11\textsuperscript{th} January 2008

Dear Professor Garnaut,

Re. Response to Issues Paper No.1

You may or may not have heard of the WaterMark Australia Project. Briefly, the project was officially launched in the middle of 2004 although preliminary scoping of the work, project design and specification, fund-raising commenced about two years before this. Watermark Australia was conducted by the auspices of the Victorian Women’s Trust with a secretariat set up and operating from the Trust’s premises in Bourke St, Melbourne.

Watermark Australia enlisted groups of people (volunteers) from all walks of life and in various locations around Australia, to conduct a process of community engagement aimed at raising water literacy. The process was interactive and iterative with participants discussing various water issues that had been identified and documented in a prepared set of eight Session Notes. Each of these discussions has been summarised and reported back to the secretariat and at the same time, participants have taken the opportunity voluntarily disclose there views, experiences and ideas about water. All of this material as well as information and data in various publications and published reports were used in the writing of our document, “Our Water Mark – Australians making a difference in Water Reform”. The document was released in July and since that time about 25,000 free copies have been distributed across Australia.

The Watermark Australia secretariat wants to continue to distribute the document so as to encourage and facilitate widespread comment and discussion about what needs to be done in various parts of Australia in response to the very serious water situation that is facing the nation. In order to continue with the distribution, we have entered into an arrangement with The Body Shop retail group so that from the end of this month, copies will be available from all of its stores across Australia. A copy of our document is enclosed for your information and consideration. Also enclosed is a summary paper “Australia’s Water Crisis” that is based on information in the complete document.

Watermark Australia has been independently funded. Some initial funding for the Project came in the form of a grant from the Sidney Myer Trust and this was followed by substantial funds being contributed by five women in Victoria. The gender ratio amongst participants was about 80:20, female to male. Some of the key messages in Our Water Mark are:
The eastern side of the Australian mainland has seen drying out for several decades now. This trend will become more pronounced because of a major, natural, climate shift with the overlay of predicted, further decline in rainfall over the south east of mainland Australia that is linked to global warming.

In Australia population is a major driver of water demand and use. Net immigration is now the major element in this population growth.

There has been a major expansion of irrigated agriculture during the last 10-20 years together with new forms of land use that require significant water inputs.

In irrigation agriculture, land use changes and new forms of farming (tree plantations, high water-demand horticultural crops etc) have had major impacts upon water use and supply so that many surface water and groundwater systems are now under great stress. These impacts have been amplified by the past decade of extremely dry conditions.

In many parts of the agricultural regions of Australia, aquatic environments and the biodiversity that depends upon these are now in free fall.

Cities along the eastern seaboard are very poorly placed to respond to the predicted decline in freshwater availability that will take place.

From this point onwards, energy use (and therefore carbon emissions) and expansion of water supply is inextricably linked.

The current mindset of the various water agencies and government advisers appears to be that any situation of future water scarcity can be responded to by simply increasing supply. Given the predicted changes in Australia’s climate, this approach is not sustainable.

The alternate approach is that Australia must start on a pathway to first become water-efficient as a nation, and then move to super-efficiency with water use.

Simple technologies exist that will allow us to move in this direction. Governments must decide and give the appropriate signals.

Some major, national programs need to be initiated to better place and equip communities to deal with a very different water future. The financial cost will be significant – possibly $40-50 billion over 30-40 years. These national programs should also provide significant opportunities.

Demands upon the Watermark Australia secretariat last year meant that we have been remiss in not paying closer attention to the timetable and activities of the Garnaut Review. We did not understand that NGOs could participate in any of the public meetings that took place and we are only now preparing a response to the Issues Paper No. 1.
As a general comment I feel that the paper's consideration of water issues and implications, both primary and consequential, is seriously deficient. Australia needs modern, efficient irrigation farming in order to be able to feed its population. This need is going to continue. Large sections of irrigation agriculture are not as efficient as they could and should be and successive state governments have been irresponsible in their handling of water entitlements and allocations, their failure to ensure that irrigation infrastructure has been maintained in good order and their failure explain and promote the important ways in which rural and urban Australians are linked because of water. During the past twenty or more years state governments have been very willing to “vacate the field” leaving situations to worked out by market forces. At the Commonwealth level since the days of the Keating government we have had insufficient interest and attention paid to issues of greenhouse gas emissions, threatened global warming and predicted climate change scenarios. This is despite the fact that the community-wide activities aimed at educating people were being held as early as 1986 by the then Commission for the Future.

While the water crisis that is now facing many parts of Australia has resulted in some level of state governments involvement once again, a lot of the motivation appears to be based upon gaining further water security for the cities, particularly along the east coast. There is a real risk that that the full needs of the irrigation industries and the natural environment will not be met, that regulatory frameworks based upon equity considerations will not be introduced and instead, this sector will become captive to corporate agricultural interests, management consultants and taxation advisers.

**Inclusion or exclusion of Agriculture in an emissions trading scheme (ETS).**

Irrespective of whether agriculture in included, in any ETS, large scale greenhouse gas emitters are going to look for offsets by investing in current and new, on-farm activities. Farm forestry and biofuels will be seen as opportunities. An extremely important question here is going to be, “What will be the implications for water use and availability within the agricultural sector? This question becomes more acute if everything is going to be left to market mechanisms.

I want to argue that there is a real need for a case study to be done of the existing arrangements for hardwood plantations. This form of farming continues to be allowed under Management Investment Schemes and it is becoming increasing clear that in some parts of Australia these plantations are having a huge impact upon base river flow, water in shallow aquifers as well as soil moisture. You may well ask about comparable impacts in a riparian vegetation scheme. In this, water uptake by growing trees will be an issue in the early stages of establishing the riparian strips. However water demand will decline as the trees get older. This is in contrast with the plantation where, because of the short harvesting rotation, water demand by the trees is always maximal.

**Adaptation opportunities available to agriculture and forestry.**

In the chapter “What people and government can do”, we outline some of the key issues that must be debated, decided and acted upon. One that is relevant to the questions that are being asked in Issues Paper No.1 is our proposal for a national
program to re-establish riparian vegetation. Such a program might take 50-100 years to complete and could involve 500,000 km or more of river and stream frontages. It would result in many on-farm and off-farm benefits and one that is relevant here is the establishment of an appreciable and permanent carbon sink across rural Australia. A national initiative on this scale should be able to answer some of the difficulties that are identified in Issues Paper No.1. The geographic basis for the scheme would ensure that many rural enterprises were able to engage on the basis of them simply farming within new boundary lines, changing these boundaries will be relatively low cost and reaching permanency with the sinks would be assured by initial, national co-ordination of activities such are fuel and physical hazard reduction and vermin and weed control.

Victoria could take the lead here by starting with its river and streamside reserves which remain Crown Land. In other states this Crown Land benefit no longer exists and agreements would have to be negotiated between the land holder and the national program proponent.

Another issue here is the re-education of farmers - existing and into the future. You will also find enclosed, copy of a paper that was listed on Australian Policy Online. It is a simple consideration of the former Prime Minister’s so-called National Plan for Water Security. In the paper I looked at the relative costs of going the proposed “high tech” route in contrast to simply getting more farmers up to world’s best practise. My guess is that the same opportunity exists in relation to energy etc.

Because we were unable to participate in the meetings that you group conducted last year, I want to suggest that a face to face meeting would be very worthwhile. It would give you and your staff an opportunity to learn where we are coming from so that the report from your review is able to provide to governments in Australia with useful and accurate information about the economic options and their resource implications of this complex problem.

Yours sincerely,

WAYNE CHAMLEY
Watermark Australia Research Co-ordinator