

MUST AQUATIC PROTECTED AREAS BE 'ALL AT SEA'? MAKING THE MOST OF WHAT WE ALREADY HAVE FOR 'TERRESTRIAL' AQUATIC PROTECTED AREAS

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Abstract

Success stories of marine protected areas (MPAs) are rarely matched for 'terrestrial' aquatic systems, despite widespread appreciation of their values, the pressures they face, and the sense of urgency with which we need to address their conservation. Drawing on recent Australian experience with the Ramsar Convention, this paper examines some of the possibilities and challenges of using the Convention to accelerate and strengthen a comprehensive, adequate, and representative system of aquatic protected areas. The paper expresses concern that development of such a system in Australia appears to be marked by competitiveness rather than by cooperation.

Keywords: Ramsar, wetlands, collaboration, partnership, Federalism

INTRODUCTION

The depth and breadth of attendance at this Congress demonstrate a widespread appreciation of the importance of developing systems of protected areas for aquatic ecosystems, and also of the challenges in achieving this outcome. Many other papers at this Congress will detail issues with marine protected areas (MPAs). The Congress Abstracts show that we are still debating longstanding issues such as the basis for selection, the management of use, and the scientific basis of both sets of decisions.

Whilst many of the same debates continue in relation to protected areas on the Australian continent, it is clear that after decades of conservation efforts we have come a long way in developing widespread acceptance of the need for protected areas as a primary conservation tool (Figgis 1999). This has tended to operate at several different levels over time. In just a few decades we have witnessed a shift from setting aside areas valued primarily for their scenic and recreational value (amenity), through preserving places for appealing plants and animals (species), to conserving particular communities such as rainforests (ecosystems). But through all of these the predominant tool used was a 'locking up' of the land or, rather, a 'locking out' of uses that were seen to be incompatible.

In more recent times we have seen much greater recognition of the importance of all species and all ecosystems. As the concept of biodiversity has entered the language, we have been seeing protected areas pursued in the interests of the

somewhat less attractive species and ecosystems, even targeting 'the other 99%' of biodiversity in the invertebrate world.

For terrestrial ecosystems this approach has brought conservation down from steep and rugged terrain and out of impenetrable vegetation communities – those islands of nature that could not be used for anything else – to compete directly with commercial uses in grasslands, on rich river flats and even in the midst of urban areas. This has led to a gradually increasing (but at times begrudging) acceptance that conservation of biodiversity will not be achieved solely by permanent setting aside of isolated national parks and nature reserves, and will not always be well served by removal of humans from what are essentially cultural landscapes. Under economic rationalism we will never be able to meet the cost, and will never have the capacity within management agencies, to achieve the objectives through this single modality. Rather, we need to pursue sustainable management objectives on a wide range of public and private-tenure lands, and through a wide range of people engaged in different uses of those lands, some for their sustenance and livelihood.

In a corollary to this we are also seeing a shift beyond the amenity, species and ecosystem levels to pursuit of conservation objectives at bioregional and landscape scales, recognising at last the seamlessness of the natural world and the complexity of human ecology. It may seem somewhat surprising then that development of protected areas for aquatic systems, one of the most obviously seamless components, has lagged

behind. At the same time as approaches to MPAs have caught up with those for their terrestrial counterparts, or possibly because of that development, we are becoming aware that terrestrial approaches are not adequately addressing conservation of aquatic ecosystems.

Unfortunately, much of the debate over sustainable management of these systems has become clouded by arcane approaches to what is not intrinsically different from conservation of other elements of terrestrial landscapes, and therefore not particularly difficult. In this cloud we are at risk of losing our way. Our ability to use tools already at our disposal is obscured by obsession with the new.

This raises two key questions:

- What would be the characteristics of an effective system of aquatic protected areas (APAs)?
- What do we already have that could be applied now to address conservation needs?

I suggest that characteristics of an effective system of terrestrial APAs, incorporating fresh and saline inland waters, in the vast Australian jurisdiction might involve

- *comprehensiveness* – taking a ‘whole landscape’ approach to types, encompassing aquatic systems from the obvious (e.g. open waters in lakes and watercourses) to the occult (e.g. groundwater aquifers and karsts), from permanent to ephemeral, from alpine to coastal and shallow marine, from tropical north to sub-Antarctic south and from Norfolk Island in the east to the Cocos (Keeling) Islands in the west;
- *representativeness* – stratifying and characterising in a systematic way to encompass what we know of biogeography and landscape dynamics;
- *adequacy* – using a reasoned basis for assessing values, how large or how connected the areas need to be, and how best to manage them to conserve those values, including ‘whole catchment’ approaches capable of taking into account cryptic groundwater hydrology; and
- *constituency* – ensuring broad stakeholder support for sustainable management of a range of values, and active engagement in assessment, planning, management and monitoring of effectiveness.

At the highest level, such characteristics are self-evident and are quite within reach. Why then are we so far from achieving this kind of result? I contend that one major factor that has tended to confound wide acceptance of these principles is a

historic tendency for each level of government to seek to retain control of water at the expense of neighbours and the national good. Until some very recently achieved water reforms, this kind of picture made landscape approaches difficult, and national consistency and cooperation close to impossible.

During that quite extended period, a perception has arisen of rifts and tensions between and within two starkly painted groups – ‘the plumbers’ who deal with reticulation and commercial value of water and ‘the biologists’ who deal with environmental flows and natural values. All of this provides fertile ground for a diverse range of stakeholders to be acting at cross-purposes, working in competition, rather than in cooperation, with each other – despite the short time that remains to secure the sustainable management of what remains of aquatic systems.

Regardless of how sceptical we might be of the validity of such perceptions, the parties do not seem to be able to agree on the frameworks and tools that we need to use for an effective system of APAs. Each contesting party will seek to push their own new technique, solution or brilliant idea, believing that the other parties have got it all wrong and need to be defeated. In the meantime, aquatic ecosystems are continually being placed at risk. It’s all a bit like saying, ‘It’s your end of the boat that is sinking’.

I contend that we actually have frameworks and tools already at hand that could allow us to be getting on with the cooperative task of conservation of aquatic ecosystems, instead of butting heads. What is more, we have had access to these tools for some decades.

Australia was one of the first Contracting Parties to the Convention on Wetlands of International Importance signed at Ramsar, Iran, in 1971. The stated mission of this Convention is the ‘conservation and wise use of wetlands by national action and international cooperation as a means to achieving sustainable development throughout the world’ (Ramsar CoP6 1996).

This paper will recap what devices the Ramsar Convention offers, and draw on Australia’s national report to the Conference of Parties (Commonwealth of Australia 2002) to assess how well we have deployed these, and what forces are working against them. It will then examine some directions in which we could profitably be heading.

Detractors of the Ramsar Convention sometimes portray it as too narrow to deal with aquatic ecosystems more generally, misrepresenting the scope of wetlands as being limited to ‘ponds with reeds’ or ‘mangrove swamps’. Rather, the

definition of wetland is quite broad enough to encompass the full range of terrestrial aquatic ecosystems: 'areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres' (Ramsar Convention Bureau 2000). The latter enables inclusion of intertidal mudflats, or even lagoons and shallows associated with coral reefs.

Converse arguments that this is just too broad to comprehend or to communicate are missing the point that however diverse the types of aquatic ecosystems may be, consistent values are attached and there are fundamental principles to be followed to conserve those values. The Ramsar Convention acknowledges the ecological functions of wetlands as regulators and as habitats, linking these to their economic, cultural, scientific, and recreational values. In recognition of the dramatic rate of loss of, and encroachment on, these kinds of systems, it fosters active management to ensure their 'wise use', a concept enshrining sustainable use and inter-generational equity (Ramsar Convention Bureau 2000).

The Convention thus provides a valuable global context for sustainable management of aquatic ecosystems, bolstered by a joint work plan with the Convention on Biological Diversity and memoranda of cooperation with the Conventions on Migratory Species, World Heritage and Desertification. This connectivity and synergy are about to be extended further with functional links to other conventions and with the forthcoming World Summit on Sustainable Development.

Although its membership comprises governments, the Convention models the importance of intersectoral collaboration by recognising international NGO partners, including IUCN, Bird Life International, the World Wide Fund for Nature, and Wetlands International. In turn, it encourages Contracting Parties to collaborate with the non-government and industry sectors.

Contracting parties to the convention are obliged to:

- promote as far as possible the wise use of wetlands through their territory,
- designate sites to the list of wetlands of international importance ('the Ramsar list'),
- establish conservation reserves to protect wetland values,
- promote training in research and management of wetlands, and

- consult with other parties in wetland management.

This is no small undertaking and yet there has been no shortage of takers – as of 9 August 2002, 133 nations were Contracting Parties, and the Ramsar list contained 1180 sites totalling 103.2 million hectares (<http://www.ramsar.org>). For its part, Australia has 57 sites listed, totalling some 5.3 million ha. After more than thirty years, new nations keep signing up and new sites keep being added to the list – the Convention really must have something tangible to offer.

So let us return to what devices it may offer to assist a system of terrestrial APAs in Australia. In terms of the characteristics identified previously, the Convention (Ramsar Convention Bureau 2000) actively promotes principles of comprehensiveness, adequacy and representativeness, and offers a range of frameworks and tools to

- improve institutional and organisational arrangements,
- address legislation and government policies,
- increase knowledge and awareness of wetlands and the full range of their values,
- review the status of, and identify priorities for, all wetlands in a national context, and
- address problems at particular wetland sites.

Examples of specific guidance under these include tools to:

- develop and implement national wetland policies,
- integrate wetland conservation into river basin and catchment management,
- prepare management plans,
- conduct impact assessment and monitoring programs,
- engage local communities and indigenous people in wetland management, and
- involve the private sector in conservation and wise use of wetlands.

The devices offered are subjected to continuous review and improvement through international panels and working parties, ensuring a high and increasing level of scientific and technical rigour.

But how does 'wise use of all wetlands' equate with declaring and managing APAs?

In this consideration the definition of a protected area is taken to be 'an area of land and/or sea especially dedicated to the protection and maintenance of natural and associated cultural

resources, and managed through legal or other effective means' (IUCN 1994). This form of words suffers from the incessant challenge of communicating that water is part of 'land', made more complicated by some 'terrestrial' protected areas that contain marine components and some 'marine' protected areas that contain terrestrial components (Cresswell and Thomas 1997). This semantic issue for 'protected areas' is actually quite well addressed by the Ramsar definition of wetlands.

Our belated recognition that conservation occurs across a spectrum is reflected in the range of categories of protected area used by IUCN. These range from Category 1a, which represents a 'single use' strict conservation reserve, to the more recently defined Category VI, which represents multiple use carried out in such a way as to ensure sustainable management of values (Cresswell and Thomas 1997).

This spectrum is entirely compatible with the Ramsar Convention's wise-use approach and with the kind of zonation it encourages in management planning. Similarly, both IUCN and Ramsar emphasise the active engagement of local and indigenous communities in shaping and implementing management plans.

I simply do not accept that 'wise use of all wetlands' is incompatible with the kind of priority setting inherent in assessment, selection and management of APAs. In both frames comprehensive assessment of aquatic ecosystems across a bioregion, administrative region or catchment would indicate (and perhaps weight) a range of values and threats, and a corresponding set of priorities for conservation effort and investment, suggesting a range of conservation mechanisms available under both federal and State/Territory legislation and policy regimes.

To recap, thus far an appraisal of what the Ramsar Convention has to offer suggests the following:

- the scope of the Convention is not inappropriate in terms of the definitions of wetlands and protected areas, nor in terms of the categories of protected areas;
- the Convention's emphasis on 'wise use of all wetlands' is entirely consistent with informed and balanced approaches to conservation in multiple-use environments;
- the Convention encourages and provides devices to support all the important characteristics of a system of APAs;
- the approach of the Convention is compatible with a wide range of international, national

and regional strategies, policies, agreements and arrangements;

- the approaches and devices offered by the Convention are subject to continuous review and improvement underpinned by scientific and technical rigour;
- as a nation Australia is already contracted under the Ramsar Convention to meet certain obligations, including the wise use of all wetlands; and
- Federalism implies that these obligations are shared between federal and State/Territory governments – the Convention already applies at all levels.

With such a high degree of applicability to the Australian situation, and after 30 years as a Contracting Party, one might expect Australia to be achieving highly on all the expectations of the Convention. However, perusal of our national report to the Ramsar Conference of Parties suggests that, despite some laudable achievements, we collectively have a long way to go.

In the area of legislation, policies and institutions, the news was not all bad, citing

- introduction of statutory protection for Ramsar wetlands and habitat of listed migratory waterbirds under the EPBC Act along with new standards for managing Ramsar wetlands ('Australian Ramsar management principles'),
- development of wetland policies in half the States and Territories, and with draft policies for the remainder,
- progress in water reform in all States and Territories, designed to provide water for the environment including wetland ecosystems,
- substantial investment of federal funding for a variety of wetland rehabilitation and conservation projects, largely being implemented by community groups,
- development of new directions for wetland site management involving community, indigenous and private-sector groups in site monitoring, and
- emergence of new partnerships between corporate/private-sector and non-government conservation organisations to deliver wetland conservation and rehabilitation projects.

Under 'conservation of Ramsar sites' and 'designation of new Ramsar sites' it was not so good, indicating

- a significant lag in preparation or updating of management plans, with no plans in place for

one-third of the 57 listed sites, and only 8 of these 19 in progress,

- a degree of inadequacy and inconsistency in description of ecological character in Ramsar Information Sheets and in management plans, with flow-on implications for managers' ability to monitor and report on-site condition,
- four new Ramsar sites designated and five existing Ramsar sites extended since the previous Conference of Parties in 1999, and
- some systematic assessment of candidate Ramsar sites carried out in Western Australia, but conspicuously in no other State or Territory.

At the national level perhaps the most innovative step taken was recognition of wetlands designated to the Ramsar list as matters of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). This has the effect of requiring the approval of the Commonwealth [Australian federal] Environment Minister for an action that has, may have, or is likely to have, a significant impact on such a wetland. That action does not have to take place in the wetland itself to fall within the ambit of the EPBC Act, allowing consideration of actions in the catchment of a wetland. There is an argument that the EPBC Act has been able to afford a significantly higher level of protection to some wetlands because these had been listed under the Ramsar Convention.

However, this regime was not extended to give legislative effect to our further obligation as a Contracting Party to promote as far as possible the wise use of all wetlands in our territory. The federal government is active in encouraging State and Territory governments, who carry the major responsibility for environment management, to pursue wise-use principles, but it is constrained by the current flavour of Federalism and is pushing at the limits of its Constitutional ability.

Some opportunities are offered in the shift to regional delivery of much of the federal funding for the Natural Heritage Trust and National Action Plan for Salinity and Water Quality. In principle this shift empowers regional communities to invest in management of their natural resources, including aquatic systems. With wetlands explicitly included in national goals and targets for biodiversity conservation (Commonwealth of Australia 2001) and in other documents that guide priorities for such investment, funding agreements may provide leverage with regional bodies to give effect to wise-use principles to a degree not previously

achieved in funding agreements with States and Territories.

Perhaps the greatest opportunity offered by the shift to regional investment in natural resource management (NRM) is the impetus given to conservation at landscape level, across tenures, and through new coalitions and partnerships. This offers considerable potential for establishment and sustainable use of a system of APAs. We can only hope that this will not encourage even more competitiveness to hinder application of the frameworks and tools available to us under the Ramsar Convention.

The federal and State and Territory governments did cooperate to develop the national objectives and targets for biodiversity conservation for 2001–2005 (Commonwealth of Australia 2001). In addition to numerous objectives with indirect impact for aquatic systems, this document contained explicit targets directly relevant to obligations under the Ramsar Convention. This latter group included

- by 2001, all jurisdictions identifying wetlands of national and international significance and important areas of habitat for migratory waterbirds;
- by 2003, management plans for 85% of Ramsar-listed wetlands being prepared and implemented consistent with the Australian Ramsar Management Principles, and all jurisdictions having programs in place, both on and off reserve, to protect significant habitats for migratory waterbirds, and
- by 2005, all jurisdictions having effective legislation and management plans in place to protect wetlands of national significance; and the number of Australian sites in the East Asian–Australasian Shorebird Site Network increased from 11 in 2001 to 36.

The national report (Commonwealth of Australia 2002) cited some additional targets by 2005 for designation to the Ramsar list, being a total of 75 sites (including 10 in under-represented types such as coral reefs, seagrass beds, karsts and arid wetlands) across a wide geographic spread, and representing an increase in aggregate area of 30%.

These targets are all worthy aspirations and are readily achievable, except for a persistent theme throughout the national report. In something of a mantra, jurisdictions repeatedly cited lack of resources to carry out wetland inventory, management planning, monitoring, research, education and training.

One interpretation is that Ramsar obligations are seen as something that the federal government has undertaken and then imposed on States and

Territories. In this view, the federal government should be providing all the funds to implement or advance those imposed obligations. On the face of it, this might seem reasonable except that, having argued to retain responsibility for such matters, some jurisdictions did not appear to have afforded them priority in their own budgets, despite aspirational statements in their policy documents and strategies. It is acknowledged that agency budgets are sorely stretched in the modern climate. Even so, this would be misdirection – ‘it is our responsibility, not that of the federal government, to manage such matters, but it is the federal government’s responsibility, not ours, to fund such management’.

Any misrepresentation of the Ramsar Convention as a federal imposition could have deleterious effects in the shift of funding to regional NRM bodies. Unfortunately, the incorporation of designated wetlands as matters of national environmental significance in the EPBC Act may have helped to fuel efforts to engender fear of federal takeover among communities considering such a designation. There is anecdotal evidence of instances (even campaigns) of disinformation portraying the Convention as having only the one modality – designation to the Ramsar list – a convenient development for those who appear to see Ramsar listing as competition for their own schemes for protection.

A number of groups have emerged with a vested interest in making ‘Ramsar’ a dirty word among rural and regional communities – even dressing it up as a front for United Nations interference in the way private landholders manage their land and water. However, any objective appraisal would note the primary emphasis of the Convention on wise use, an approach that recognises all values and that benefits all stakeholders, including those who derive their livelihoods from wetland resources.

Misdirection of this sort could be effectively countered by a sincere and concerted effort by the scientifically and technically literate in our communities to redirect thinking and resources in appropriate proportions to the conservation and wise use of wetlands. But instead of being voices of reason, some denigrate the Convention’s frameworks and tools as less scientifically rigorous than we might like, or as ‘not quite appropriate’ to Australia’s or their own State’s situation, or under some other construct, all of which in effect say, ‘If it isn’t perfect, let’s not bother with it’. But regrettably, the perfect is the enemy of the good. We are not progressing anywhere near fast enough.

The last thing we need is multiple players

competing to develop a better mousetrap. Because they see the devices that we already have as competition for their own, they work against their deployment, despite the threats we face and the short time we have to deal with them. In such a zero-sum game, the stakes are no less than the future of our aquatic ecosystems and the only guaranteed winners are the mice.

But I am actually much more optimistic than that. In my view, reasonable progress will be made when all jurisdictions, together with all sectors of the NRM community

- acknowledge the urgency we face in securing conservation of aquatic ecosystems and accept that we do not have the luxury of deferring action until we have ‘the perfect system’,
- accept that the Ramsar Convention offers a comprehensive and appropriate framework and set of tools to guide conservation and wise use of aquatic protected areas in a nationally consistent way – by no means ‘perfect’, but a solid foundation,
- accept that all levels of government share responsibility for national obligations under the Convention and redirect resources accordingly to support initiatives at both State/Territory and regional levels,
- eschew competition in favour of cooperation, bringing to bear all available modalities and all sectors, to meet shared objectives, and
- continue to refine and improve scientific and technical knowledge and skills to advance those objectives in association with our international peers.

We can, we will, and we must.

REFERENCES

- Commonwealth of Australia (2001). National Objectives and Targets for Biodiversity Conservation, 2001-2005. Environment Australia, Canberra.
- Commonwealth of Australia (2002). Australia’s National Report and Companion Document: Eighth Conference of Contracting Parties to the Convention on Wetlands (Ramsar, Iran, 1971). Environment Australia, Canberra.
- Cresswell, I D, and Thomas, G M (1997). Terrestrial and marine protected Areas in Australia (1997) Environment Australia, Canberra.
- Figgis, P (1999). Australia’s National parks and Protected Areas: future directions Australian Committee for IUCN Inc., Sydney.

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IUCN (1994). Guidelines for Protected Area Management Categories IUCN, Gland, Switzerland.

Ramsar Convention Bureau (2000). Ramsar handbooks for the wise use of wetlands Ramsar Convention Bureau, Gland, Switzerland.