

# Basin Futures: An introduction

This book represents a remarkable collection of evidence, opinions, proposals and remedies for the troubles that ail the Murray–Darling Basin. It grew out of a workshop and conference held on 14 and 15 October at The Australian National University shortly after the release of the *Guide to the proposed Basin Plan* by the Murray–Darling Basin Authority (MDBA) on 8 October 2010. At the time there was a wave of protest about what was proposed, and what might happen should water reform continue its course. This protest may have lost its radiance somewhat in 2011 but there is still no shortage of heat. This book sheds some much-needed light over these controversial issues.

The workshop participants and others who have been invited to contribute to this book were asked to respond in their own ways, and with their own expertise, to the questions: what led to where we are today? And what can we do about it? We owe a great debt to our fellow contributors. They, like us, strongly believe a better future is possible, although they might not agree about the path(s) we should take.

The Basin's troubles have been a long time in the making. They arise from the inherent trade-offs that result from multiple and rival demands for a scarce resource. The challenges that have resulted have shaped our nation, our constitution and who we are as a people. What we decide to do in the Basin—for good or ill—in the coming years will be watched by generations to come. It will help create the sense of not only what Australia is, but how Australia is perceived by onlookers overseas who see our part of the world as the proverbial 'canary in the coalmine' in terms of future water scarcity.

All told, there are 27 chapters in this book that cover the issues of landscape; communities and stakeholders; Indigenous issues; law; economics; and governance—written by some of Australia's leading thinkers on water issues. The common purpose of all the chapters is to 'shine a light' on water reform in the Basin. We stress emphatically that we do not agree with everything that is written in every chapter. Neither is there a consensus across all the chapters. But we would not expect this from a book the two editors of which have tried to be as pluralistic as they can be when they requested diverse thoughts and ideas from many different disciplines and experiences. Nevertheless, between these pages you can find a robust debate, whether it be about the amount of water that should be reallocated from consumptive to non-consumptive purposes or the process of reform and what might be missing, and what should be included in the proposed Basin Plan.

The chapters discussing community issues emphasise the importance of process and good communications to achieve positive change in the way natural resources are managed in the Murray–Darling Basin (MDB). Leith Bouilly and Karlene Maywald draw on their experience working in the MDB to comment that although over-allocation is widely acknowledged as a problem by irrigators, the fact that many people subsequently made major investment decisions based on those over-allocations creates a serious dilemma, which will need careful negotiation to resolve. They also stress the community dimension of the challenge. This means that programs to promote acceptance of reform need to go much wider than merely compensating individual irrigators who are willing to sell their entitlements. These points are supported by Catherine Gross, who draws on recent episodes of conflict in south-western New South Wales and central Victoria to stress that whether or not people perceive the processes used to make decisions as fair and reasonable will influence their thinking about the decisions that result. The need to connect and consult better was a theme or sub-theme of many chapters. Part of the problem was the way in which the release of the draft Plan was treated by the media—a result that was at least partly due to the approach of governments and the MDBA, according to Åsa Wahlquist, who adds her valuable thoughts about how it should have been done.

Chris Miller’s chapter supports these recommendations by drawing on the large body of available national and international literature to outline what would be involved in developing a strong community-engagement strategy. Key elements include retention of local capital, attraction of new capital investment, fostering of the development of new products and services for a diversified economy, extension of community ownership of local services and enterprises, encouragement of new migration, retention of young people, building of human, social and cultural capital, collaboration with other basin communities, partnerships with local, State and Federal governments and integration of community development with local natural-resource management. This discussion is complemented by Martin Mulligan’s examination of the concept of ‘community’ and of a number of Australian examples of where community development has been successful.

Most recent public discussion about the constitutional foundations of the *Water Act 2007* has not gone beyond rather simplistic discussion of whether social and economic considerations should be seen as equal to the imperative to achieve environmental sustainability or whether they are secondary. The chapter by Douglas Fisher pushes beyond that public debate to examine the complex mesh of ‘protectable rights and enforceable duties’ and the concept of ‘ecologically sustainable development’ that are central to the way in which the courts will interpret the *Water Act*. In addition, he expands on the application of the rules contained within the Act and discusses how its compliance provisions

will work. Central to what happens in the courts will be the way in which scientific evidence is used and weighed; that subject is the theme of the chapter by Jennifer McKay.

In 2004 the National Water Initiative (NWI) placed a high priority on restoring Indigenous rights to water in the MDB, but since then there has been considerable confusion about what this could mean in practice. The two chapters on Indigenous issues complement each other neatly. One discusses what the waterways of the MDB mean to Indigenous people and the other considers what can be done to take account of their interests in the water-reform process. Jessica Weir's chapter explains that water management in the past—with its acceptance of increasing allocations for production and the resulting ongoing environmental decline—was in effect an act of dispossession similar to that experienced by Indigenous people when they lost access to their land in the nineteenth century. What can be done about incorporating Indigenous issues into water decisions is the theme of Sue Jackson's chapter. It outlines work done by the CSIRO and others at the behest of the MDBA as part of the preparation of the draft guidelines to the Basin Plan, and links the commitments of the NWI and the requirements of the *Water Act* to a number of international agreements to which Australia is bound. It also explores the concept of a 'cultural flow', which involves using water to improve the social, cultural and economic conditions of Indigenous people in addition to the riverine environment.

The potential economic impacts of the Basin Plan are discussed in a number of chapters. John Quiggin approaches these issues from the perspective of risk, examining in particular the interaction between uncertainty and property rights—a relationship that is particularly fraught in the MDB because, arguably, property rights have been allocated to more water than is sustainably available. He also addresses the issues of risk assignment. Quentin Grafton argues that social, economic and environmental outcomes in the MDB could all be improved if the \$5.8 billion now allocated to infrastructure investment was divided between the buybacks fund and community-orientated investments in those regions that will be affected by the reduction in water for irrigation. (Under the current Plan, the \$5.8 billion for irrigation-infrastructure investment will supplement the \$3.1 billion in payments for water purchases, thus, focusing the public investment to promote change in the MDB solely on irrigators rather than the communities of which they are part.) John Quiggin provides similar comments in terms of the cost effectiveness and the ability of the current spending priorities and current funding for water reform to sufficiently achieve a 3000–4000 gegalitre per year reallocation. Grafton also makes the point that there is no economic evidence provided in the Guide or supporting technical documentation to justify the assertion that an increase in environmental flows of more than 4000 GL/yr would generate socioeconomic costs that are too high.

Central to the debates about the potential impacts of the Basin Plan are the results of modelling exercises used to predict the outcomes of different buyback and investment scenarios. Qiang Jiang provides a chapter that examines the ways the various models are being used. The impacts on irrigation are central to this debate. The attitudes of irrigators to what is taking place are examined by Henning Bjornlund, Sarah Wheeler and Jeremy Cheesman, who reveal that opposition to a significant redirection of water to the environment has become stronger in recent years. Their research also indicates that much of the money gained from the sale of water entitlements could be used to retire debt or will be invested away from the MDB, thus highlighting the potential negative impact of current policies on irrigation-based communities. There is also a chapter from the late and distinguished agricultural economist Donna Brennan. She assesses the proposed new regime from the perspective of its impact on water markets and deduces that the focus on environmental outcomes will cause significant anomalies in water-trading transactions in regions such as the upper Goulburn River. Taking a different perspective, Darla Hatton Macdonald, Rosalind Bark, Dustin Garrick, Onil Banerjee, Jeff Connor and Mark Morrison focus on the many costs and benefits that are left out of standard assessments, which, if taken into account, would radically transform public understanding of the benefits of water reform in the MDB.

Much of the public debate so far has focused on the perceived lack of consideration of social and economic issues in developing the Basin Plan. Jamie Pittock and Max Finlayson redress this imbalance somewhat by arguing that the Basin Plan falls seriously short of meeting the requirements of the international treaties dealing with the environment that provide much of the constitutional underpinning for the *Water Act*. One of the major sources of pressure making delivery of those commitments increasingly difficult is climate change. As part of the preparation of the draft Basin Plan, the MDBA commissioned a substantial suite of research projects to investigate its potential impact. These are summarised in the chapter written by Nick Schofield. He explains that while the planetary trajectory of global warming is now well defined, the ability of science to provide reliable regional forecasts for catchments such as the MDB will need considerable further development before it can reliably underpin policy.

Also in this section discussing how science should inform policy is the chapter by Richard Norris, who argues that there has been a growing tendency in recent years to treat environmental benefits as an optional extra to be provided only to the degree that major interest groups find convenient and not too disruptive to their established activities. In opposition to that view, Norris restates the case that the environment is the source of a wide range of ecological services of high value, both monetary and non-monetary. He explains that continued access to

such services depends on the maintenance of key ecological functions in the riverine system through the provision of adequate water and the maintenance of essential patterns of flow, and that this view accords with the stated aims of the *Water Act*.

As John Williams explains in his chapter, water policy is about managing the interaction between human aspirations, demands and impacts and the wider environment. Williams summarises the main elements at play in the context of the MDB and explains why management success will require more than just balancing off the competing claims of human stakeholders. The compromises that are negotiated also have to be within the long-term limits of what the environment can provide. This is a key issue to be considered when discussing how great should be the shift of water away from production back to the environment. At the very least it should be sufficient to halt the ongoing environmental decline that characterised the past century. In discussions about water policy in the MDB, there is a tendency to concentrate on surface water, but the NWI requires that it be managed in coordination with groundwater where systems are linked. How best to do this is discussed in the chapter by Stuart Richardson, Ray Evans and Glenn Harrington, who draw on a number of recent examples to show how both science and stakeholders can be effectively involved.

The book contains a wide range of chapters discussing water governance in the MDB. Neil Byron is highly critical of the underlying design of the *Water Act* and calls for a fundamental reassessment of the sort of institutional arrangements that are needed to best manage the MDB. The call to go back to basics is also supported by Ray Ison and Philip Wallis, who discuss approaches that could be used to re-conceptualise the task and encourage institutional innovation. A reminder that water reform in Australia is part of an international movement is provided Dustin Garrick and Rosalind Bark, who argue that the growing occurrence in the western United States of negotiation between stakeholders to avoid the courts is a development worthy of more attention in Australia.

Other chapters accept the *Water Act* as a given and discuss how it could be made to work to produce the best possible outcomes under current circumstances. Daniel Connell writes about the Commonwealth Environmental Water Holder—an organisation that could be used to implement large-scale rehabilitation even if the Basin Plan is indefinitely delayed by political conflict and litigation. Also working within the *Water Act* is Mike Young, who proposes that the process for producing the Basin Plan should be redesigned to allow for more effective engagement with affected communities. He recommends that regions should play a greater role to allow for increased innovation and more flexibility to adapt to local circumstances. Drawing on her research into water reform in Europe, Katherine Daniell also discusses this theme. She argues that ‘the centralised

technocratic approach' used to develop the Basin Plan was always likely to alienate people in the MDB. Instead, governments should draw on the large body of experience now available for the promotion of community participation. Communities and the regional sub-catchment level are also the focus for Mark Hamstead, who stresses that there will need to be much more effective water planning if the goals of the *Water Act* are to be realised.

We trust that you will value the insights in these pages as our nation struggles with a 'wicked water problem'. If you have the time to read this book cover to cover or even if you 'cherry pick', you will soon realise the real issues are about not water *per se*, but water and its interactions with people. Key questions we and our fellow contributors have struggled with include: what are the values people hold about agriculture and about the environment? How can we 'balance' competing demands? Who should bear the costs of transition to a sustainable future? Who should pay?

All these questions can, and should, be debated, and this is what this book does. Whether you are a farm worker living in Griffith worried about your job or a retiree in Sydney who cares passionately about the Coorong, the chapters in this book have much to offer. The book tells a clear story that business as usual is not working in the Basin. Contrary to what some people think, these problems have most certainly not been resolved by the floods of 2010–11, just as they were not created simply by the Millennium Drought. Decisions must be made, and made soon, and these cannot be half-measures or we risk irreparably damaging the future of all those who live, work and care about our basin, our home.

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