

David Allen

4 April, 2011

Ref: Murray Basin Plan Submission – Billion Dollar Opportunities

Executive Summary

The whole of the Murray Darling strategy, along with all other aspects of Australian Agriculture, may need to be rethought in Economic, Environmental and Social terms. As Lewis Carroll wrote, if we don't know where we are going, then any direction will do.

Any plan, including the Murray Basin Plan, needs to be designed in a business-oriented way to achieve results. While a SWOT-analysis is part of such a plan, the document we are responding to minimizes the use of negatives such as Weaknesses and Threats, despite the fact that they are very real if the MB-Plan does not produce the goods.

Local Aboriginal communities have a more detailed knowledge of the potential of the land and its water-flows than all the expensive foreign experts that we employ. Indeed the net worth of many foreign experts may well be negative, as we watch the land and water systems being degraded over the decades. Each foreign expert would, of course, value their work very highly as they strive to recreate a small patch of their homeland.

Definitions of key terms such as Economic, Environmental and Social need to be agreed, as there is considerable overlap between all three. If the environment were destroyed, there would be no society and no economy. All three components need to be addressed at the same time and there are mathematical processes that help integrate the results.

The potential for the Murray Darling and for many other Australian River Deltas is enormous, especially once we stop using pesticides so freely. The Basin and Deltas can provide countless sustainable and economically viable jobs with careful planning.

The management of the Murray-Darling Basin, and the development and implementation of the Basin Plan, with particular reference to:

(a) the implications for agriculture and food production and the environment:

Water needs to be spread across the land, as it used to be, and to reach the sea, as it used to do, to maximize food production. We are now a net importer of food, despite the fact that our small population of 22 million people has an entire continent at its disposal. When the cost of imported equipment, fertilizers, pests and pesticides is included, then Australian Agriculture would have been a net importer for decades.

Australia is the only continent that does not produce a single item of indigenous fruit or vegetable for general consumption. We no longer know which Oz-crops we could grow.

Once the Basin Plan has been developed, then implementation may take years if not decades. The Basin Plan needs to factor in droughts, bushfires, floods and the occasional

years of good production – i.e. there may be a series of Basin Plans for the different types of seasons, each with their own Water and Food Production Targets.

There may also be Basin Plans at Regional and Farm level. Farm Planning is an intensely complex activity which, as the statistics indicate, many farmers do not well. “How much should they plant in a given year?” and “How many temporary workers they should employ to harvest good crops?” are examples of complex questions that farmers face under extreme time-constraints. Australia loves to criticize other countries when their crops are rotting in the field but too much of our crops face a similar destiny.

(b) the social and economic impacts of changes proposed in the Basin;

Rural populations need to be restored, so people can manage the land once more. Most of Australia is far less densely populated than it used to be before European settlement and many multi-national owners do not want people on their land. The price of water needs to be rational, so water can be shared across the basin. Well-watered cities (e.g. Sydney) receive enough water from local Catchments and should take no rural water.

It is possible to create new types of jobs in the Murray Darling that will lift the regional and Australian economy. Australians have become too used to job-creation processes that may cost half a million dollars per job and the possibility of creating cost-effective jobs may surprise some government officials.

It is possible to use water wisely and productively and create sustainable and productive jobs at the same time and there are many ways to achieve this. One minor strategy is to restrict the amount of food that Australia imports, as imported food is a National Security issue for several reasons.

(c) the impact on sustainable productivity and on the viability of the Basin;

There is little about Australia’s dry-land agriculture that is sustainable and Productivity decreases each year, despite the uber-optimistic reports that the Productivity Commission produces. Indeed a close reading of Productivity Reports shows just what a disaster European dry-land agriculture has been in Australia. A large percentage of farmers survive on subsidies, relying on good crops when local rain falls at the right time.

Even Einstein, who was not real snaps *mit der Mathematik*, could realize that if pesticides are continually put on land and in water, productivity must diminish to zero, especially as the topsoil is destroyed by drought and flood.

Australia spends millions of dollars each year trying to ‘Save the Whale’. Ironically we also spend billions of dollars each year on putting pesticides onto the Basin’s land and into its waters which flow into the sea. Such pesticides may do more to destroy the food chain of species such as Whales and Homo Sapiens than commercial whaling does.

The Basin Plan could focus some resources on growing indigenous Australian crops that are less dependent on weather fluctuations. The international market for such crops could be huge and several examples spring to mind quite readily.

Why should the Murray Darling produce crops that, on average, produce a negative return and cause health problems due to over-consumption? While agricultural research concentrates on sweet crops that pests love, Economics must prevail.

(d) the opportunities for a national reconfiguration of rural and regional Australia and its agricultural resources against the background of the Basin Plan and the science of the future;

The opportunities to develop sustainable and productive agricultural systems are enormous. European colonists specified which crops Australia would plant in the early days and such people are still quite active in Australian universities. Reconfiguring Education in Australia is a national priority, as 101-Rivers from Harvard or Oxford are not terribly useful in this wide, well-watered (on occasions) land.

Science is extremely important and Statistics show which strategies are succeeding. While American agriculture uses far more indigenous and sustainable crops than we do in Australia, many of their problems are similar to ours and we can lead the way in some areas. NB: "How to grow rice in semi-arid regions" is not a skill I would care to boast about too loudly. NBB: America spent more than one trillion dollars on their rivers which functioned better before they spent the first dime, with Australia following suite.

While the science of water is so complex and mysterious that homo sapiens will probably never understand it fully, there is much more that we can learn.

Weather-science is also very complex, with many recent long-term forecasts being so inaccurate that some may be fraudulent. Local rain may be easier to influence and forecast than monsoonal rain is. Local rain may be more important for the production of certain types of crops and we could perhaps model local rain more accurately, putting the computers aside if they are not as accurate as the mathematician Joe-down-the-road.

Agricultural science of the future will be bio-science and perhaps quite similar to the sciences that Indigenous peoples used in many lands for so many sustainable millennia.

a) You can't stop progress

b) That's a waterfall up ahead

a) Reverse! Reverse! Reverse!

(e) the extent to which options for more efficient water use can be found and the implications of more efficient water use, mining and gas extraction on the aquifer and its contribution to run off and water flow;

Australian Water is mostly wasted, especially in the uber-luxurious cities, and we export far too much of it. The whole approach to using water in a way that benefits the Economy as well as the Environment and Society needs to be rethought. It is possible to have an agricultural system that obtains fair prices for its products if we choose our crops and our markets carefully. It is economically important that clean water flows to the sea.

Water-efficiency is a potentially dangerous concept. Too much Murray Basin Water evaporates from concrete monstrosities, leaving the land dry, unproductive and increasingly prone to intensive bushfires.

Using very efficient pipes to transport water from the Murray to paddy fields many kilometers away may deprive the intervening land of much needed water. This may in turn reduce the amount of local rain that falls, especially when local trees are also destroyed. The more natural the flow is from the Murray Darling to crops that are to be irrigated, the more general the benefits may be.

It is interesting to see that such large volumes of water from The Basin are used to exploit Australia's mineral resources as quickly as possible. It is not in the interests even of the resource-poor countries that profit from this exploitation to destroy Australia's mineral and hydrological resources at the current rate.

(f) the opportunities for producing more food by using less water with smarter farming and plant technology;

Bio-technology, as used by Aboriginal Australians, is perhaps the way of the future. Concrete technology is expensive, polluting and very transient, as we saw in the Queensland floods and in the earthquakes in Christchurch and Japan.

Legislation that prevents certain types of crops being grown in semi-arid land would have an immediate effect on water-efficiency and water-availability.

Plant technology has been a 200 year disaster in Australia. We have imported virtually every plant that might grow here and the resulting cost of introduced noxious weeds is a multi-billion dollar expense each year. We are still importing new plants and using genetically-modified plants to put some of our existing crops at risk and Australian knowledge of our own nutritious and healthy foodies and medicinal is extremely limited.

We could use mathematics, process-flow-analysis and traditional Aboriginal Science to determine the types of plants that may produce cost-effective edible and medicinal crops in the Murray Darling Basin and in Australian River Deltas.

(g) the national implications of foreign ownership, including:

- (i) corporate and sovereign takeover of agriculture land and water, and
- (ii) water speculators;

Foreign ownership is destroying Australia's economy and our topsoil. Nameless and faceless people who live overseas take no interest in the land and have no accountability.

As we saw with Brisbane's Dutch Wives Hoe dam, water is so artificially expensive that rational decisions cannot be made about it. Speculators were unwilling to open the dam's gates, despite the urgent threat that Brisbane was facing. Any price on water that falls from the sky needs to be rational and the profits need to stay in local communities.

Water is Australia's most precious resource, as life is not possible without it. All Australian rivers and lakes need to be protected in national documents such as the Australian Constitution, perhaps referring to America's Great Lakes legislation.

(h) means to achieve sustainable diversion limits in a way that recognises production efficiency:

There is no way to produce crops such as cotton and rice efficiently in semi-arid regions. Water should not be diverted towards such crops and the farmers of such crops should receive no government drought or flood subsidies. Other crops provide far more employment opportunities and better economic returns for the Basin's communities.

Water should not be diverted towards cities such as Melbourne that have adequate rainfall in most years. Melbourne and Sydney are quite capable of growing their own food with their own rainfall and should leave external Catchment water to be used more productively. There are many such productive uses, with bushfire prevention being just one that springs to mind. When rural bushfires become too frequent and intense, the lives of people in urban Australia will increasingly be at risk.

Legislation around the Great Lakes in North America prevents cities outside the Basin from taking their water. Australia needs such legislation, despite the fuss that European experts stir up from time to time. Their latest ploy focuses on E-coli in the Great Lakes.

(i) options for all water savings including use of alternative basins;
and

The true economic value of clean water occurs when it covers the land and when it meets the sea. According to several reports in the Scientific American, we have polluted the oceans almost to death and continue to do so at our peril.

Water savings occur when water is not wasted on unsuitable crops. Secondly water is saved when it is not sent to support the uber-luxurious lives of metropolitan Australians. Thirdly water is saved when it does not evaporate from concrete monstrosities each year. Lastly water is saved when drugs that are harmful to the community are not grown.

Storing water in shallow lakes with bio-coverings is efficient. Allowing Australia's super-efficient water-retaining plants to obtain the water they need is a good strategy. Alternate Basins are not necessary, as the Murray Basin has all the water it needs to function effectively, once the over-allocation of water ceases. During droughts, less water will be available and farmers need to preserve trees to protect their topsoil.

(j) any other related matters.

(j.1) Local Economically Valuable Fauna and Flora: Economically valuable animals such as Birds and Bees that pollinate our crops must be protected. Economically valuable animals such as Echidna that slow our replacement by Termites and Insects must be protected. NB: America has virtually destroyed all their pollinating bees and fruit bats.

Europeans howl that the excrement of certain species such as Homo Sapiens contains super-dangerous levels of E-coli, while domesticated animals can do whatever they want wherever they please. The Bible tells us that a Bad Shepherd allows his flock to defecate in streams. It also tells us not to build houses on sand or on flood-plains. We could read it.

(j.2) Cost of Australian Food: Australia has the most inefficient agricultural system in the world, as we cannot even feed ourselves and we are turning productive land into deserts. Australian food used to be cheap but now it is artificially expensive. Cutting imported foods back would free Australian markets from the grip of multi-national food-chains and persuade some Australians to turn to sustainable food crops.

(j.3) Burning Australian Books: It was interesting to see groups of people burning the Basin's Plan in 2010, despite the fact that many of them would not have read it. It was also interesting to see how frequently Australian media referred to this typically Australian story. We have been burning Australian books for well over two hundred years and much knowledge has been destroyed. Our universities continue the process of destroying 'old' books, presumably replacing them with modern 101-books from Harvard or Oxford. We cannot afford to lose the knowledge that valuable Australian books contain, especially as electronic books are quite expensive and will less easily available to Australians than printed matter.

(J.4) Australian River Deltas: The Murray Darling Delta was the most fertile land on the planet when Charles Sturt sailed down the river. Now it is a septic mess and many other valuable river deltas are becoming concrete deserts. Restoring the fertility and productivity of Australian River Deltas is a national priority and would create viable jobs.

(j.5) Summary: There is much we can learn about Water Management from Traditional Aboriginal Stories such as Tiddelak and from The Bible. I am an Australian and I have a lot of rural and business experience from Australia and from other countries. Experience with Planning is essential, as it is much easier to rush to produce a deficient Plan than it is to take the time and do the community consultation that would produce a good one.

The Basin's Plan needs to be flexible, as the next drought is approaching and there is a strong probability that future droughts will be more severe than the recent 1-in-one-hundred-years-drought that just finished. The Basin's plan needs to recognize the economic importance of water, local fauna and flora and, when drafted in an intelligent way, can provide sustainable and productive employment for large communities.

I would be more than happy to assist with the process of identifying the billion-dollar opportunities that the Basin Plan offers. As Mark Twain wrote, "Whiskey is for drinking, water is for fighting". We do need to get the Basin Plan right, and involvement of all upstream communities is essential, as Aboriginal Australians realized in their brilliant unwritten Constitution several millennia ago.

Yours Sincerely

David Allen B. Sc (Hons – Maths), MA (Business Management) : (0419) 268583