assessment of Daily Flows Required to Maintain Habitat for Fish Assemblages in the Latrobe, Thomson, Mitchell and Snowy Rivers, Gippsland	Yes
(b) An Assessment of Environmental Flow Requirements for the Upper Latrobe Catchment. (Unpublished) Freshwater Ecology. P,F&F	No
<i>Plenty</i> An Assessment of Environmental Flow Requirements for the Plenty River Catchment . DNRE Freshwater Ecology. P,F&F	No
<i>Seven Creeks</i> An Assessment of the Environmental Flow Requirements for Seven Creeks, Victoria	No
<i>Worri Yallock</i> An Assessment of Environmental Flow Requirements for the Worri Yallock Creek Catchment. DNRE Freshwater Ecology Division	No
<i>Bulk Water Entitlement Reports</i>	
<i>Murray</i> (a) An Environmental Bulk Water Entitlement for the River Murray Victoria	Yes
(b) Report of the River Murray Scientific Panel on Environmental Flows	Yes



<i>Campaspe</i> Scientific Panel Environmental Flow Assessment for the Coliban R below Malmsbury and Campaspe R below Redesdale	Yes
<i>Thomson/Macalister</i> (a) Environmental Flows in Thomson River Necessary to Maintain Fish	Yes
(b) Environmental Flow Assessment for the Lower Thomson and Macalister Rivers – Report to West Gippsland CMA	Yes
( c ) Development of Rehabilitation Plan for Lower Thomson and Macalister Rivers – A Scoping Study*	Yes
<i>Yarra</i> Environmental Flow Recommendations for Yarra River and Tributaries	No
<i>Bunyip</i> Environmental Flow Recommendations for Bunyip River and Tributaries	No
<i>Barwon</i> Brief Environmental Assessment of the Barwon Water Supply Headworks (Upper Barwon River)	No
<i>Ovens</i> (a) Report of the Ovens Scientific Panel on the Environmental Condition and Flows in the Ovens River.*	No
<i>Broken</i> Report of the Broken River Scientific Panel on the Environmental Condition and Flows in the Broken River.*	No
<i>Wimmera Glenelg</i> (a) Environmental Flow Studies for the Wimmera River, Victoria. ARI Tech Report Series 73-6	Yes
(b) An Ecological and Environmental Flow Study for the Glenelg River From Casterton to Rocklands Reservoir. Aquatic Resource Utilisation and Management Research Group, Deakin University	No

<i>( c ) Wimmera Mallee Bulk Entitlement Conversion Project – Environmental Investigation Draft Feb 2002</i>	No
<i>Latrobe</i> Preliminary Assessment of the Daily Flows Required to Maintain Habitat for Fish Assemblages in the Latrobe, Thomson, Mitchell and Snowy Rivers, Gippsland. 1989 ARI Tech Report No 85	Yes

Copy available on CRC Freshwater Ecology Web site