

Submission

To: Murray Darling Basin Ministerial Council

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Integrated Catchment Management in the Murray-Darling Basin 2001-2010

The Murray Darling Basin Ministerial Council published *"a draft statement of commitment by community and governments on the future management of the natural resources of the Murray-Darling Basin"* in September 2000. A three-month period for public comment was provided.

The document presents a veneer of courageous and committed rhetoric. However, underneath this veneer lies a cringing, superficial and conceptually flawed approach.

Rhetoric

The document is subtitled: "Delivering a sustainable future". Clearly, we expect a heavy emphasis on sustainable principles and management.

On the title page we find the statement: "We the community and governments of the Murray-Darling Basin commit ourselves to do all that needs to be done to manage and use the resources of the Basin in a way that is ecologically sustainable".

On page four, we find a commitment: "We will be prepared to make hard decisions".

So far so good...

Cringe

Page four contains the heading: "Our principles". Given the rhetoric, one might expect to find strong commitment to a comprehensive set of sustainability principles.

The section starts with the statement: "We agree, in a spirit of partnership, to *abide by* the following principles". (My emphasis). Not "embrace" but "abide by". Why would these words have been chosen? The answer is perhaps revealed by examining the principles themselves.

The most universally accepted statement on the principles of sustainable development is the Rio Declaration on the Environment and Development (1992). Here 27 principles are listed. While many of these apply to a nation-State context, and would be out of place in the Basin document, we would expect to see the core principles applicable to the management of natural resources listed here.

Principle Four of the Rio Declaration is the first principle listed, under the heading "Integration". Principle 22, on indigenous participation, is found under the heading "Informed decision making". However, where is Principle Three, on the needs of future generations? Where is Principle Seven, on ecological integrity? Where is Principle Eight, linking ecological sustainability with demographic policies? Perhaps most importantly, where is Principle 15, the Precautionary Principle - already embraced by all Australian States and the Commonwealth, and listed in dozens of key strategic documents? (Stein 1999).

Where is Principle 16 (polluter pays)? And where is Principle 17, on environmental impact assessment? The assessment of the cumulative effects of development is a key issue in the Basin.

And where is a commitment to the national environmental flow principles? (ANZECC 1996?)

The answer, I suggest, lies in an attitude of cringe permeating the substance of the Basin document.

The document's list of principles can also be compared unfavourably with a recent list of principles developed by the Victorian Environment Protection Authority for inclusion in legislation (see Nevill 2000a). For example, the Basin document contains no commitment to the waste hierarchy principle, even though saline wastes are one of the biggest problems the Basin faces.

Under the heading: "Making choices" we find the statement: "Many of the changes will involve trading wealth between communities and individuals". Importantly, there's no mention of trading wealth between the existing community and future generations - which, I suggest, is the core issue. The economic basis of regional communities in the Basin is founded on the unsustainable use of the Basin's natural resources. Unsustainable utilisation must be wound back, at the expense of the financial viability of existing enterprises - or let future generations pay the price. Why isn't this clearly stated? Cringe, I suggest.

Again, on page four, we find a statement which reads: "Even if we stopped using the Basin's natural resources immediately, water quality would continue to decline, and land would continue to degrade." A few fundamental words have been omitted: "in the short term". The statement, presented without this rider, is misleading, and creates an impression that "forces beyond our control are at work". Why would these words appear in the Basin document? Are we trying to make excuses for a half-baked and superficial approach? Again, I suggest this is indicative of the cringe underlying the Basin document.

Superficial

Fundamental issues affecting the long-term sustainability of the Basin's economy are either treated by the most superficial reference, or ignored completely.

The degraded (and still degrading) circumstances of the Basin's waterways can in part be attributed to nine important assumptions underlying traditional water management frameworks. Three of these assumptions relate to the cumulative impacts of incremental water infrastructure development:

- although very large dams were subject to environmental assessment, it was assumed that *small and medium-sized dams* needed only cursory assessment on a case by case basis - no assessment of the catchment's capacity to support increasing numbers of small dams was thought to be necessary. In other words, it was assumed that "the little ones don't matter";
- similar assumptions were made concerning *small users* of surface and groundwaters, and the *construction of levee banks*. These escaped catchment-based strategic assessments on the basis that "little ones don't matter";
- it was assumed that the harvesting of surface flows *away from watercourses* did not need to be controlled - that these flows comprised a minor proportion of total surface flows and that their harvesting (through channelling surface flows into farm dams) did not matter to overall catchment flows;
- it was assumed that landholders should, by and large, *be allowed to place dams across small watercourses*, on the basis of generally cursory case-by-case assessments and licensing arrangements - ie: that it was unreasonable for State water agencies to ask landholders to pay the additional costs involved in off-stream dams;
- it was assumed that the plants and animals living in the streams would look after themselves, and that no particular attention was needed regarding the provision of a *guaranteed environmental flow* to keep them alive;

- it was assumed that, while the need to protect biodiversity necessitated the development of systems of *representative reserves* conserving key examples of terrestrial and marine ecosystems, it was *unnecessary and impractical* to apply the concept of representative reserves to freshwater ecosystems;
- it was assumed that the provision of fish passage facilities was either impractical, uneconomic, or unnecessary;
- it was assumed that *groundwaters and surface waters were somehow separate*, and could be managed independently; and finally:
- it was assumed that there was no need for rigorous program implementation, compliance auditing and enforcement; that illegal dams, bores, off-takes and levee banks would be minor and insignificant features in overall water management programs.

While the Council of Australian Governments (COAG) water reform agenda signalled the death of some of these assumptions (concerning environmental flows, for example) others live on, to a large extent unscathed by the agenda (NCC 1999). While many of these assumptions were once correct, this is no longer the case, and it is dangerous to make *any* of these assumptions in the development of Basin water management frameworks. I believe that, as far as the freshwater ecosystems of Australia are concerned, it is a key challenge of the next decade to reverse *all* of these assumptions.

The Basin document fails to tackle any of the assumptions listed above in any convincing way, with most issues ignored completely. The best coverage is given to environmental flows, but even here, commitments are general and superficial. No-where in the document is there a clear commitment to implement the ANZECC environmental flow principles.

Conceptually flawed

Tragedy and tyranny

Two fundamental mechanisms lie at the heart of much of the degradation of the Basin's resources: the tragedy of the commons (Hardin 1968), and the tyranny of small decisions (Odum 1982).

These mechanisms are ignored in the Basin document.

A consideration of these mechanisms may have led to the development of general proposals to manage their impacts, including the development of cumulative effect management programs, and compliance audit and enforcement programs.

Focus on integration of groundwater and surface water management may also have been another outcome of a focus including these mechanisms.

Current strategic concepts

The Basin document does not use current strategic concepts in common use for natural resource management. For example, the *value / indicator / objective* framework used on the National Water Quality Management Strategy is not utilised (ANZECC 2000), and confusing terminology is introduced on page 7 where the word "outcome" is used in place of "value".

The *pressure / response* framework used in National and State *state of the environment reporting* is also not used in the Basin document. (State of the Environment Advisory Council 1996).

The use of such concepts could have allowed the development of strategic programs within existing and understood logical frameworks.

Planning for sustainability

It has been argued that assessing the sustainability of policies and programs (relating to natural resource management) must involve a two-pronged approach - where both aspects undergo rigorous scrutiny during program design, monitoring and evaluation phases.

Firstly, sets of values, indicators and indicator targets must be established, predicted, measured and evaluated. Where evaluation indicates that targets are not being met, the design and implementation of policies and programs must be reviewed and improvements must be made. These concepts are incorporated into the Basin document, and form a substantial part of its general thrust.

Secondly, of equal importance is the examination of the processes which are designed and implemented through policies and programs. These processes must embody sustainability principles. These principles have been established and are undergoing conceptual evolution. Management processes must be evaluated against these principles, and where gaps are demonstrated, changes must be made (Nevill 2000b).

This second aspect to the planning of sustainable management programs remains entirely unexplored within the Basin document.

Exploration of these issues could have led, for example, to a strategic discussion of sustainability benchmarks, and a commitment to establish comprehensive, adequate and representative systems of freshwater ecosystem reserves (Nevill 2000c).

Summary

In the Basin document's favour, it does attempt to establish a framework to facilitate consistency of management throughout a large river basin spanning five major jurisdictions. This is ambitious and important.

However, in spite of its rhetoric, the document is superficial and conceptually flawed. Of perhaps even greater concern is evidence of an cringing underlying attitude, hardly indicative of the strength of purpose which will be necessary to reverse existing and continuing environmental degradation within the Basin.

Overall, the document fails to establish a strategic direction capable of managing the very pressing issues the Basin faces over the next few decades.

References

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