SENATE ENQUIRY: RESEARCH INFORMATION & CONCLUSIONS

1. Murray Darling Basin Commission (MDBC) Media Releases

I have been analysing the Commission's Weekly Reports since June 2007 and I've come to the following conclusions re the lack of environmental vision and priorities of the MDB Commission.

MDB Inflows/Storage Levels

When the MDBC says that **"MDB inflows for June 2008 were 95 GL"** most people hearing this figure wouldn't know that this inflow figure was generated from only a small part of the huge Murray Darling Basin catchment. For example, any diagram in the MDBC Weekly Reports showing 'Murray System Inflows' always states that the figures do not include Snowy Scheme or Darling River inflows.

Yes whilst it is true that inflows for the specific part of the MDB catchment that the MDBC has control over were a record low for this June, the actual figure for the whole of the Murray Darling Basin would've been considerably higher. Furthermore, the Snowy inflows should also be added into any report on monthly inflows as they are actually part of the Murray and Murrumbidgee's flows. My take on this selective reporting of inflows is that it conveniently allows the MDBC to justify not allowing emergency environmental flows for the Lower Lakes & Coorong because "MDB inflows were only 95 GL in June".

My view is that the term 'MDB Inflows' should be called 'MDB Commission Inflows' and should not be confused with what would be the much larger figure of Total MDB Inflows'. Furthermore, there should be a public education campaign to explain the difference between the two – specifically the actual percentage of the total MDB catchment the 'MDB inflows' applies to, plus a comparison between the median annual inflows for the Total MDB and the median annual inflows of the much smaller MDB Commission section of the catchment.

Priorities of the MDBC: Irrigation over Ecological Health

The bias of the MDBC towards the irrigation industry rather than having an emphasis towards improving the ecological health of the Murray and its associated floodplains/wetlands is apparent from the following statements made in their June 2007 and July 2008 Drought Updates:

"As the 2006/07 irrigation season drew to a close, flows in the River Murray were reduced below normal winter flow rates to conserve water upstream in Hume and Dartmouth Reservoirs. Recent rainfall has boosted tributary flows from the Kiewa and Ovens Rivers – this rise in Murray flows is currently making its way downstream to be stored in Lake Victoria. Flow to SA has been reduced to 950 MgL day which is the lowest flow at this time of the year since before the Hume Reservoir was built in 1936".

What hope has the Lower Lakes and Coorong when the MDBC is deliberately storing water upstream or reducing flows into SA to such drastically low levels?

"Until there is significant rain and run off, the prospects for irrigation and the environment in 2008/09 are grim". (Note that irrigation is mentioned before the environment).

"Water levels in the Lower Lakes have temporarily stabilised but unless there is a significant improvement in water availability for SA, the outlook for the next 12 months is extremely poor". (A euphemistic statement at its best – why not say potential ecological collapse rather than the outlook is extremely poor!)

2. True State of MDB Inflows: It's Actually Better Than Reported!

The MDB Commission's Weekly Reports are a valuable tool in seeing through the rhetoric of their media releases which continually state the 'record low inflows' line. Yes, since the start of 2006 MDB monthly inflows have mostly varied between extremely low and record lows. Nevertheless, on page 4 of the 25th June 2008 Weekly Report there is a diagram which shows that MDB daily inflows exceeded 10 000 MgL for 3 weeks in July 2007.

In fact, on 8th July 2007 just the Ovens River was flowing at 13 500 MgL day at Wangaratta and in late June the Goulburn River was flowing at the impressive rate of 29 000 MgL day into Eildon Reservoir. From my knowledge of that region, I would estimate that the unregulated flow of the Goulburn River at Shepparton would've been close to 40 000 MgL day in the late June/early July 2007 period if the majority of these flows had not been stored in Eildon or diverted into the Waranga Basin.

Imagine if all of that Goulburn River flow had been able to swell the flow of the Murray and send a large volume of water into SA. Another important tributary of the Murray was the Lachlan before major irrigation diversions began in the latter part of the 20th Century. It's inflow to Wyangala Dam rose to 15 000 MgL day in late June 2007.

Yet with all these high flows in the Murray's tributaries in June and July, the flow within the South Australian section of the Murray in September and October 2007 was anywhere near the peak MDB Commission inflow of 28 000 MgL day during late July. And remember this inflow is only part of the huge MDB catchment - the peak Total Murray Darling Basin inflow would've been considerably higher than 28 000 MgL day – that is more like 50 000 MgL day.

I am quite confident that inflows to SA never exceeded 5 000 MgL day at any time in the July - October 2007 period. So where did all that water go? Lake Victoria is one of the answers – this is confirmed in the Weekly Reports of 18th July 2007, 28th May 2008 and 25th June 2008. (See further on for discussion on this often overlooked South Australian controlled storage). The other major reason these large tributary flows never reached South Australia is the existence of Dartmouth Dam and the Hume Reservoir. For example, the inflow to Hume Reservoir on 13th September 2007 was approximately 5 500 MgL day, whilst only 430 MgL day was being released. Whilst I don't have exact flow figures for Dartmouth, I would estimate that 1 500 MgL day was being captured by this storage.

So in total, 65 GL day was still able to be stored in these gigantic reservoirs during a time of extremely low flows! To put into context how much the Murray and its major tributaries are robbed of their flows by the 'god king trilogy' of irrigation storages: Eildon, Dartmouth and Hume Reservoirs - the combined capacity of these reservoirs is 10 336 GL. So when the MDBC says storages levels for these three massive reservoirs are currently at a low 23% - this figure equates to an **imposing 2 430 GL**.

3. Total Murray Darling Basin Storage Levels

As the MDB Commission is seen by the popular media as the font of all MDB inflow and storage level wisdom, it is fair to say that the general public would be unaware that as at 23rd July 2008 there were 5 638 GL of water stored in 28 of the Murray Darling Basin's major reservoirs – see Table 1.

To further emphasise the difference between MDBC storage levels and Total MDB storage levels - as at 23rd July there were 2 152 GL in MDBC storages as compared to the 5 638 GL held in the Murray Darling Basin's 28 major storages. For the period 2nd to 23rd July 2008, MDBC storages increased by 123 GL, whilst Total MDB storages increased by 352 GL. Again the media is fed the standard headline of 'record low inflows' by the MDBC rather than reporting the moderately positive story that Total MDB storages increased 352 GL in the first three weeks of July.

In addition to the 28 major storages listed in Table 1, there are countless other small/moderate storages within the MDB which would obviously increase the already massive storage level of 5 638 GL. From my research I would estimate that there would be at least another 1 500 GL stored in government dams, the Murray lock system and diversionary weirs. And then there's the huge amount of water stored on private land in northern NSW and southern Queensland which is estimated to be 800 GL. All of this adds up to the truly remarkable figure of **8 000 GL stored** within the Murray Darling Basin as at **10th September 2008**.

Whenever there are radio talk back discussions re sourcing water for the Coorong & Lower Lakes most people refer to the Menindee Lakes and the water stored on properties in southern Queensland and northern NSW such as Cubbie Station. Yes in that region there's currently around 800 GL stored privately, however looking at Table 3 there are 11 major public storages in NSW and the border region of Queensland which capture flows from rivers such as the Macquarie, Gwydir, Namoi, Condamine, Dumaresq and Severn. All of these rivers are fed by the relatively high rainfall section of the Great Dividing Range whereas any flows captured in the private dams of the drier flood plain section of the upper Darling catchment are relatively rare events.

As at 23rd July 2008 the 11 storages listed with a * in Table 3 hold 1071 GL. The combined capacity of these storages is 4 925 GL. The combined capacity of the major government storages in the Darling system is a massive 6 656 GL, plus there are numerous other smaller diversionary weirs. Is it any wonder that precious little Darling water ever makes it to the Murray at Wentworth? The total storage capacity within the Darling catchment is estimated to be in the range of 11 700 GL. The split of this huge figure between the government storages and that which can be captured in the vast array of highly inefficient farm dams is 6 700 GL and 5 000 GL respectively.

Water Storage	28 th May	10 th Sept	Change in Levels
Dartmouth Dam	685	781	96
Hume Reservoir	361	900	539
Lake Victoria	270	314	44
Burrinjuck Dam	422	473	51
Blowering Dam	504	810	306
Eildon Reservoir	452	749	297
Menindee Lakes	557	505	-52
Totals (GL)	3 251	4 532	1 281

Table 1: Changes in Levels of Selected Murray Darling BasinStorages: 2nd May to 10th September 2008

Analysis of Table 1 reveals that:

- Menindee Lakes levels have reduced by 52 GL in the 15 week period despite June - August being the lowest evaporation period of the year – from now on evaporation rates will increase markedly
- the other 6 storages collectively increased their levels by 1 333 GL during the same 15 week period
- these 7 storages held 3 251 GL as at 28th May during a period of record low inflows and before winter 2008 inflows had commenced

Table 2: Active Storage Levels of Selected Murray Darling BasinStorages as at 10th September 2008

Water Storage	Storage	Storage	Dead	Active	Dead Storage
	Capacity	10 th Sept	Storage	Storage	% of Capacity
Dartmouth Dam	3 906	781	80	701	2.0
Hume Reservoir	3 038	900	30	870	1.0
Lake Victoria	677	314	100	214	14.8
Burrinjuck Dam	1 026	473	3	470	0.3
Blowering Dam	1 631	810	24	786	1.5
Waranga Basin	432	150	125	25	28.9
Eildon Reservoir	3 390	749	84	665	2.5
Totals (GL)	14 100	4 177	446	3 731	

Active Storage versus Dead Storage

Although Table 3 states that there were 4 177 GL in storage as at 10th September – if each storage was to be completely emptied, 446 GL of that water would not be able to be returned to the river was diverted from without the use of pumps. This water is referred to by the MDB Commission as 'dead storage'. As such the total storage figure of 4 177 GL is reduced to 3 731 GL of 'active storage' or in other words, the actual amount of water that can be easily returned to the Murray Darling system.

I refer the reader to the 28.9 % dead storage figure for the Waranga Basin. This storage is a perfect example of the gross inefficiencies of many parts of the NSW/Victorian irrigation storage and distribution system. To think that this storage has to be filled with 125 GL before any water can actually be diverted is almost beyond belief.

Water Storage	2 nd July	23 rd July	Change
Dartmouth Dam	697	722	25
Hume Reservoir	489	591	102
Lake Victoria	302	307	5
Burrinjuck Dam	426	440	14
Blowering Dam	609	677	68
Eildon Reservoir	480	562	82
Menindee Lakes	540	532	-8
Snowy Scheme	337	354	17
Wyangala Dam	122	121	-1
* Burrendong Dam	237	238	1
* Copeton Dam	299	298	-1
* Pindari Dam	98	98	nil
* Glenlyon Dam	88	81	-7
* Chaffey Dam	48	48	nil
* Split Rock Dam	25	25	nil
* Keepit Dam	95	97	2
* Beardmore Dam	34	33	-1
* Coolmunda Dam	49	48	-1
* Windamere Dam	89	89	nil
Waranga Basin	53	71	18
Lake Eppalock	20	20	nil
Greens Lake	23	22	-1
Goulburn Weir	25	25	nil
Torrumbarry Weir	36	35	-1
Lake Mulwala	22	55	33
Lake Buffalo	14	19	5
Lake William Hovell	13	14	1
* Leslie Dam	16	16	nil
Totals (GL)	5 286	5 638	352

Table 3: Changes in Levels of 28 Major Murray Darling BasinStorages: 2nd July to 23rd July 2008

NB: storages denoted * are located within the upper Darling catchment

4. Lake Victoria: A Superb Evaporating Basin

Although this highly inefficient storage is located in NSW (between Wentworth and the SA border) it is used to store water and regulate flows into SA. A stark reminder of Lake Victoria's hydrologic inefficiency is that 100 GL of the current 314 GL is not able to be accessed and subsequently returned to the Murray. Nevertheless, SA has 214 GL of water in that storage which if it wishes can immediately release into the Murray.

The 100 GL of 'dead storage' in Lake Victoria is an issue that the South Australian government should be urgently pursuing with the new MDB Authority. With a capacity of 677 GL and 100 GL permanently not available, this equates to a 14.8 % loss of true storage capacity. On the other hand, perhaps reconfiguring this storage would be another example of misguided funding priorities.

In addition to the 100 GL of dead storage, the other hydrologic problems with Lake Victoria are:

- located in a semi arid environment with high/extreme evaporation rates all year round
- it is a wide and shallow storage which only exacerbates the region's high annual evaporation rate
- being an off stream storage, there is further loss of water by seepage/evaporation as flows are diverted from the Murray and released back into the main stream.

Surely, it would be more efficient for South Australia to store Lake Victoria water in a mountain reservoir such as Dartmouth (which SA helped pay for) where evaporation rates are markedly lower and the dead storage as a percentage of the capacity is much lower, that is 2.0 % versus 14.8 %.

5. Median Inflows versus Average Inflows Flows

Analysis of the Murray system's historical flows finds that there is a large difference between the river's median annual flow and its mean annual flow – respectively they are 8 900 and 11 200 GL. The reason for the large difference between these two flows is that the average flow figure is boosted by the high flows which occur during the infrequent flood years.

To further emphasise the unreliability of the Murray's inflows, even the high rainfall zone of the upper Murray has a large difference between the median and average inflows in the month of July - 850 and 1 190 GL respectively!

6. New Paradigm Required: Anticipated MDB Flows for Next 10 years

A radical rethink of the way water is managed within the Murray Darling Basin is required. For at least the next 10 years and in the long term it is probably best we all take the view that the amount of water available in the system has permanently reduced.

There will be barely enough water for the River Murray and its major tributaries to function as a healthy river system, let alone providing reliable water for large scale irrigation projects. Since June 2002, water levels in the MDB Commission storages have been consistently below average and so it seems that the new reality for the MDB now is upon us.

An example of how the Murray has simply run out of water due to the highly inefficient method water is managed within the MDB – that is large volumes are still being diverted and/or stored in sometimes not much better than evaporating basins. The inflow to SA in 2007 was a paltry 1 000 GL despite the total MDB inflow figure probably being close to 8 000 GL. Take out of the available 1 000 GL:

- Riverland irrigation diversions
- Adelaide and regional cities water supplies
- evaporation from the 1 000 GL stored in the 8 Murray locks controlled by South Australia

Allowing for these diversions and evaporative losses, it is likely the flow that arrived at Wellington would've been around 500 GL. This is about 50% of the flow required to maintain adequate Lower Lake levels.

With a negative inflow budget such as the one outlined above, it is not surprising that the River Murray has not flowed through the Lower Lakes barrage system since 2002. The exception was a 5 day period during the winter of 2004 when eastern Mt Lofty Ranges streams such as the Finniss River temporarily boosted the levels of Lake Alexandrina sufficiently for a small release to be made.

Given the following facts, it is highly likely that the southern section of the MDB will have well below average inflows for the next 10 years even if the catchment receives average rainfall:

- a CSIRO report which predicts autumn rainfall has permanently reduced in south eastern Australia
- the Young/McColl report 'A Future Proofed Basin: A New Water Management Regime for the MDB' which says that a 1% reduction in annual rainfall equates to a 3% reduction in runoff
- massive areas of forested catchment in NSW and Victoria are recovering from recent bushfires it is estimated that stream flow from these areas will be 20 % less over the next 10 years
- Mike Young's prediction due to increased levels of farm/forestry dams there is the potential for an extra 2 750 GL to be taken out of the MDB system by the year 2023
- almost the entire Murray Darling Basin is extremely dry requiring well above average rainfall to get the landscape to at least average moisture conditions. For example whilst close to average rainfall was received in the Hume Reservoir catchment following the extreme drought years of 1903 and 1945, stream flows yielded from this near average rainfall were only half of the average flow expected.

The conclusions/recommendations that can be made from the above discussion are thus:

- to ensure the ongoing health of the Lower Lakes and the Coorong a minimum annual environmental flow at Wellington must be established and most importantly legislated
- future irrigation within the MDB must be seen as a year by year proposition irrigation water will only be allocated once the annual minimum environmental flow at Wellington has been exceeded
- future irrigation planning to be based on the Murray's much lower median annual flow of 8 900 GL rather than the often quoted mean annual flow of 11 200 GL
- even with 10% above average rainfall over the next 10 years, the possibility of environmental flows being allocated for South Australia which will be sufficient enough to maintain adequate levels in the Lower Lakes and provide enough fresh water for the Coorong looks quite grim, should the current highly inefficient system of water management within the MDB at both a government and farm gate level continue

9. Murrumbidgee River

I've previously highlighted the situation in which precious little of the Goulburn River's flow actually reaches the Murray. Another major tributary of the Murray is the Murrumbidgee which is also fed by the Lachlan River. The combined catchments of these two rivers accounts for a huge swathe of NSW's alpine/high country from near Bathurst in the north to almost the Victorian border in the south.

After analysing stream flow figures for the MDB Commission's 25th June 2008 Weekly Report I came to the conclusion that the Murrumbidgee is in a much worse position than the Goulburn River. This former grand stream was 'flowing' at the pitiful rate of 38 MgL day at Balranald. At this flow rate it would take over a day to fill an Olympic sized swimming pool!

Even the modest Onkaparinga River at Mylor would currently be flowing at a much greater rate than that. To put this alarmingly low flow into context – given an average flow throughout the year at Balranald of 300 MgL day, this equates to an annual flow of 110 GL. Even allowing for the continued low inflows into the Murrumbidgee system, the 110 GL figure is only 4.4 % of the 2 486 GL median annual natural flow of this former major tributary of the River Murray.

Although I don't have exact figures on Lachlan and Murrumbidgee River flow rates, I would nevertheless estimate that the Murrumbidgee's flow at Balranald would've been 1 750 MgL day on the 25th June if its flow were not robbed by major storages such as Wyangala, Burrinjuck, Blowering and Tantangara. This means that **97.8 % of its natural flow has been diverted**.

10. Recommendations

Urgent Actions

- the entire MDB (or at least the Lower Lakes & Coorong) be declared a National Disaster Zone – water to be released from selected MDB storages in mid September ensuring that the Lower Lakes & Coorong is full by the start of summer
- to ensure the ongoing health of the Lower Lakes & Coorong a minimum annual environmental flow is established for Wellington which is backed by legislation
- commence the process whereby land unsuitable for irrigation (as recommended by University of Adelaide Irrigation Researcher Professor Wayne Meyer) be formally identified and taken out of production – the landholders involved to be compensated immediately
- all land irrigated for dairying and livestock purposes within the MDB to cease it should only continue in the small section of the MDB which has the rainfall to support this water hungry land use
- a minimum or survival allocation for the properties which: (1) have permanent orchard plantings and (2) meet the criteria as land suitable for irrigation
- no allocation for annual crops until June 30th 2010

Three Year Plan

- future irrigation within the Murray Darling Basin to be seen as a year by year proposition – irrigation water to be allocated once the minimum environmental annual flow at Wellington has been or is certain to be exceeded
- ensure there is a significant reduction in water diverted for irrigated land use in the range of 30 to 50 % via: (1) the continuing process of retiring land unsuitable for irrigation and (2) the development of legislative backed criteria for undertaking irrigation within the MDB – this criteria will apply to not only individual landholders but also to the Boards managing each irrigation region
- to reduce the untenable amount of water evaporated from the surface of all MDB storages - reconfigure and/or seriously review the future of all non mountainous water storages – review priorities are Lake Victoria and Menindee Lakes, however even decommissioning Hume Reservoir and replacing it with a mountain reservoir further upstream should not be ruled out
- as a matter of urgency develop a solution to the annual 1 500 GL evaporative loss from the Lower Lakes
- all future irrigation planning to be based on the Murray's median (or typical) annual flow of 8 900 GL rather than the mean annual flow of 11 200 GL which is boosted by the high flows which occur during the years of infrequent floods

LOWER LAKES & COORONG ENVIRONMENTAL AND ECONOMIC RESTORATION PLAN

1. Wellington Weir: A \$130 Million White Flag

There are two reasons I'm totally against the weir at Wellington:

- it gives the message to the upstream regions, the MDB Commission and the Federal Government that the South Australian has given up on the Lower Lakes & Coorong
- South Australia has control over 1 400 GL of Murray water in the weir pools of the 8 locks downstream of Lock 9, plus the considerable volume of water stored in Lake Victoria.

2. Clayton – Hindmarsh Island Weir

There is a proposal to block off the Goolwa Channel with a small weir between Clayton and Hindmarsh Island. The purpose of this weir is to capture all the fresh water which is currently flowing out of the eastern Mt Lofty Ranges (ie Currency and Tookayerta Creeks and the more substantial Finniss River) and store it in the Goolwa Channel.

3. Hindmarsh Island Marina Configuration

To further reduce evaporation levels from the Goolwa Channel I propose that at least the most easterly Hindmarsh Island marina is filled with sea water. This would require a pipeline of no more than 200 metres from the Goolwa Channel downstream of the Barrages. The advantages of this project are:

- it reduces the evaporation levels from the fresh water section of the Goolwa Channel
- it increases the depth of water in the marina
- water levels in the marina can be maintained at more constant levels.

4. Negotiate with State Government to Source an Extra 300 GL

This extra water would increase levels of the Lower Lakes to sea level. This 300 GL of water could be sourced thus:

- 150 GL 15 % of the 1 000 GL stored in the 8 locks controlled by South Australia
- 75 GL from Lake Victoria there is currently over 300 GL in this SA controlled storage
- 75 GL from the Menindee Lakes South Australia has rights to 180 GL in these storages.

Water should first be released from Menindee in mid October to join with the downstream releases from the other storages in order that this emergency environmental flow would reach the Lower Lakes just as higher evaporation rates are commencing.

5. Lower Lakes Evaporation Reduction & Coorong Restoration Project

There are a number of project proposals to reduce evaporation in the Lower Lakes. The one outlined below was devised by Ray Najar, General Manager of the Murray Darling Association – see article in 'The Advertiser' (21/8/08):

- divide Lake Alexandrina into two sections 20 % fresh water and 80 % sea water by creating a levee bank system around its perimeter, approximately 1 kilometre from the edge of the lake
- the fresh water would be contained inside this earth wall which would allow fresh water flows to be directed into Lake Albert and then into the Coorong via a short pipeline
- total area of the Lower Lakes as a fresh water system would be reduced by 64 % which would save between 550 and 600 GL annually in evaporation.

The advantages/features of this major project are:

- the fresh water section of Lake Alexandrina will enable all of the current wetland bird breeding areas to be protected
- the extensive Currency Creek, Finniss River and Tookayerta Creek wetlands will not be inundated by sea water should the Wellington Weir be built nor be affected by soil acidification
- Lake Albert will be 100 % fresh water the current expensive method and associated 24/7 use of fossil fuels to prevent Lake Albert becoming acidified would no longer required
- the Coorong will have a guaranteed supply of fresh water every year
- the fresh water section of Lake Alexandrina can be kept at sea level (zero AHD) even during a severe drought such as the one we're currently experiencing

- there is now no reason for the Wellington Weir to be built
- during high flows in the Murray fresh water can be directed into the normally tidal section of Lake Alexandrina
- the connection of Lake Albert to the Coorong can also provide a better mixing of the fresh water with the tidal flush 35 kms upstream from the Murray Mouth which is vastly superior to the current situation with the existence of the Tauwitchere barrages
- the Lower Lakes & Coorong are more likely to be granted one off environmental flows from NSW, Victorian and Queensland irrigation communities and state governments in future years because SA has taken action to improve the health of their section of the River Murray rather than continually blaming the eastern states for the dire situation the Lower Lakes & Coorong was facing

6. SA Flood Plain Wetland Reconfiguration

There are 150 wetlands on the Murray floodplain that became artificially permanent in the 1930's with the creation of the locks system. There is the potential to recover 200 GL lost through evaporation by constructing regulators which will return all of these permanent wetlands to being naturally ephemeral.

7. Reconfiguring Inefficient Storages

Lake Victoria, Waranga Basin (Goulburn) and the Menindee Lakes are all storages with high levels of 'dead storage'. This is water which is not able to be returned to the river it was diverted from without the use of pumps. Lake Victoria and Waranga Basin combined have a 225 GL of dead storage.

On the other hand the Menindee Lakes are so hydrologically inefficient it is hard to be specific what its dead storage figure is – suffice to say that it is well over 300 GL. Thus in just those 3 storages there is approximately 550 GL of dead storage. Once these storages were reconfigured they could guarantee an extra 350 to 400 GL annually for the Lower Lakes.

It is disappointing that the authorities have known about the combined 550 GL dead storage figure of these three storages for a number of years. Yet despite an EIS having being undertaken and significant COAG funding being available, reconfiguration work at the Menindee Lakes is still yet to proceed.

8. SA Community/Government Needs to Radically Change Attitude

As previously mentioned I believe the SA community's immature approach of always blaming eastern states irrigation communities for the lack of Murray water in the Lower Lakes & Coorong rather than recognising the large amount of water SA has control over is seriously counter productive.

In my many discussions with Ray Najar from the Murray Darling Association, he has often made the comment to me that upstream irrigators and politicians will be much more likely to grant environmental flows to the Lower Lakes if as a community we stop using them as scape goats and instead do something to improve the situation ourselves. Furthermore, the SA Government is also a big part of the Lower Lakes problems. I have heard Mike Rann say the following a number of times during interviews: "This is a 1 in 1 000 year drought" with the inference that this is the reason why his State Government is going to sit back and let the Lower Lakes & Coorong die.

Yes this is a severe long term drought but as records have only been taken for 117 years it is absurd to make a claim of that significance. For example, the winter inflows to the Murray system this year were only the fifth lowest on record – in other words, there were four other years when winter inflows were lower! However, the problem is that most people will believe the 1 in 1 000 year drought statement to be true, particularly if it is said often enough by the Premier or Minister Maywald!

Matthew Dowling 10/9/08