

30 September 2009

Dr Ian Holland  
Secretary  
Environment, Communications and Arts Committee

Dear Dr Holland,

I would like to make the following comments on the management of freshwater resources of rivers and wetlands in Australia. These comments are in response to calls for review of such matters.

1. There is clearly a need for rationalization of water management across all the states, in view of the current crisis of over-allocation of water by different states acting independently and in their own interests. The ecological integrity of rivers and wetlands can only be achieved by whole-of-catchment management, and for rivers which span several states there is an obvious need for a broader set of policies and principles of river management with which the states should conform.
2. The policies and principles would need to be tailored to the ecological requirements for sustainability in specific catchments. One example of such an embryonic policy structure is the Lake Eyre Basin Agreement to which the Commonwealth and all states within the Lake Eyre Basin catchment are signatories. However this agreement does not yet possess the necessary power, nor the detailed policy, to ensure compliance from state water resource plans.
3. I would hesitate to suggest all control should be vested in the Commonwealth, rather than many details of resource planning and operations are probably best left to state processes. However it would be appropriate for the Commonwealth to administer and require state compliance with specific sets of policies of river management directed towards the ecological health and sustainability of Australian rivers. I believe that these policies and principles should recognize at least four different types of rivers in Australia:

*(I) Irrigated rivers.* Many of these, e.g., the Murray-Darling system, are already severely degraded by over-allocation and require urgent action, along the lines of the licence buy-back scheme, to return water to environmental flows. Dramatically reduced allocations must be accepted for these rivers.

*(II) Rivers of the arid pastoral rangelands.* The Lake Eyre Basin encompasses a prime group of such rivers. The extreme aridity of this environment, and its complex dynamics of boom-and-bust ecology suggest that large-scale water extractions, e.g. for commercial irrigation, should be prohibited in these rivers. Normal small-scale water uses, for stock and

domestic purposes or for the relatively few small towns in the region, would appear to be sustainable and have minimal ecological impact. Mining development in such catchments needs stricter control as a recent heavy metal pollution event in the upper Georgina river catchment demonstrates.

(III) *Rivers of the tropical north Australian rangelands.* In general these rivers have not been subject to other than pastoral development, and have not yet received thorough scientific study. It would be prudent to apply the precautionary principle when considering water resource development in such rivers.

(IV) *Rivers and wetlands of national conservation significance.* An example would be the rivers and wetlands of Kakadu National Park, an area rich in natural heritage and Aboriginal cultural significance. Traditional Aboriginal culture and sensitively managed eco-tourism should be the only permitted land and water uses in such regions. Mining should cease in such sensitive areas.

4. The COAG National Water Initiative requirements to impose water trading are an example of a policy that is too broad to be applied to all Australian rivers. The trading requirement is counterproductive if applied to rivers such as the Lake Eyre Basin rivers where irrigation is inappropriate. In Cooper's Creek, for example, application of water trading would force the activation of unused "sleeper" entitlements and thus have an ecologically undesirable effect.

5. In the contexts of global energy consumption and global climate change, many current practices, such as costly and circuitous long-distance food transport and distribution systems, are illogical, wasteful, and unsustainable. The modest water requirements for locally grown food, e.g. for market gardens near local towns, would seem to be a valid water use in this emerging context. For the sparsely populated regions of inland Australia, the water requirement for a return to partial self-sufficiency in food production would be very modest indeed, and justifiable within most water resource plans.

Dr R.B. Morrish  
Chairman, Cooper's Creek Protection Group

I attach a brief summary of efforts to protect Cooper's Creek from ecologically inappropriate development, as an example of difficulties associated with state legislative requirements, with the NWI water trading impetus, and with the vagaries of the political climate.

## Protecting Cooper's Creek

The pastoral development of arid central Australia has implicitly recognised the need to protect the natural values of the scarce water resources which are the region's lifeblood. Consequently, a proposal in 1995 to introduce a large irrigation project within this environment met with alarm and fierce opposition. The irrigation proposal envisaged a 3000 ha cotton growing development on the property *Currareva*, located near Windorah on Cooper's Creek in the South West Queensland Channel Country. The proponents had recently purchased *Currareva* and applied for water harvesting licences to take 42000 ML annually from Cooper's Creek.

The *Currareva* development application triggered Queensland's first water resource planning process, conducted by the Department of Natural Resources. The development was vigorously opposed by the local community of Cooper's Creek, and by scientists, conservationists, and many members of the Australian public. Although the proposal generated considerable political debate, the National Party Minister for Natural Resources at the time declared support for cotton irrigation development on the Cooper. Repeated requests for independent scientific assessment of ecological impacts were denied by the Department and the Minister.

In September 1996, the local community, the Australian Conservation Foundation, and members of the Australian ecological science community jointly convened a scientific workshop in Windorah. The workshop provided an ecological perspective on Cooper's Creek and issued a clear recommendation to the Queensland Government against any irrigation development or other large-scale water extraction from the Cooper and other rivers of the Lake Eyre Basin in Queensland. Shortly afterwards, the Windorah Workshop recommendations were unanimously endorsed by a very large gathering of international scientists and water managers at the Fifth International Ecological Congress in Perth, Western Australia.

The Queensland Government responded to this overwhelming weight of scientific opinion by withdrawing support for the *Currareva* development application. However it ignored the general scientific recommendations against irrigation development and in April 1998 introduced a Draft Water Management Plan proposing an extra 22500 ML of water harvesting irrigation entitlement for the system, specifically in the upstream tributary catchments of the Thomson and Barcoo rivers. In August 1998 a State election resulted in a change of government. The incoming Labor Minister for Natural Resources rejected the previous Government's draft plan, and issued a new plan prohibiting irrigation development. This plan formally took effect in 2000.

This outcome was hailed as a victory for the principles of wise use and conservation in arid river management, and for the efforts of the many people who had opposed ecologically unsound development in the Cooper.

However, some disturbing issues still remain. The water resource planning process is clearly subject to the vagaries of political change, and even though such a change ensured

a good outcome in 1999, subsequent ten-year reviews of the Water Resource Plan remain vulnerable to renewed calls for irrigation development. The review process currently under way is facing such calls for "small scale" irrigation development. As experience elsewhere in Australia has shown, the establishment of an irrigation industry, even with small beginnings, can escalate rapidly to unsustainable levels of water demand and ecological degradation of river systems. A second issue involves the presence of large "sleeper" licence entitlements for the *Currareva* and *Hammond Downs* properties near Windorah, totalling 10000 ML of allocation. The introduction of water trading provisions as required by the National Water Initiative would guarantee the activation of these currently unused water licences.

Secure protection of the Cooper's natural values will require a permanent prohibition against irrigation or other excessive water use and a return of the large sleeper entitlements to natural environmental flows.

Bob Morrish