



Sustaining Our Future

EDUCATION – RESEARCH – COMMUNICATION – COOPERATION

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Director

The Secretary
The House of Representatives Standing Committee on Environment and Heritage
Parliament House Canberra

23 June 1999

Inquiry into catchment management

Dear Sir/Madam

I would like to make some brief comments against your terms of reference and I will attach some other work which specifically relates to solutions to some of these issues and modification of catchment management (ICM / TCM) as currently practised. I would be happy to discuss these issues further with the Committee.

Comments against Terms of Reference.

- *the development of catchment management in Australia.*

While the concept should be applied for integration and co-ordination, very little has actually happened successfully in the development of catchment management. Be aware that, unfortunately many projects sited as successful ICM projects are actually small-scale, site specific and applied to one part of a catchment or sub-catchment with little benefit beyond the boundaries of the application. I would suggest also, that it may not be the only or best way of attempting integrated resource management and resource conservation in a very dry continental nation that has extremely poor soils - it appears this is a hard lesson for most Australians to learn. For similar reasons, underground water and subterranean water flows are probably as, if not more important, and do not follow catchment "boundaries" or topography / geology.

- *the value of a catchment approach to the management of the environment;*

To date, I don't believe a great deal of value has been made or achieved from ICM. There are various reasons for this (see attached). Fundamentally however, a few well buffered natural parts of rivers might be maintaining ecological integrity and function, but most, especially in city, peri-urban, rural and production landscapes (where most ICM committees operate) are continuing to degrade at alarming rates (including Murray -Darling Basin) with production losses increasing, rural debt increasing, catchment degradation increasing, larger landscape scale degradation and loss of ecological function supporting production and ecological service delivery (eg, clean water), and increasing social debt and disruption. While the concept is good - that of integrated resource management at catchment / landscape scales - its application and (potential?) value certainly has not been realised. There are a number of social / institutional reasons / issues for this; and, some potential solutions as outlined in the attached.



2.

- *best practice methods of preventing, halting and reversing environmental degradation in catchments, and achieving environmental sustainability;*

See comments above (at beginning) - I have looked at these around Australia in the past 6 years and I don't know of any actually implemented or integrated/co-ordinated at a catchment scale (or even sub-catchment scale) that have achieved this. As suggested above, most seem to be "band-aids" applied to a localised or site specific problem with varying success, but without dealing with causal factors occurring at broader scales. While all this sounds negative I do believe a modified approach to catchment-(bio)regional scale management could achieve a lot and has great potential and I would encourage the Standing Committee to recommend considerable reforms.

- the role of different levels of government, the private sector and the community in the management of catchment areas;

There are a variety of institutional and social impediments. See above comments and attached.

- planning, resourcing, implementation, coordination and cooperation in catchment management;
- mechanisms for monitoring, evaluating and reporting on catchment management programs, including the use of these reports for state of the environment reporting, and opportunities for review and improvement.

A National to Ecoregional (continental scale regions) to Bioregional (nested within Ecoregions) and possibly to landscape level (local) nested, hierarchical approach would provide a means to integrate and report on a whole range of catchment and interrelated programs and strategies and their on-ground manifestation. Note that sub-catchments or possibly groups of sub-catchments in similar biophysical or homogeneous landscapes might become the management context (see Fig 9.1 on attached). This would provide considerable integration, co-ordination and efficiencies for environment reporting (national, State & Local gov.) as well as pulling together into a single framework the plethora of confusing strategies etc around, and provide a sensible ecological framework for implementation. (This is all discussed in detail in forthcoming book; see attached).

Yours sincerely,

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