

Submission

Inquiry into water policy initiatives

Senate Rural and Regional Affairs and Transport Committee

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Summary

This submission highlights the urgent need for protective measures to address the declining health of Australia's rivers and streams. It argues for strong Commonwealth leadership to coordinate the development of a national conservation plan. A systematic conservation planning approach is suggested as one that will effectively consider both water users and conservation needs.

A national conservation plan to protect Australian rivers and streams

River degradation is extensive and widespread. In a national survey of river health, 40% of sites were found to be impaired to some degree, 9% severely or extremely degraded¹. There may be significant lag effects however, so the full influence of human activities on river systems may not be evident for many decades²⁻⁴. Dryland salinity, for example, a result of the replacement of deep-rooted native vegetation with shallow-rooted pastures and crops, is expected to be the major contributor to increased salinisation of rivers over the next 100 years¹. The Assessment of River Condition⁵ found that over 85% of the 210,000km of river length assessed within the intensive landuse zone, occupying about 40% of the landmass, was significantly modified from the original condition by the aggregate effects of resource use; some 19% of this was classed as substantially modified. Large rivers in particular, suffer the cumulative effects of human activities upstream with only 2% of large rivers (catchment area > 5000km²) unaffected by some form of human disturbance post-European settlement⁶.

The threats to river systems are ongoing and in many cases expanding. Water use has dramatically increased over the last two decades putting many rivers under severe stress⁷.⁸ In the early 1990's, the major wetland system on the lower Murrumbidgee River, the Lowbidgee floodplain, was a candidate for listing as a wetland of international importance under the Ramsar Convention but by the end of the decade it was in serious decline due to substantially increased water resource development upstream⁹. More than a quarter of surface water management areas are close to, or have exceeded, sustainable extraction limits⁷. Groundwater usage is also increasing, particularly where more restrictive controls on surface water use are imposed¹ with potentially serious impacts on

many river systems dependent on groundwater inputs to sustain base flows¹⁰. Pressure is now growing to develop the relatively unimpacted tropical rivers in the north^{11, 12}. Australia's globally significant river ecosystems are seriously threatened and urgently in need of conservation. Their health is cause for concern and anger among Indigenous people, due they believe, to the lack of a holistic and respectful approach to the land and its resources¹³. Indigenous groups now seek a more substantive involvement in planning and management and recognition of their water rights¹⁴. For several decades, probably longer, concerned scientists and community groups have been calling for conservation action^{10, 11, 15-24}. A recent summary of scientific concerns can be found in Kingsford and Nevill²⁵. Yet despite mounting evidence of the pervasive effects of human activities, river conservation still lags well behind that for terrestrial and more recently, marine environments^{10, 12, 20, 26}.

Many river types are poorly represented by the National Reserve System and opportunities to address these gaps are limited²⁷. There are many other conservation initiatives across all levels of government that may help to conserve Australian river ecosystems but they are often poorly implemented²⁸. Moreover, there is no over arching plan to co-ordinate these programs or ensure they are targeted towards the most urgent needs while minimizing the impacts on water users. Thus, even where effectively implemented, these initiatives may not be achieving the greatest benefits from the use of scarce conservation resources.

There is a strong role for Commonwealth agencies to ensure a nationally consistent and comprehensive approach. Commonwealth agencies can play a leading role in coordinating the development of a national plan for the protection of Australia's rivers and streams. A national plan would enable a range of conservation measures (reservation, land-use planning and management of threats) to be strategically employed and integrated within the landscape^{12, 15, 19} and include effective strategies for the management of the cumulative effects of incremental development²⁹. Conservation measures coordinated across jurisdictional boundaries will have more than just a local effect. Parochial decision-making can undermine environmentally sustainable management, especially for cross-border rivers^{30 8, 12}. A national planning framework makes it harder for local interests to ignore broader policy objectives, guides the priority setting of national funding programs and avoids the artificial constraints imposed by administrative boundaries. The relative conservation value of any river (e.g. locally, regionally or nationally important) is only apparent from a continental assessment. Cross jurisdictional information on the range of spatial variation within and among rivers is essential to inform effective planning¹².

Protection of rivers need not come at the expense of rural water users. A systematic conservation planning approach^{31, 32} can account for both the conservation needs of Australia's rivers and streams and the requirements of water users. A systematic planning approach allows tradeoffs between competing water uses and conservation objectives to be explicitly factored into the planning framework. It is only if we adopt a systematic approach to develop a national conservation plan that we can be confident we are achieving the best outcomes for all.

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