

(Submission by Email to: rrat.sen@aph.gov.au)

The Secretary
Senate Standing Committee on Rural and Regional Affairs and Transport
Parliament House
Canberra ACT 2600

Senate Inquiry into water management in the Coorong and Lower Lakes and Emergency Water (Murray-Darling Basin Rescue) Bill 2008.

**Public submission to Senate Standing Committee on Rural and Regional Affairs and Transport
by Peter Murray
due 11th September 2008**

Thank you for the opportunity to make a submission to the Senate Committee relative to the Coorong and Lower Lakes and the associated Bill.

The COAG agreement leaving the Goulburn & Murrumbidgee river flow directions with State Authorities is flawed and should be substantially re-ordered.

In any plan for the Murray – Darling Basin that recognizes over allocation of water and a fragmentation of management, it is becoming ever clearer that the COAG COMMUNIQUE of 26 March 2008 advising “*State authorities will make river flow directions for the Goulburn and Murrumbidgee Rivers*” encompasses a seriously flawed decision.

The decision should now be readily seen as an unsustainable anomaly, in that the preamble¹ to the Agreement on Murray-Darling Basin Reform specifically mentions the Goulburn and Murrumbidgee Rivers, their iconic status and confirms their place as a vital part of the Murray Darling Basin as follows: “*The Murray-Darling Basin covers one-seventh of Australia. The Basin is one of our country’s most important social, economic and environmental resources. The Murray, Murrumbidgee, Lachlan, Darling, Goulburn and Condamine-Balonne rivers are iconic parts of Australia’s identity. Three million Australians, living within and outside the Basin, are directly dependent on its water. Economically, the Basin supports an agricultural industry worth more than \$9 billion per annum. Environmentally, the Murray-Darling Basin has 16 internationally recognised wetlands*”.

The absence of integrated control over the Goulburn and Murrumbidgee Rivers is also an unacceptable restriction on the COAG decision that heralds “*there will be a new, cooperative approach to environmental water management by the Parties;*” limiting the field of operations so

that existing and indeed new programs of the States affecting these rivers are not adequately controlled.

The Murray-Darling Basin Reform – Memorandum of Understanding March 2008 states - *“The Commonwealth agrees to bring forward the risk assignment framework in the National Water Initiative, and incorporated in the Water Act 2007, to commence from the date at which existing water resource plans in the Murray-Darling Basin cease to have effect”* - emphasizes this anomaly when State plans remain in place to 2019 as in the case of Victoria.

The planned North-South Pipeline (Sugarloaf Interconnector - EPBC Ref: C08/15098) to Melbourne looms as a major anomaly in the need to gain increased environmental flows in the MDB. (In fact it poses a serious risk to even maintain existing environmental flows).

The proposed pipeline is a major contradiction of the agreement - *“The Basin Plan will provide for improved environmental outcomes across the Basin. Importantly it would seek to improve the status of all Ramsar sites (including the Lower Lakes, Coorong and Murray Mouth) and other key environmental sites in the Basin, with important environmental outcomes such as increasing environmental flows, healthier wetlands, protection of floodplain areas and River Red Gums”.*

The North-South pipeline of approximately 70 kilometres in length from the Goulburn River near Yea, Victoria is planned to provide Melbourne with 75Gl (gigalitres) of water and potentially much more, sourced from the Murray Darling Basin by 2010. Its justification has been based on gaining “savings” of 225Gl from Stage 1 of the Food Bowl Modernisation Project (Northern Victorian Irrigation Areas), with the projected savings split three ways between Melbourne Water, the environment and the irrigators.

In the interim the Victorian Government plans to utilise a significant proportion of the water from the Goulburn River water quality reserve¹ held in Lake Eildon to operate the pipeline in 2010-2011 – a measure that heralds a detrimental effect on the Goulburn-Murray River system and hence matters listed under the EPBC Act in Sections 16,17B, 18,18A and 20.

The following is an unofficial, but highly credible assessment of water delivery based on Goulburn Murray Water official figures and government statements relating to the Food Bowl affected area that indicates the projected level of water savings is illusory.

---Unaccounted water flows (losses) were 380 Gl for the past season, with the 15 year average loss 761 Gl, for 71% efficiency over the whole of the irrigation system. Taking an optimistic scenario - the 15 year average - and the projected level of 85% efficiency from modernisation²;

¹ Project Impact Assessment (PIA) report – Appendices C - Environmental Implications of Transferring Water Report 169 Appendix 3 Goulburn River Implications Page 12

² The targeted efficiency of 85% is considered to be at the top of expectations as only approx. 1% of the channels are to be piped

deducting existing environmental commitments of 70Gl to the Living Murray initiative, 100Gl for the Snowy River and 100Gl for the Kerang Lakes (a Ramsar listed wetland); the potential saving are only an estimated 97Gl over the whole system, falling far short of even the promised additional savings of 225Gl from Stage 1 of the modernisation.

When the projected “savings”- 200Gl, from the Second Stage of Irrigation Modernisation are taken into account, there is an overall deficit (shortfall) of 338gl. The effect of this is there are only minimal savings available to be added to the existing environmental commitments from the whole of the irrigation modernisation – Stages 1 and 2. (E.g. one third share of 97Gl or a half share of 97Gl, if Melbourne is excluded).

Despite this the Victorian Government's Minister for Water, Tim Holding continues to state publically, that based on an annual loss of around 800Gl, the required savings of 225Gl stage 1 and 200Gl Stage 2 can be achieved. However, these assertions are seriously in error, as at the projected efficiency rate of 85% only approximately half this loss is recoverable and there is no allowance for the existing environmental commitments to the Living Murray, Snowy River and the Kerang wetlands totaling 270Gl; leaving no more than an additional 100Gl per annum to be shared between the irrigators, the environment and Melbourne Water.

In the light of this it should be noted “the Commonwealth Government has agreed in principle to fund 90 percent of the total project costs, up to \$1 billion, of the Stage Two Food Bowl Project in Victoria, subject to a joint due diligence assessment and the delivery of half the gain in additional flows (around 100 billion litres) to environmental flows into the Murray River”. (Ref COAG Communique March 2008 Page 11)

With the recently published *Murray-Darling Basin Rivers: Sustainable Rivers Audit*ⁱⁱ report on the ecological health of rivers in the Murray-Darling Basin, study flagging possible reduced water availability, affecting the Goulburn-Broken River system, of up to 41%, it is incumbent on all governments to act prudently in the public interest and not promote a project (the Sugar loaf Interconnector Pipeline) reliant on unachievable savings.

The Auditor General 's report “Planning for Water Infrastructure in Victoriaⁱⁱⁱ released on the 9th April, 2008 confirmed that savings were unverified recommending in the Executive Summary dot point 1.3 “DSE should publish the detailed analysis underpinning the estimates of water savings and costs for the food bowl modernisation project”. Despite calls from groups as varied as the CWA, the VFF and a large majority of Municipal Councils; to date no verification has been provided.

It is now becoming clear there are no substantial savings from the Food Bowl Project in Victoria that would justify a major new customer, Melbourne Water being permitted to draw water from the highly stressed MDB to the detriment of the environment, critical human needs and food security.

The Commonwealth has jurisdiction and bargaining power in a number of areas relating to the Sugar-Loaf Interconnector (north - south pipeline).

The project requires approval under the Commonwealth EPBC Act - Reference – C08/15098 before construction can commence. Currently, there is a reconsideration of the assessment process under the Act with a number of substantial submissions putting forward new information, or a substantial change in circumstances that was not foreseen at the time of the first decision that would warrant extended controlling provisions to also take into account down-stream effects, particularly on river and wetland health and migratory species.

With the projected level of savings unachievable and water diverted from the basin clearly a drain on potential environmental flows, the Sugar-Loaf interconnector (North-South Pipeline) should not be built, but in the interim the Minister has the power under the EPBC Act to proceed to require an independent EES. This must encompass all aspects of the project, the pipeline route, the validity of water savings on which the project is based and significantly, the effect on the rivers and associated wetlands. Whilst at a minimum this would delay any construction by more than 12 months, there can be no compromise in requiring the independent environmental studies that so far have been denied by the proponent, despite the massive community opposition³ to the pipeline concept.

Furthermore it is economically unsound with the pipeline itself costing at least \$750m with Melbourne having committed to a desalination plant; with other less costly alternative sources of supply available, including recycling for industry and several dam sites, that could also serve to better regulate environmental flows to the Gippsland Lakes.

As the \$1billion funding of Stage 1 of the modernisation (now underway) with planned funding - \$300m by Melbourne Water, \$600m by Victorian taxpayers and \$100m by irrigators, the completion of Stage 1 of the modernization should not be dependent on Melbourne Water's contribution. Given the relatively advanced stage of this modernization the Commonwealth should consider funding the \$300m shortfall to lock-in a decision not to permit water sourced from the stressed MDB to flow to Melbourne.

The plan (subject to due diligence) by the Commonwealth to fund Stage 2 of the modernisation, in the light of the projected unrealistic level of savings for the Food Bowl Modernisation should be reviewed – the insignificant benefit to environmental flows could not be seen to justify the expenditure.

³ For example the latest metropolitan media poll, in the Herald Sun reported Friday 8th August 2008, showed support for the pipeline at just over four per cent of the 4425 people who responded. (Note the exceptionally high response to a poll of this nature).

A more equitable and cost effective means of adding to environmental flows should be found elsewhere, perhaps involving funding of on farm irrigation methods in the Food Bowl area to achieve real savings, to benefit both the environment and food security. This is particularly pertinent in view of assertions by the Plug the Pipe Group (currently 2700 members); opposed to the North-South Pipeline, in a News Release dated 21st August “Brumby steals water from farmers”. It includes the following:

- a) “The cost benefit of replacing the old Dethridge Wheel has to be questioned with average cost of replacement in the Shepparton Irrigation District blowing out from \$10,000 to \$33,000. Much of the food bowl investment will be eaten up by non productive capital investment.”
 - b) “farmers will receive less and more expensive water because of the metering changes. A more sensible approach would be to recalibrate the 18,000 Dethridge wheels by 1.9% thereby making them fall into the National Standard and avoiding huge replacement and operational costs.”
- These represent further reasons why the Commonwealth funding of Stage 2 of the Food Bowl Modernisation project requires major revision to provide measureable benefits to the environment and food security.
 - Currently modernization is driven by the water trading agenda of the Victorian government and water authorities aided and abetted by an elite group of local business people and some of the larger irrigators. This is inequitable and socio-economically not responsible, with plans to drive over 800 dairy farmers and 350 mixed farmers from the Irrigation Districts as disclosed in the Victorian Government’s Food Bowl Modernisation Project Draft Report released for public comments closing October 2007. In the final report released shortly afterwards, this virtual social engineering – stemming from the modernization of the main channels and leaving many irrigators located on the spur channels with insurmountable logistical problems to retain water, was not refuted.

Increasing Environmental Flows -Environmental Water Reserves.

The COAG endorsed strategy of seeking an urgent increase in environmental water flows, is threatening previously viable agriculture pursuits over a wide area, particularly in the Murray-Darling Basin. Increasingly, much of the demand comes from numerous, predominantly urban based environmental groups that are effectively “anti” irrigation and want first call on available water for rivers.

Without the existing storages, built primarily for irrigation and electricity generation, the Murray River and many tributaries would be little more than dry water courses similar to the experience of previous prolonged droughts, the former being around 1945. It is only the presence of these

storage dams that has provided the regulated flows that have averted even more serious environmental damage to major waterways.

Whilst it is important that South Australian interests, for the environment, critical human needs and irrigators are catered for, this should not be achieved by the Commonwealth Government and other government funded groups taking the line of least resistance, forcing the removal of the cap on diversions to buy up water from distressed irrigators, or whole farms without regard to the viability of the remaining infrastructure and food security.

There has been much emphasis on the cap, particularly in Victoria being an obstacle to willing sellers relinquishing their water. As at 3 September 2008 Goulburn Murray Water reported that only one District – Campaspe had reached the 4% cap. It should be noted that the cap does not apply to temporary water sales – a viable water source for some aspects of environmental remediation. Exit fees that apply in major irrigation areas in NSW have also been adversely criticised. However, they should be seen as legitimate charges to ensure the viability of the remaining irrigators and a part of the cost of water and a viable alternative to the cap.

The fact is there is little or no water to buy in this prolonged drought. In the latest MDB Basin report, (ABC Country Hour, 2008-09-02, MDBC CEO Wendy Craik made mention of a significant rainfall event in the Ovens River Valley and the necessity of keeping Lake Mulwala at a low level to store the windfall flow.

This stop gap measure calls for the building of additional storage within the MDB primarily for environmental purposes. Two storage dams which over-topped earlier this year - Lake Buffalo and Lake William Hovell have the capacity to be enlarged. Specific plans have been in place for an enlarged Buffalo River Dam since the late 1960's including the land being in government ownership, but have not progressed due to the Victorian Government's anti dam policy.

With these storages in place, the regulation of environmental river flows serving the Murray Darling Basin would be significantly improved – whilst not breaching the basin cap. Portion of the Commonwealth funds currently being expended “buying water entitlement”, but no available water, would be better utilised preparing for the future by funding the enlargement of Lake Buffalo and Lake William Hovell, primarily for environmental storages.

Unfortunately, for the Coorong and Lower Lakes there is insufficient water that could be accessed and guaranteed to reach these locations in the current situation – critical human needs and irreplaceable permanent plantings must have the first call on available supplies.

The alternative, to build a weir wall at Wellington, returning the Lakes to an estuarine habitat, in the absence of strong springtime rains, appears inevitable.

Should this permanent change transpire, this is another area where there should be a reassessment of Commonwealth spending on water and environmental projects to provide a

pipeline to serve irrigators and urban areas disadvantaged by the change to the Coorong and Lower Lakes – some work of this nature is understood to be in progress.

Should the lower lakes remain as a fresh water environment, urgent measures are required to reduce the unacceptably high annual losses incurred through evaporation. (This may then become another area of intrastate water delivery requiring significant Commonwealth funding).

In this regard the article *Downsize Murray Plan* (The Australian, 6 September 2008 , page 9) quoting Prof. Mike Young, viz “*One option requiring careful, cold and technical study, was to seal of areas where water pooled to limit evaporative losses and preserve the main river channels . This could include ecologically important wetlands, dams and lakes –“suggests a proposal that should receive serious consideration in any scientific study of the Basin.*

Scientific study of environmental water needs

Current government policies, despite the greatly reduced in-flows from drought affected streams, call for a massive increase in environmental flows, fuelling governments at several levels entering the water market. Given the dominant nature these major players have on the market; there is a much greater urgency for rigorous scientific studies to be completed and circulated widely. Meanwhile there should be no increase in environmental flows, only limited dilution flows.

The quantum of water required to preserve the environment, the priorities and means of distribution must be scientifically based – there have been calls from various sources for annual releases varying between 1500GI to 3000GI to be set aside for environmental flows – amounts that would devastate many rural communities and threaten food security.

The science of the health of the Murray River Basin was found by the 2004 House of Representatives Standing Committee on Agriculture Fisheries and Forestry inquiry, to be so little known that there was no sound basis on which to allocate environmental flows.

Subsequently, with no substantial and conclusive scientific analysis on which draw, it is ludicrous that \$13 bn has been allocated to a “water plan” until:

- An audit of the Basin’s Water is made (at least this deficiency is being attended to as a result of the call for this Committee inquiry and the associated Bill).
- a full environmental audit of the Basin is carried out
- A socio-economic study of the effects of permanent water trading of water out of irrigation districts and buying water from irrigation for environmental flows down rivers.

All river health issues should be systematically addressed, before considering environmental flow changes, especially of the magnitude proposed. It is understood there are up to 22 issues affecting river health, indicating the complexity of assessing environmental needs.

Water Trading

The complexity of the water issue is undisputed and calls for a unified and national approach. It is high time that unbundling of water rights from land and water trading is seen as a device for removing water from farms, diverting it to the urban areas, thus forcing up the price of water and with it food to the detriment of the masses.

Further, it has arguably made providing water for environmental purposes significantly more expensive. (My opinion is that permanent water trade should be severely restricted to within irrigation regions, to avoid stranding of assets and the collapse of regional economies and as a general principle, a small part - based on a rising scale according to total water held - taken to help ameliorate over allocation and serve environmental needs).

The “Northern Region Sustainable Water Strategy”, a major Victorian Government policy document to guide future water policy has many market driven features, ominously stating - *“None is more critical than the expansion of the water (pipeline) grid”* – for which the Commonwealth has already provided some funding for the GoldFields Super Pipe that serves Bendigo and Ballarat. (It should be noted Ballarat lies outside the MDB and a major portion of water for the pipe for the past season was sourced from the environmental water reserve held in Lake Eildon).

Within the planned grid the Sugarloaf Interconnector pipeline to serve Melbourne and the other pipelines planned to link all major urban areas of Victoria, together with the planned link of the Murray system to the Goulburn system⁴ are part of a grand scheme of water trading, both intrastate and interstate.

In highlighting the benefits of expanding the water grid, the document reveals water trading as a “Trojan horse” within rural communities and the Victorian pipelines, now under construction as a conduit with vast potential for urban areas to outbid the rural areas for water.

Governments at all levels are complicit in this mishandling of our water resources which goes against FAO and World Bank Research that argues strongly that the primary allocation of water between sectors has to be done by governments and that it cannot be done by markets. This recognises that water is not a private good, but a mixed good with many public good characteristics.

⁴ Ref. Barmah Choke – Agreement for MDBC to accelerate feasibility study - COAG March 2008 Communique para. 22 Page 12.

Clearly water trading is a strategy that permeates the COAG agreements on water that aids and abets the water trading policy of the States, particularly Victoria where substantial Commonwealth funding for water projects helps endorse their planned pipeline grid.

High Value Agriculture

Further; trading water from low value to high value agriculture is a flawed concept:

Australia needs low value products to provide low cost quality food to both domestic consumers and overseas markets. Over investment in high value products (generated from unfettered water trading) turns today's high value products into tomorrow's low value products.

Farmers already act on market forces to shift to high value agriculture. Water trading is not essential to their increasing output. This is quite evident with the growing productivity from their innovations over the years.

Managed Investment Schemes (MIS)

Most permanent water trade (until recent government intervention in the water market) has been to managed investment schemes (MIS) that have been driven by government tax breaks, not market forces. Moreover many of MIS involve new land opening for irrigation, often distant from major supply sources, with consequent high levels of evaporation in delivery.

Open water trade has seen MIS, water barons, urban areas, industry and the massive involvement of governments purchasing water for the environment, drive up the price of water beyond the reach of most forms of agriculture.

Given the effect of prolonged drought on many farmers viability, with many receiving close to zero allocations over several past years, many are forced sellers of water. This is inequitable and leads to stranded assets and higher maintenance and delivery costs to be borne by fewer consumers. It also has detrimental social effects on many communities.

Basically the real value of water, taking into account community benefits is substantially greater than that being realised through the market

Urban Water Supplies

Finally, governments particularly in Victoria must build new dams and invest in alternative water sources to avoid reliance on the water market, particularly for urban water supplies. Whilst desalination is an obvious alternative, storm water storage in aquifers for use in industry and on parks and gardens has much promise.

The alternative, particularly the model underway in Victoria, drawing on the highly depleted irrigation storage (Eildon Reservoir) to supply major urban areas, will devastate large areas of irrigated agriculture causing massive social disruption.

To justify such gross inequity the Government uses what has to be emphasized is a partial upgrade of a significant State Government owned asset (the Irrigation System) that produces the food that is essential for the people of Melbourne and beyond, as reason to take water from this highly stressed system.

It puts at risk the future security and investment in a real food bowl that is a major contributor to the GDP of the State's economy and is the source of the majority of the fresh, clean food and milk coming from our Supermarkets.

A change of focus – relevant expertise required

Finally, water policy is of such critical importance that the peak body Murray Darling Basin Authority must include experts in irrigated agriculture and water supply that are not beholden to market driven forces, to undertake a National Water Initiative that ensures a full and professional overhauling.

For example, where is there an adequate understanding of the complexities of water delivery, with, I understand more than 24 different water entitlements in the Murray Darling Basin alone?

It is imperative that the Senate inquiry and the new Authority have the benefit of the expertise of water professionals that are not highly influenced by water trading, a condition permeating Victorian water authorities. For too long water policy, has on the one hand been beholden to the influence of the Wentworth Group of scientists, centering on water trading and on the other hand, conservation based groups with an anti-irrigation bias. It is time to re-emphasise the importance of irrigation for food security and the maintenance of sound regional economies in the Basin.

In Summary:

- The river flow directions for the Goulburn and Murrumbidgee Rivers must be subject to the control of the Murray Darling Basin Authority to fulfil the new, much heralded cooperative approach to water management by the Parties.
- Saving the Coorong and Lower Lakes cannot be equitably achieved by the indiscriminate purchase of water rights, placing water for critical human needs and food security in jeopardy. The building of a weir at Wellington, in the absence of sufficient rain to prevent acidification appears to be the only practical solution.

- The Sugarloaf Interconnector (North-South pipeline) planned to deliver water from the Murray Darling Basin to Melbourne is environmentally damaging to the Murray Darling Basin River systems and should not proceed. The associated Food Bowl Modernisation project falls far short of the projected water “savings” and the planned allocation of Commonwealth funding should be reviewed.
- The expenditure of \$13 billion on a water plan without scientific analysis cannot be justified and should largely be withheld, pending audits of the Basin’s water, river environment and the socio-economic effects of water trading, including government purchases of water for the environment.
- Permanent trading of water rights is destructive of the orderly management of water and should be greatly limited in application and replaced with an expanded role for central government, to effect an equitable balance in water use, to ensure food security and the basin wide urban and environmental needs. The paper by Bruce Haigh ‘Feudal water trading plan will create cartels’ provides an important summary of the failures of water trading^{iv}.
- The building of additional storage capacity primarily for improved regulation of environmental flows, but also to better ensure the utility of existing irrigation storages, should be a priority for Commonwealth funding.
- It is imperative that the Senate inquiry and any Basin wide Authority have the benefit of the expertise of water professionals that are not highly influenced by an adherence to water trading as a central plank of policy.

(Mr.) Peter Murray

September 9, 2008

ⁱ (COAG) Intergovernmental Agreement on Murray Darling Basin Reform, July 2008 page 83.
<http://www.nwc.gov.au/resources/documents/Aus-Water-Management-PRES-090708.pdf>

ⁱⁱ *Murray-Darling Basin Rivers: Sustainable Rivers Audit* A report on the ecological health of rivers in the Murray-Darling Basin, 2004–2007
http://www.mdbc.gov.au/_data/page/2260/SRA_Report_1_June2008_small.pdf

ⁱⁱⁱ The Victorian Auditor General ‘s report “Planning for Water Infrastructure in Victoria released on the 9th April, 2008
http://www.audit.vic.gov.au/reports_publications/reports_by_year/2008/20080409_water_infrastructure/1_executive_summary.aspx

^{iv} Feudal water trading plan will create cartels
<http://www.abc.net.au/news/stories/2008/05/02/2233307.htm>

Added to original.
R.W.M.



MR BRUMBY, did you watch *60 Minutes* last Sunday? The Goulburn River is a tributary of the Murray River, so plug the pipe.
R. Woodman, Cohuna

