

The Secretary
Senate Standing Committee on Environment, Communications
And the Arts
PB BOX 6100
Parliament House
Canberra ACT 2600
Australia
Email: eca.sen@aph.gov.au

January 25,2009

Dear Sirs,

Re Submission of Acheron Valley Watch Inc. to the Inquiry into the Water Amendment (Saving the Goulburn and Murray Rivers) Bill 2008

Acheron Valley Watch Inc. wishes to express its strong support for the Water Amendment (Saving the Goulburn and Murray Rivers) Bill 2008. Our support is based on the following reasons:

1. CSIRO report expresses dire warnings for future low environmental flows in the Goulburn River

The North Victoria Sustainable Water Strategy (Victorian Government 2008) presents CSIRO-predictions under different climate change scenarios showing a substantial reduction of water availability for environmental water reserves. These forecasts are based on the CSIRO Murray-Darling Basin Sustainable Yields Project. For example, by the year 2050 Scenario B forecasting a medium climate change expects a reduction of some 21% of inflows of 1990 levels for the Murray system. For the same time span, Scenario D is based on a continuation of the past 10 years of low inflows and expects a 43% reduction in inflows compared to 1990 levels. For the Goulburn river Scenario B and D forecast an even greater reduction in inflows of 25% and 49% for scenario B and D respectively (North Victoria Sustainable Water Strategy, Table 3.2, p. 50).

The North Victoria Sustainable Water Strategy also shows that water available for the environment will decrease more sharply than for other uses. Under scenario B, for the Murray System the diversion for consumptive uses are expected to decline by 8% in 2055 compared to the long-term average calculated for 1891/92 to 2006/07. In contrast, the Environmental Water will decline by 28%. Once again, in the Goulburn River system the change for the environment is more dramatic: Whilst diversion for consumptive use is 15% lower for the forecast under scenario B compared to the long-term average, the Environmental Water decreases by 38% under scenario B compared to the long-term average. Under scenario D with a continuation of the recent low inflows, water availability for the environment could be reduce by 51% for the Murray System and by 69% in the Goulburn River system (North Victoria Sustainable Water Strategy, Tables 3.3 and 3.4, p. 51-52)

Thus, under increasing impacts of climate change and drought, reflected by the low current storage levels of Lake Eildon (20.48% as of 25th of January 2009), the use of environmental water reserves for purposes other than the environment is even more dangerous and

irresponsible – especially when other options of supplying water to urban areas of Melbourne are not fully or not at all utilized (i.e. stormwater treatment, water recycling, rainwater harvesting, see also Submission of Acheron Valley Watch Inc. to the Senate Inquiry into water management in the Coorong and Lower Lakes, 10 September 2008, Section 3, pp. 1-2).

2. Goulburn River Environmental Flow Directions

In this context, statements made in the Discussion Paper on Goulburn Broken Environmental Flow Directions issued by the Goulburn Broken Catchment Management Authority in August 2008 are of particular interest. For example, the Discussion Paper observes that apart from the provisions in the 1995 bulk entitlement (Bulk Entitlement (Eildon-Goulburn Weir) Conversion Order 1995, Gazette G35, page 2367, 9.07.1995), there is no other water allocated for environmental purposes in the Goulburn River and that water savings projects for the Living Murray Initiative would have to be used to assist in improving winter/spring flows. The report further states:

“The key Goulburn River flow components requiring significant additional flows are an increase in minimum flows and an increase in flood flows. The amount of water required to meet these flow regimes is not yet well defined. Detailed modelling is required to better define shortfall in environmental flow needs.

The minimum flow increase requires roughly 90,000ML/year of additional flow. Some 40,000ML/year of this occurs between December and April and could potentially be provided by Inter Valley Transfers. Experimental summer freshes could also be supplied by Inter Valley Transfers.

The increased flood flows require roughly 130,000ML/year of additional flow in winter/spring but varying significantly from year to year. These increased flood flows and the increased minimum flows from May to November would need to come from Living Murray Initiative releases and additional Goulburn environmental flow entitlements. “

(GBCMA, 2008, page 11)

The GBCMA Discussion Paper further notes that the Victorian Government has accepted the Food Bowl Modernisation Project Steering Committee recommendation to use the 75GL/year environment’s share of the water savings from the Food Bowl Modernisation Project would be used for the improvement of Victorian tributaries, including help to achieve the Victorian Government’s contributions to the Snowy and Murray Rivers. The Discussion Paper also states that it is likely most of these water savings will be available to improve flow regimes in the Goulburn River and that the additional environmental flow is to be available by 2011.

Furthermore, the GBCMA Discussion Paper also states that the share for the environment made available by the Food Bowl Modernisation Project will not be sufficient to achieve environmental flow requirements of the Goulburn:

“It is likely that the Food Bowl Modernisation Project savings will not be enough to fully meet the Goulburn environmental flow needs. However, water resource modeling needs to be undertaken to understand how best to deploy the water for the greatest environmental benefit, to develop appropriate entitlement specification rules to maximize its usefulness, and to determine what additional volumes are required to meet the full environmental flow recommendations and the associated environmental benefits.”

(GBCMA, 2008, page 12)

3. Lack of critical information and empirical data

In addition to the before mentioned water resource modeling needs recommended by the GBCMA Discussion Paper, it is important to note that the GBCMA Discussion Paper makes however no recommendation with respect of the two interim years, where the Sugarloaf Pipeline is already operating but the savings of the Food Bowl Modernisation Projects are not yet achieved (between 2009 and 2011). For this period it is unclear how environmental flow requirements will be met in the Goulburn Broken River after a diversion of consumptive needs and the 75GL share for Melbourne. I

In his Statement of Reasons for Grant of Approval under the Environment Protection and Biodiversity Conservation Act 1999, Peter Garrett, Minister for the Environment, Heritage and the Arts states under Section 71 that:

“Minister Wong advises that more information regarding the sources and security of the water supplied during the tow years between the completion of Sugarloaf pipeline project and the delivery of water from stage 1 of the FBMP may be required”.

And in Section 72:

“Based on information received from the Victorian Government by my Department, I found that water savings for the interim supply will be audited and verified before being allocated. I found that it is likely that the savings to be used in the first year of the pipeline will come from modernization projects (eg the Central Goulburn 1, 2, 3, 4 and the Shepparton Modernisation Project, and, if required, from the water quality reserve. I found that if the projected savings are not achieved the quantity of water available for Melbourne from the Sugarloaf Pipeline will be reduced accordingly”

(Minister for the Environment, Heritage and the Arts, 2008, p. 34)

In this context it is particularly irritating, that to date no detailed, quantitative assessment of the alleged water savings has been provided to the public neither for the two interim years nor for the period when the water savings from the Food Bowl Modernisation project come online. Also, according to our repeated inquiries with Melbourne Water (the last from early January 2009 still awaiting a reply) the Bulk Entitlement for the diversion of 75GL of water from the Goulburn River to Melbourne via the Sugarloaf pipeline is still outstanding.

4. Using Environmental Water Reserves for purposes other than the environment contradicts National Water Commission position Water-dependent ecosystems (1st September 2008)

In its latest position paper of September 1, 2008, the National Water Commission reminds us of the commitments under the National Water Initiative with respect to environmental water as follows:

“ The National Water Initiative calls for:

- *environmental water to enjoy the same security as water for consumptive uses*
- *environmental water managers to be established and equipped with the necessary authority and resources*
- *water market and trading arrangements to protect the needs of the environment*
- *environmental water to be included in water accounts and audited*
- *periodic assessments of river and wetland health to be conducted so that adaptive management can be undertaken on an evidence basis.”*

(National Water Commission, 1 Sept. 2008, p. 1)

The predicted savings of the Food Bowl Modernisation Project (FBMP) planned to come online by 2012, which form the political basis for taking 75GL/per annum from the Goulburn River to Melbourne via the North-South Pipeline, have not been established and confirmed by independent third party auditing. Also, these savings are not expected to be achieved within a few years until the FBMP up-grade has been finalized. Yet the Victorian Government intends to take the 75GL/annum from the Goulburn River to Melbourne from 2010 onwards when the pipeline starts operating, using the "environmental water reserve" allocated for environmental purposes.

In our opinion, mis-using environmental water reserves for purposes other than the environment is a perversion of the original intent of the concept of “environmental water reserve”. It therefore constitutes an *in-principle-problem setting a dangerous precedence* and should not be tolerated under any circumstances neither at State nor Federal level. In fact, taking Environmental Water Reserves for purposes other than the environment does not conform with the Victorian Water (Resource Management) Act 2005, S. 11, 22C (c) and (d), and the Federal Water Act 2007, S 6 (1) (b) and S. 6 (2) (b).

Due to ongoing drought (possibly as a consequence of climate change) and continuous below long-term average inflows into the Murray-Darling Basin (CSIRO 2008a, 2008b), including the sub-catchments of its tributaries (i.e. the Goulburn Broken catchment) the "Environmental Water Reserve" is already diminished. Yet under these new climatic circumstances environmental water reserves are even more critical to the Goulburn and Murray aquatic environments, as they serves as vital insurance against algal bloom and low dissolved oxygen events, they constitute the principal pillar for the River Health Strategy 2005-2015 of the Goulburn River (GBCMA 2005), and they provide the nature conservation reserve system (i.e. for the Lower Goulburn River National Park and other sites) with desperately needed water in order to preserve River Red Gum forests, wetlands and associated ecosystems as recommended by the Victorian Environmental Assessment Council River Red Gum study (VEAC 2008).

Thus, following Professor Barry Heart and Dr. Paul Sinclair (as quoted in The AGE, 23 August 2008) Acheron Valley Watch Inc. requests that environmental water should be used to restore the environmental flows of the River Murray System and the tributaries of the River Murray System, including the Heritage River Goulburn. This request is also reflected in the National Water Commission’s position on water-dependent ecosystems, and in particular under the section on “Future directions for water-dependent ecosystems”, (point 1-6, National Water Commission, 1st Sept. 2008), in which the authors request a higher security of environmental water and a more effective management of environmental water to increase river health.

In this context it is important to remember the recommendation no 13 made by the Advisory Committee in their report of May 16, 2008 on behalf of the Victorian Minister for Planning with respect to the Implications of Transferring Water:

“Restrict the Melbourne Water off-take to the Sugarloaf Pipeline to be”

- (i) not more than 7.5% of the riverflow at the time as measured at the nearest upstream river flow gauge station;*
- (ii) not more than 75 GL in any one year (as is proposed); and*
- (iii) zero if necessary regulated releases are for the maintenance of environmental flows or materially deplete water stored in Eildon Weir that is designated as being an environmental reserve.”*

(Advisory Committee, 16 May 2008, p. 158-159)

Indeed, in his response to the Advisory Committee, the Victorian Minister for Planning states:

“The Advisory Committee considered that the off-take from the Goulburn River can be managed without detriment to downstream values and users if the amount of water diverted is effectively controlled. I note the Committee’s recommendations in relation to rules for governing the water off-take.

I intend that the EMF will include binding commitments specifying that:

- a daily maximum limit of 7.5 percent of river flow may be diverted from the river during the non-irrigation period*
- the pipeline may convey a maximum of 75 gigalitres of water in any one year.*

I note that the proponent may access part of the water quality entitlement but will not be accessing environmental flow entitlements stored in Eildon Weir.

I also note that this matter is relevant to the decision to be made by the Minister for Water with respect to the bulk entitlement to be issued to Melbourne Water under the Water Act 1989.”

(Planning Minister for Victoria, Response to Advisory Committee Recommendations, p. 4)

In this context we have approached the Melbourne Water during January 2009, and were told that no Bulk Entitlement with detailed operating rules for the diversion of water from the Goulburn had been determined to date.

We believe that clearly defined operating rules for the diversion of water from the Goulburn river are critical in order to fully appreciate the impacts on EPBC listed species and ecological communities present downstream of the point of diversion.

5. Goulburn River water diversion to Melbourne via the Sugarloaf Pipeline is in breach of the Intergovernmental Federal Murray-Darling Basin Reform

As major tributaries to the Murray River the Goulburn river and the Murrumbidgee river should not be excluded from the Intergovernmental Agreement on the Murray-Darling Basin Reform and in particular, from the operation of the “River Murray System” as established in clause 3.2.9 of the agreement (COAG, 3 July 2008, p. 9). In fact, Acheron Valley Watch Inc. believes that the North-South Pipeline by diverting water out of the Murray river catchment, is completely inconsistent with and does not comply with the environmental objectives of the

Intergovernmental Agreement on the Murray-Darling Basin reform including its Memorandum of Understanding of March 2008 (COAG 2008a, 2008b).

This political decision to exclude major tributaries of the Murray from the operation of the River Murray System is *wrong in principle and creates a dangerous precedence*, because it enhances the “prisoners dilemma” with drastic effects on the state of the environment. The “prisoners dilemma” describes a perception bias in which many projects of individual actors appear to be relatively small on their own with seemingly negligible impact, but when added up they create a large cumulative negative impact on the River Murray System and the sub-catchments of its tributaries.

In the case of the Goulburn River this problem is accentuated by the fact that it does not only serve as source of water for Melbourne (via the North-South pipeline), but it is also part of the planned Victorian Water Grid, supplying water to the towns of Ballarat and Bendigo. Under continuous drought and climate change related reduced inflows (as forecasted by the CSIRO 2008), the different demands of the Water Grid will out-compete each other – i.e. the Goulburn River will not be capable to top up the water needs of Bendigo and Ballarat via the Goldfields Superpipe AND at the same time deliver 75GL p.a. to Melbourne via the North-South pipeline AND supply irrigators in the Shepparton Irrigation area AND have any *environmental water* left for its own river health and the health of the Murray river, although this is a requirement of the National Water Initiative (National Water Commission position on Water-dependent ecosystems, 1 September 2008, p. 1).

6. Conclusions

In conclusion, Acheron Valley Watch Inc. requests that the Senate Inquiry into the Water Amendment (Saving the Goulburn and Murray Rivers) Bill 2008 take into account of the following:

- CSIRO forecasts indicate a massive reduction in inflow for both the Murray and Goulburn River Systems that is further exacerbated in a reduction of Environmental Water availability. Current very low inflows and storage levels at Lake Eildon indicate that the forecasts of scenario D (on-going drought scenario) materialize again in this season. In this context, diverting Environmental water for purposes other than the environment is totally irresponsible and should be prohibited.
- Environmental Water Reserves and savings assigned to the environment and achieved in modernization project other than the Food Bowl Modernisation, should be used for the sole purpose of the environment and should not be allowed for the transfer to Melbourne via the Sugarloaf Pipeline at any time (including the two gap years before the Food Bowl Modernisation water savings come online);
- Currently lacking critical information and empirical data with respect to the Goulburn and Murray River environmental flow needs and with respect to savings achieved in the different modernisation projects of the Murray and Goulburn Systems (Food Bowl Modernisation project and other) should be determined, independently audited and publicized first, before water be diverted out of the Murray catchment via the Sugarloaf Pipeline (or via other means).
- A diversions of water out of the Murray-Darling catchment is in breach with the Intergovernmental Federal Murray-Darling Basin Reform and should be prohibited and only allowed under a COAG agreement as *a last resort*, if all other forms of urban water supply (including stormwater harvesting, water recycling, etc.) are exhausted;

Rita Seethaler, PhD
Chairperson
Acheron Valley Watch Inc.
PO Box 246, Alexandra, VIC 3714
www.acheronvalleywatch.org.au

Ann Jelinek, Ecologist
Board Member
Acheron Valley Watch Inc.

Appendix A *Acheron Valley Watch Inc. – who we are*

Acheron Valley Watch Inc. is a not for profit community group concerned about the well being of the local communities, natural and rural environments, scenic landscape and cultural heritage of the Acheron Valley/Cathedral Range area, including the Acheron River Catchment (tributary of the Goulburn River). Acheron Valley Watch engages in activities that strengthen co-operation and communication with planning and decision making bodies, local residents and the broader public. Acheron Valley Watch Inc. is grateful for the opportunity provided by the Senate Standing Committee on Environment, Communications and the Arts to make a submission to the Inquiry into the Water Amendment (Saving the Goulburn and Murray Rivers) Bill 2008. Further information on water related submissions of Acheron Valley Watch Inc. can be viewed here: <http://www.acheronvalleywatch.org.au/issues.php> .

References

Acheron Valley Watch Inc. (2008) Submission of Acheron Valley Watch Inc. to the Senate Inquiry into water management in the Coorong and Lower Lakes, 10 September 2008. <http://www.acheronvalleywatch.org.au/issues.php> (last accessed 25.01.2009)

Advisory Committee (2008) Sugarloaf Interconnector Pipeline” Project Impact Assessment Report – Report of the Advisory Committee, 16. May 2008
<http://www.dse.vic.gov.au/DSE/nrenpl.nsf/LinkView/40E4070E0049B1F7CA2573BE0081AAF392FBC7C133A6F520CA2572DA007FAB8B> (last accessed, 25.01.2009)

Council of Australian Governments COAG (2008a) *Agreement on Murray-Darling Basin Reform*, 3. July 2008

Council of Australian Governments COAG (2008b) *Agreement on Murray-Darling Basin Reform – Attachment: A Murray-Darling Basin Reform Memorandum of Understanding*, 26 March 2008, 3. July 2008

CSIRO (2008) *Water Availability in the Murray. Summary of a report to the Australian Government from the CSIRO Murray-Darling Basin Sustainable Yields Project*. July 2008. www.csiro.au/mdbsy (25.01.2009).

Goulburn Broken Catchment Management Authority (2008) *Goulburn Broken Environmental Flow Directions - Discussion Paper*. Draft 4, 10. August 2008.

Minister for Planning (2008) Sugarloaf Pipeline – Response to Advisory Committee Recommendations (undated)

<http://www.dse.vic.gov.au/DSE/nrenpl.nsf/LinkView/40E4070E0049B1F7CA2573BE0081AAF392FBC7C133A6F520CA2572DA007FAB8B> (25.01.2009).

National Water Commission (2008) *National Water Commission position on Water-dependent ecosystems*. Australian Government, 1st September 2008

The AGE, Royce Millar and Jo Chandler (23.08.2008) *Cabinet leak reveals win for farmers*

Victorian Environmental Assessment Council (VEAC) (2008) *River Red Gum Forests Investigation*, July 2008