

The Chairperson, House of Representatives Standing Committee on Regional Australia,
G.P.O.Box 6021,
Parliament House,
Canberra, A.C.T. 2600.

12. 12. 10

Dear Sir, Herewith my Submission on Guide to Murray Darling Basin Plan.

From day one irrigation in Australia has been problematical. Some of the proposals did not meet design intention drainage was inadequate causing salt and other hazards. Since inception water extraction has increased by 500%- overextraction.

Irrigation will probably oversee its own demise, or at least substantial mitigation. Unfortunately irrigation, like the oil industry, obeys the laws of diminishing returns. Man, the Planet's toxic tenant has overpopulated the planet to unsustainable proportions. Concerned scientists are calling this the Anthropocene Age, an Age in which anthropogenic predatory behaviour is degrading our life support systems! In Canberra on 09 12 2010 these scientists gathered for Earth Systems Science meetings. How apt, how necessary in the context of your deliberations?

I find it difficult to express the goodwill I feel for you. You must not fail this onerous task or you will fail the Murray Darling Basin Australia and Australians

Thank you for accepting this amateur submission GG

Yours Faithfully,

Walter B Grahame,

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Date Received:	15/12/10
Secretary:	SL

c.c. Mark Dreyfus, Q.C. M.P.
Kelvin Thomson M.P.
Jill Quirk, S.P.A.
Lorraine Wreford M.P. Mordialloc,
Tony Windsor. M.P. Chairman of M.D. Committee

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Murray Darling Basin, A selective History.

In 1887 the Chaffey brothers from Canada pumped water for irrigation in Mildura. These were enormous steam driven pumps fuelled by red gum extracted from the river bank. The amount extracted in this era was said to be 1.5 metres long 1.5 metres high and would reach from Mildura to Alice Springs! This was the first big insult to the river environment and ecology which has continued one way or another since.

Biodiversity is essential to human existence, it contributes to a healthy environment, clean air and clean water that supports human life. These services to humanity are called "ecosystem services" and include temperature amelioration, (e.g., reduction of urban heat island effects) reduction in greenhouse gases through carbon capture, air purification, water filtration and drainage, and waste decomposition. Ecosystem services are a requirement under the act, but not mandatory Why?

In 1891 the Goulburn Wier was completed, the first major diversion structure built for irrigation in Australia. The pioneers knew about salt. The arrangements to deliver water to the local districts were adequate but the drainage was completely inadequate. In fact the drainage channels were so small that they could be cleaned out using pick and shovel, a bitter personal experience. As a consequence the water table in Kyabram rose from 2 meters (6 feet 8 inches) to 150 millimetres (6 inches). Much of the area became salinated and it was so to Kerang and Swan Hill. Aboriginal communities have lived in Australia for 60,000 years, barely leaving any recognisable damage. They were nomads with completely biodegradable aids to living. They planned for 7 generations. With all our technology can we do that for the Basin?

The beautiful Murray River of my childhood was a delightful tourist destination. At Easter 2009 there were 800 km of algal blooms between Albury and Swan Hill (500 miles) the river was not flowing and the water was not potable and tourists were advised not to swim in it. In 2006 tourism and its offshoots employed approximately 221,000 people. In the longest and most destructive drought in recorded Australian history (2000-2010) water extraction exceeded inflows, the river was being used as a dam for several years. I can't record accurately when the Barrages were built at Goolwah to prevent salt going upstream into Lake Alexandrina and the Murray but by the look of the workers' hats it was depression years. The locks on the river were built to aid irrigation and were also an aid to river boat navigation. Their use has also led to pooling and stasis of flows. The Coorong and Lake Albert and Alexandrina have suffered enormously from loss of species in the drought and the appearance of acid sulphate soils. It was depressing to see the graphic pictures and descriptions of acid sulphate soils at "Bottle Bend" in Mildura. The equivalent concentration of battery acid! Explorer Sturt saw algal blooms in the basin, but nothing like the extent of today's concentrations. I suppose we should be grateful that super phosphate is almost depleted throughout the planet. In general our soils are geologically old, shallow and infertile. We have neither soil nor water to support the misguided growthists self indulgent thrust for 36 million population in 2047.

Your guide speaks plainly of mismanagement in the past due to Governments of various stripe, the dreadful hangover from anachronistic State Governments (Federation). Intransigence and bloody mindedness (Victoria joining scheme in 2019). This has led to the debacle of 20 of river catchments out of 23 being at least in poor condition. On the above considerations alone the basin plan should be adopted.

Rehabilitation. In the past flood irrigation was the "modus operandum". In Balranald district the Murrumbidgee was flooded over the levee banks and the water allowed to reticulate back into the river, together with a load of salt! In the Goulburn Valley flood irrigation was practised between bays that overused water to get to the highest ground. Thus heightening capillarity bringing a salt load near the surface. Enter the laser ploughing which left paddock as dead flat. This allowed the reduction of irrigated water by one third and sometimes one half. Boom sprays have further reduced water consumption with better management. Electronic management of supply to farm has also helped. These have been tried in the Victorian Northern Foodbowl Refurbishment, the so called "Northern Dog"

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because 9 out of ten Agricultural Economists say it will return nothing to the taxpayer and will benefit a few irrigators only.

And what happened to Stop, Caution, Go.? This was Tim Holding's only good idea. Stop, no water available because the land was too degraded to fix. Caution, water available to land holders who met certain criteria of rehabilitation. Go, land O.K. Water available. It gave guidelines to hope and stopped farmers from flogging a dead horse. Your graph demonstrating outflows at the mouth of the Murray and the proportion of the years the mouth would open there for flushing salt. Without development and assuming 2000 Gigs/yr flow the mouth would open 97% of the years, under current arrangements 64% of the years. Under the regime of an additional 300 Gigs/yr to 4000 Gigs/yr about 90% of the years open. Without development all end of system flows would be rated good!

So your plan for additional environmental flows goes a long way towards remediation of this problem. Flood plains, Your diagrams and text neatly explain the required flows to sustain the Basin's key environmental assets at 2,400 odd sites. Base flows, Freshes which provide cues for aquatic animals to breed and for water birds to come into season, a most important consideration in the maintenance of species as we are experiencing the sixth big species loss in world history. Overbank flows which return carbon to the river and allow fish and invertebrates to breed and reproduce. These factors, of course, contribute to ecological services which I have alluded to in a previous paragraph. The fact that water in sufficient quantities at one location will probably suffice for many locations up and downstream that this can be achieved is a freak of nature i.e. The fact that the course of the Murray falls only 250 metres in 2,500 kilometres. You estimate that an additional 3,000 Gigs/pa to 4000 Gigs/pa can accommodate this. I find this one of the most compelling arguments for the institution of the plan. Flooding, like the destructive episode we are currently witnessing is fraught. The flushing is a good thing to get rid of salt, but at the same time brings in additional salt. And nutrients. Will this be somewhat abated by the guaranteed flows of your plan? It is a given that Ramsar sites throughout the basin would be augmented and protected by guaranteed flows.

Productivity "The basin's agriculture produces \$ 15 billion worth of produce annually. (39 % of Australia's total annual production. It contains 65% of Australia's irrigated land approx 40% of Australia's farms." However 20 of the 23 river valleys in the basin are in poor to very poor ecological condition. This is an unsustainable situation because of the importance of ecological services. The basin population in Queensland enjoy a disconnection from people of Victoria. The basin has been divided into 19 regions vis a vis C.S.I.R.O. I believe that the basin is our best chance to commence the inception of regional Government because it is based on a river system, albeit in extremis and serves so many people in disparate situations. Khancoban, Adelaide and 2.1 million people living in the basin and 1.3 million dependent on its water resources. The basin produces 39% of Australia's agricultural product, 15% only is consumed in Australia. Yet we are net importers of food. Potatoes from Tonga, Mushies from Sth Korea, tomatoes and capsicum from New Zealand, and soon fireblight with apples? Pears from China, onions from U.S. A and asparagus from Peru! So we are exporting our water embodied in produce including "Deathbag" (cask wine), at the same time overseas interests are buying up irrigated and dry land farms to secure their food supply. This figure amounted to \$ 9 billion last year! Where was the foreign investment review board?

Cotton is an irrigation dependent crop in Nth N.S.W. & Queensland and is apparently a successful enterprise. This is a shame because it's not a food crop. Cotton consumes great quantities of water near the top of the system. The most frequently asked question is: WHY ARE WE GROWING COTTON? Rice, The predominant crop of N.S.W. Central Murray and Murrumbidgee. An annual adaptable. If crop profitability is high and water available, farmers will buy water to augment diversions. They will sell off to dairy or horticulture if the opposite prevails. The Murrumbidgee rice area, because of relatively high volumes of water held by irrigators is able to take greater advantage of trading. The overallocation of Victoria's water resources is predominantly due to the capture of the regional water authorities by irrigation interests. When available, water is available to irrigators at cost, excluding

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infrastructure!

We hope that the institution of the Murray Darling Basin scheme will address the over allocation of water and smooth out the disparities outlined above. Bracks And Brumby gave up trying to introduce consistency to avoid overallocation. What hope do we have with Peter Ryan Minister for water with Ted Bailleu's libs.? He wants to further delay your endeavours!

Why do we grow rice?

Dairy Mostly features in Vic Goulburn Murray ,N.S.W. Central Murray annd S.A. Cloven Hooved animals of great weight were never meant for shallow infertile Australian soils.Great areas of Victorian Dairy areas in the basin are threatened by salt , overstocking and overuse of nutrients . 9,000 river dependent grazing licencs were renewed by Brumby with no requirement for fencing to keep stock out of watercources and no pump to trough requirements.Irrigation was never the magic bullet to riches.

Subsidies were the order of the day in post war years dairy quality was measured in butter fat. N.Z. And Denmark produced butter fat at 16 cents a pound we produced it at 26 cents per pound. When the U.K. joined the common market the Ottawa Trade agreement was abandoned and fruit growers in my home town lost a subsidy of 15 pounds per ton. So they were subsidised by the Government to pull their trees. So they went across to dairying which was a natural fit and soon dominated the industry.

(Murray Goulburn) Australia currently suffers an epidemic of Diabesity (dibetes mediated by obesity) Dairy contributes to this, it is not a health food. It contains cholesteral which causes atheroma contributing to heart disease.Ther are less cases of osteoporosis in the vegetarian community than in the carnivores (meat eating population) The gallows humour when I was a boy was to tell the ten pound Poms to buy an orchard and relax! A couple on irrigation in post second world war could scrape a living with 40 or 50 cows . Now overstocking occurs on larger properties with 400 cows a farm mortgage , a stock mortgage and Mum working in town. And they can't afford to miss a teat.As for beef we should be eating kangaroos instead of culling them, very low cholesterol in" Roo meat.

. Horticulture ,the hope of the side. Mainly occurs in the Southern half of the Basin, but they irrigate a little over half their land, and represents a small component of input costs. However it is highly variable in profitabillity because we allow imports that make us net importers of food ! If producers are going to feel the pain of reasonable diversions the community should share some of the pain. Sensible ,understandable labelling would be a start. BE AUSTRALIAN, BUY AUSTRALIAN.!

High water consumption but low value is the spectrum occupied by broad acre cereals rice and cotton are more severely impacted than higher value crops . Grapes nuts fruit and vegies.are healthier anyway. Mining,Coal seam Gas Extraction The cowboys who imagine that they can operate without damaging aquifers and using billions of gallons of ground water ought to be reined in and be subject to stringent restraints of the act . Also mining that would take away food producing land and damaging aquifers should be most closely restrained. Rice and Cotton should be under a big question mark! Coal seam gas extraction is environmentally hazardous as it pollutes the very subterranean water we are desperate to preserve. Furthermore it uses billions of litres of water from the source we are trying to preserve.

Observers say that the mining is poorly regulated, especially in N.S.W. And a little better in Queensland.If the miners are going to destroy this ecosystem, they should be charged a superprofits tax,to rehabillitate agriculturalists displaced by the plan, but then you would be taking on the hydrocarbon cartels and I know where that would get you! The toxic waste fed into aquifers will prevent the use of water for stock and humans !

Climate change: Climate change is a matter of fact according to 99% of climate scientists and 90% are convinced of the anthropogenic component.Your historical record (1895 to 2009) seems the most reasonable way of engrossing the exigencies of variabillity into a workable formula .The groundwater recharging is an amazing and interesting phenomenon and would seem to be drought proof. However sourced from underground. times of poor surface supply it will be raided by unregistered bores.Your measuring and inspectorate will have to be very robust.Climate change will see the contraction of

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rainfall towards the poles, this will affect inflows in the lower basin and I have heard learned argument supporting a shift in agriculture and horticulture to Gippsland and Tasmania. The area between Hobart and Launceston has poor rainfall, but opportunities for irrigation exist by re routing water from the West Coast which currently flows out to sea. However salination would have to be considered.

I take it that ground water within the basin is not fossil water and recharges readily. I believe this water should be held by the Federal Government Water Holder and should never be allowed out without a chaperone! It seems to me to be the most stable emergency supply.

Environment Economy and Society.

Malcolm Turnbull was heavily engaged in writing this The Water Act (2007) C/wealth, and enjoyed strong bipartisan support. Mark Dreyfus in his speech to the House on 20 10 2010 begs for this spirit to be upheld and followed. However he mentions "fear mongering, misreading or misrepresentation, and the spreading of misinformation" This is not in Australian community interests. Mr Michael Taylor has resigned because he felt he was not getting a response from this Government that would deliver a good result for sufficient flows for the environment. He also felt that the Guide was not of robust enough quality to deliver on requirements. Mr Peter Ryan, Water Minister under Bailleu Wants to delay things, yet Victoria is not entering till 2019! And Warren Truss wants to "go back to basics". I believe for Warren that would be back to the 6 day mass production of the Universe 6000 years ago. Like Sarah Palin, George Bush and other American intellectuals believe. The Mad Monk and Meaty Bites (Christopher Pyne all liver and no heart) want to snipe from the side lines bringing nothing useful to the debate! I can take Warren back to basics, there is as much water on the Earth today as ever there was, it's a matter of distribution on an overcrowded planet and an overcrowded Australia And this document takes us back to basics with it's strict observation of scientific principles, adherence to World best practice in research and most importantly peer review! Some observers say that an additional flow for environmental purposes will (at 3000 Gigs reduce the basin's productivity by 30% some say by 13%.) The drought was said to reduce productivity by less than 1% but that does not take into account additional borrowings for seed etc and the interest attachments. Small towns, which are water dependent (less than 10,000) do not have the critical mass to survive it seems that towns of 25,000 e.g Shepparton, who have Hospitals, Schools and other well founded social amenity will. Banks have foretold that they would have difficulty lending into small communities. It has been estimated that additional environmental flows of 3000 Gigs will cost the Basin 8,000 Million dollars in production. How does this equate with the fact that with 3,000 Gigs additional environmental flow there will be more water available for irrigators than there was in the drought. that cost less than one % in production loss? Industries dependent on irrigated agriculture must suffer in lockstep. These are the figures that I find a bit woolly and I am sure that in response to the angry farming lobby and more particularly to the extended consultation period proposed even after DRAFT act is tabled that more reasonable figures will be adduced and therefore more practical debate emerge. In short there is bound to be "sturm and drang", loss of jobs and community upheaval but I don't think that has been accurately estimated yet.

Some say that the whole debate is being conducted on the wrong premise. The choice is not between the welfare of river dependent communities and the long term sustainability of a healthy river, It is a discussion about short term gain and scientific denialism versus sustainable planning, and adherence to World best practice science that will deliver most of both.

The best option is to obtain at least 4,000 Gigs additional environmental flows, to guarantee the Basin's future, because the compromise has been over reached at 3,000 Gigs.

My old Dad used to say assemble the facts and see if the truth emerges You know the truth, hold your nerve and have the political will (you can call it guts, I won't be offended) to save the river for Australia and Australians.

Inspectorate. I see that you have developed an hierarchical compliance profile I hope you are not

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required to oversee this too closely , although I know that expecting altruism is useless! In making a submission to The E.P.B.C.Act it was disclosed that their inspectorate achieved 17% only of their target group to occur .You cannot allow this sort of sloppy negligence to occur!

Tripple Bottom Line

