



Sustainability and Social Research Group, University of Western Sydney, Australia.

## APPLICATION OF ENVIRONMENTAL CONFLICT RESOLUTION TO PUBLIC INTEREST ISSUES IN WATER DISPUTES\*

Michael Jeffery QC  
Professor of Environmental Law and Head of



Donna Craig  
Professor of Environmental Law, University of Western Sydney, Australia.

*This article examines the role of environmental conflict resolution (ECR) in the public interest issues of water disputes. The article endeavours to illustrate the strengths and weaknesses of a range of alternative dispute resolution (ADR) and negotiation approaches in the context of decision-making. Although many embrace ECR as the cheaper and more effective alternative to more formalistic and entrenched judicial processes before courts of law and quasi-judicial tribunals, the authors argue that there is an urgent need for a more critical, contextual and issue-oriented approach. In particular, the article highlights the significant difficulties associated with representing the full range of stakeholders who should be involved in an ADR process, and the lack of transparency and procedural safeguards associated with ADR in complex public interest disputes. The strength of ADR in smaller project-specific disputes involving a very limited number of stakeholders is well understood. The authors argue that ADR may have a significant role in scoping the issues and associated research as well as facilitating agreement on procedural aspects of large, complex public interest water disputes. However, ADR has severe limitations as a decision-making process. For example, water conflicts necessarily involve the concept of sustainability that in turn touches on a complex maze of social, political, economic and ecological values. The probability of reaching a mediated settlement in such a context is severely curtailed. A preferable approach may be one that is entirely transparent, capable of being both monitored and enforced, and is binding on all stakeholders whether or not they are parties to the mediation.*

### Introduction

Much of the world’s attention is increasingly focussed on the impending impacts associated with climate variation caused, in part, by global warming and attributed to a marked increase in atmospheric concentrations of carbon dioxide, methane and nitrous oxide as a result of human activities. In particular, there is widespread consensus that it is the rampant use of fossil fuels—used to stoke industrialisation and land use changes to boost agricultural production to feed an ever increasing population base—that has resulted in global mean surface temperature rises of approximately 0.7 °C since 1900.<sup>1</sup>

Many credible climate change scientists have reached the conclusion that, in the absence of a comprehensive binding global agreement to drastically reduce greenhouse gas levels that in-

\* The authors gratefully acknowledge the research assistance of their PhD student, Elizabeth Gachenga.

<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC), 'Working Group 1 Contribution to the Fourth IPCC Assessment Report: The Physical Science Basis' (Cambridge University Press, 2007) 2.



cludes the major emitting countries, such as China, the USA and India, there is little hope of stabilising this troubling and potentially devastating trend towards higher temperatures. Over the past decade there appears to be increased evidence that some countries have reached the conclusion that we have already passed the tipping point, and that considerable time and effort should now be directed towards adaptation and mitigation of the likely adverse impacts of climate change.

In this context it is inevitable that we are headed for a prolonged period of conflict over a broad range of global environmental concerns associated with issues centred around food security, energy security, the loss of biodiversity and, most importantly, conflicts over the availability of 'water' necessary to sustain life on this planet.

This paper will examine the role of environmental conflict resolution (ECR) to public interest issues in water disputes, and the paper will suggest where and how this particular form of dispute resolution can play a useful role in future environmental decision-making processes that must deal with the water crises of the future. ECR is a term that captures a range of alternative dispute resolution and negotiation approaches. Its application in the United States was facilitated by the *Alternative Dispute Resolution Act of 1998*<sup>2</sup> and the *Environmental Policy and Conflict Resolution Act of 1998*.<sup>3</sup> Early approaches often involved limited parties or project-specific disputes.

ECR is increasingly applied to environmental disputes because of costs, frustration and inappropriateness of litigation in addressing substantive issues in complex multi-dimensional disputes. The substantive issues usually involve the goal of sustainability but Dispute Mediation (D-M) usually occurs with inadequate information and scientific uncertainty.

Edward Christie<sup>4</sup> describes two dimensions of ECR associated with 'knowledge power': power arising from:

Knowledge of legal rights that provides the basis for sharing power in conflict resolution through equitable participant joint fact-finding and problem-solving; and

An understanding of the scientific data research information for environmental management.

Notably, Christie advocates a leadership role for lawyers in integrating law, science and genuine stakeholder engagement in ECR with an emphasis on principled negotiation.

We will begin by looking at what law, including both common and civil law tradition, tends to do well.

In the judicial review of administrative decisions this takes the form of:

- Protecting individual rights through enforcement in a legal action or to prevent unlawful conduct by an agency
- Providing for accountability of government and its agencies in properly exercising their powers (often captured by doctrines such as natural justice and procedural fairness)
- Providing for consistency and certainty in the administration of legislation
- Providing procedural oversight but correcting errors of law.

One of the questions that we will consider is whether these approaches, evolved over long periods of legal history, should be left at the door when we embark on ECR; or can we use principled approaches in combination with enriched knowledge power relationships involving better information, data and expert resources facilitated by ECR? In most cases, a mediated settlement is not binding on stakeholders who were not parties to the mediation, and the public

<sup>2</sup> *Alternative Dispute Resolution Act of 1998*, 28 § 651-658 (1998).

<sup>3</sup> *Environmental Policy and Conflict Resolution Act of 1998*, 20 USC § 5601-5609, 42 § USC 4331 (1998).

<sup>4</sup> E Christie, *Finding Solutions for Environmental Conflicts. Power and Negotiation* (Edward Elgar, 2009).

interest may be better served by having any mediated settlement reviewed and, if acceptable, ratified by a court of law. Nevertheless, in some cases voluntary mediation and/or binding arbitration provides a more direct and meaningful role for stakeholders than therapeutic and manipulated forms of public participation.

There is a need for a critical review of the role of law in ECR particularly when and how it can and should be used in public interest disputes relating to water. Interestingly this aspect is ignored in major international studies such as the UNESCO/IP/WWAP Report<sup>5</sup> of ADR approaches and their application to water disputes.

ECR is but one of a variety of approaches such as traditional planning management and legislated regulatory regimes, including techniques to inform and debate major public policies such as the Murray Darling Basin Plan<sup>6</sup> or planning instruments like the *Metropolitan Plan for Sydney 2036*,<sup>7</sup> and to reduce the time and costs associated with litigation. It is rarely a replacement but rather often part of those processes. The application and appropriateness of ECR depends on the characteristics, level and timing of discussions. Public Interest disputes over water often occur at the project specific level when proposals such as dams evoke responses. However principled, informed and transformative governance approaches need to re-think how public interest issues can be integrated into adaptive eco-system management policy and legal frameworks. This paper's critique on the role of ECR is one contribution to developing a jurisprudence that can address the substantive and procedural aspects of sustainability and water resources.

The paper begins with a discussion of the concept of public interest and some practical experiences with ECR in major environmental disputes in Canada and the United States, and will conclude with some comments on the ability of ECR to address human and indigenous rights, and other social and cultural values. Finally, it will make brief comments on a way forward in flexibly adapting ECR as part of a set of approaches to improve environmental governance of water resources, public policy development, public engagement, scientific research and evaluation, D-M, evaluation and adaptive management using the World Conservation Union (IUCN) proposals<sup>8</sup> for legal regimes facilitating environmental flows.

## ADR in the context of environmental issues

Alternative dispute resolution (ADR) is a generic term referring to a variety of forms of dispute resolution used in place of litigation. In some jurisdictions ADR is also referred to as external dispute resolution. The main forms of ADR include negotiation, mediation, conciliation and arbitration.

Negotiation usually involves the establishment of structures to facilitate the parties in reaching an agreement. It is often a process used in other forms of ADR. Mediation is the process in which the participants, with the assistance of an independent third party – a dispute resolution practitioner – identify the disputed issues, develop options, consider alternatives and endeavour to reach an agreement. The mediator ordinarily plays a facilitative role.<sup>9</sup> It should be noted, however, that mediation remains a consensual process. Even though in some jurisdictions the Court often mandates mediation as a condition precedent to commencing its adjudicative role, the Court cannot compel the parties to reach a mediated settlement. Conciliation is very similar to

<sup>5</sup> Y Shamir, 'Alternative Dispute Resolution Approaches and their Application' (Israel Center for Negotiation and Mediation (ICNM), 2004).

<sup>6</sup> Council of Australian Governments, Intergovernmental Agreement on Addressing Water Overallocation and Achieving Objectives in the Murray Darling Basin (2004).

<sup>7</sup> Planning and Infrastructure (NSW), *Metropolitan Plan for Sydney 2036* (December 2010) <metroplansydney.nsw.gov.au>.

<sup>8</sup> Megan Dyson, Ger Bergkamp and John Scanlon (eds), *Flow: The Essential of Environmental Flows* (Water & Nature Initiative: IUCN, 2003).

<sup>9</sup> Council of National Alternative Dispute Resolution Advisory, 'ADR Terminology: A discussion Paper' (2002) <[http://www.nadrac.gov.au/agd/WWW/disputeresolutionHome.nsf/Page/Publications\\_All\\_Publications\\_ADR\\_terminology:\\_a\\_discussion\\_paper](http://www.nadrac.gov.au/agd/WWW/disputeresolutionHome.nsf/Page/Publications_All_Publications_ADR_terminology:_a_discussion_paper)>.



mediation but the conciliator often has a quasi-judicial status and adopts an advisory role and seeks to help reconcile the relationship between the parties. Arbitration differs from the other ADR forms in that it involves the granting of a third party the power to decide how the dispute should be resolved. Usually the decision of the arbitrator is binding.<sup>10</sup>

ADR gained popularity as parties sought to avoid some of the problems commonly associated with litigation processes across most jurisdictions around the world. Congestion in most court systems resulting in long delays, high and in some cases ruinous litigation costs, and stringent procedural rules were all contributors to the move towards ADR.<sup>11</sup> The flexibility in selection of the third party to mediate, conciliate or act as arbiter in the process, allows for the selection of an expert in the area of dispute, which is particularly beneficial in disputes involving technical issues. With time, the expectation of ADR increased as the adversarial process was condemned for focusing excessively on the past and on precedent while ADR promised the hope of a more futuristic approach allowing for creative outcomes and relationships.<sup>12</sup> These positive aspects have led to the popularity of ADR in many parts of the world including Australia, particularly over the last 30 years.

Due to the nature of its development as an alternative to court processes, ADR and litigation have tended to be compared, and ADR has come to be regarded as a panacea to cure all problems associated with litigation. Such a view is inaccurate, and has contributed to the tendency to overlook the safeguards, transparency and benefits of litigation. ADR and litigation are undoubtedly different forms of dispute resolution but this does not mean they are mutually exclusive or opposed approaches to dispute resolution.<sup>13</sup> In fact some authors argue that the 'A' in the acronym ADR ought to refer to 'additional' as opposed to 'alternative'.<sup>14</sup> ADR is not in competition with judicial processes and should not be. It is rather an additional tool for dispute resolution which can be used together with court trials. As suggested by Spencer and Altobelli, it may be worthwhile to drop the word 'alternative' and use 'dispute resolution' only so as to disassociate it from such preconception.<sup>15</sup> More recently, Menkel-Meadow has suggested the renaming of the process to Appropriate Dispute Resolution.<sup>16</sup>

The growing acceptance and use of ADR in many aspects of legal practice has led to its incorporation into law and policy in a variety of areas including environmental law. Environmental conflict resolution (ECR) has come to be understood in the context of the various forms of ADR used for resolution of environmental conflicts. Mediation or negotiation in the various stages of environmental policy and law making and implementation is now anticipated in various jurisdictions around the world. In the US for instance this has been done through the *Memorandum of Environmental Conflict Resolution* of 2005.<sup>17</sup> Not only does the Environmental Protection Agency (EPA) recognize ADR as a standard component of its enforcement programme, it goes further to encourage the use of ADR as a means of enhancing the negotiation process.<sup>18</sup>

In Canada there is a long history of using ADR in environmental decision-making.<sup>19</sup> In Ontario, environmental mediation was, for a short time in the 1980s, incorporated into the structure of the Environmental Assessment Board (EAB). Mediation was supported within the administrative

<sup>10</sup> USAID Centre for Democracy and Governance (ed), *Alternative Dispute Resolution Practitioners' Guide* (USAID, 1988).

<sup>11</sup> David L L B Spencer and Tom Altobelli, *Dispute resolution in Australia: Cases, Commentary and Materials* (Lawbook Co, 2005).

<sup>12</sup> Carrie J Menkel-Meadow, 'Empirical Studies of ADR: The Baseline Problem of What ADR is and What it is Compared to' in Peter Cane and Herbert Kritzer (eds), *Oxford Handbook of Empirical Legal Studies* (forthcoming).

<sup>13</sup> Christie, above n 4.

<sup>14</sup> Spencer and Altobelli, above n 11.

<sup>15</sup> Ibid 14.

<sup>16</sup> Menkel-Meadow, 'Empirical Studies', above n 12.

<sup>17</sup> United States Government, Office of Management and Budget and President's Council on Environmental Quality, *Memorandum of Environmental Conflict Resolution* (2005).

<sup>18</sup> United States Government Environmental Protection Agency (EPA), *Environmental Dispute Resolution* (2011) <<http://www.techstuff.com/edr.htm>>.

<sup>19</sup> Elizabeth J Swanson, 'Alternative Dispute Resolution and Environmental Conflict: The Case for Law Reform' (1995-1996) 34 *Alberta Law Review* 267.



structures of the EAB and allowed for a limited number of cases where it was deemed that it would be useful. The experience of incorporating mediation into the EAB administrative structure brought out some of the limitations of ADR in resolving environmental disputes. After a period of less than ten years, the Ontario EAB members concluded that mediation was a useful tool in environmental dispute resolution but it has its limitations.<sup>20</sup>

In the United States, where there is a longer history of the application of different forms of ADR in the resolution of environmental conflicts, reports have been prepared to document the success.<sup>21</sup> However, subsequent critical reflection on these supposed gains indicates that the over-rating of ADR may be premature.<sup>22</sup> Apart from the difficulties in comparing disputes resolved using litigation and those using ADR, particular characteristics of environmental issues make it difficult to claim the success of ADR. Environmental problems often present complex issues characterised by uncertainty and serious and far-reaching consequences, and thus any gains made through mediated agreements would have to be evaluated over a long period of time.

## The public interest and public participation

Before proceeding to a discussion of the efficacy of employing alternative forms of dispute resolution to water resource conflicts, it is important to bear in mind the nature of this type of dispute. Essentially, water resource conflicts are an environmental dispute in a particular context. As such, since the late 1980s, conflicts underlying water issues inevitably bring into focus the concept of sustainability and sustainable development that include, in the words of Bernie et al, 'the right to development, the sustainable utilisation of natural resources and the equitable allocation of resources both within the present generation and between presentment and future generations (intra- and inter-generational equity).'<sup>23</sup> These disputes have at their core what is commonly referred to as the 'public interest'. 'Public interest' is a term that is widely used in law to justify a departure from many long established procedural norms associated with litigious proceedings such as: the suspension or at least relaxation of the evidentiary rules normally applicable in a court of law; an often more pro-active approach on the part of the judge or panel of judges adjudicating a case involving the public interest; a refusal to award costs against an 'unsuccessful' public interest litigant; and reluctance to order security for costs against public interest litigants. But what is the public interest and why is the concept so important in environmental disputes, including disputes involving the use of water?

The term 'public interest' is one that defies precise definition in spite of many attempts on the part of courts and legislatures to do so. Judicial discourse on the public interest can be traced back to an early decision of the United States Supreme Court in 1937 where the court found that courts of equity may, and frequently do, go much farther, both to give and withhold relief, in the furtherance of the public interest than they are accustomed to go when only private interests are involved.<sup>24</sup> The seminal statement on the public interest, however, was that of United States Supreme Court Justice, Thurgood Marshall, who said:

Public interest law seeks to fill some of the gaps in our legal system. Today's public interest lawyers have built upon the earlier successes of civil rights, civil liberties, and legal aid lawyers, but have moved into new areas. Before courts, administrative agencies and legislatures, they provide representation for a broad range of relatively powerless minorities for example,

<sup>20</sup> Michael Jeffery, QC (one of the co- authors of this paper) served as Vice-Chair and Chair of the Ontario EAB (1981-1990) and came to the firm conclusion that, although mediation of disputes involving the public interest was extremely useful in scoping issues, it should not be used as an 'alternative' form of dispute resolution and that any mediated settlement should be subject to ratification by a court or tribunal having jurisdiction over the subject matter of the dispute. See M I Jeffery, *Environmental Approvals in Canada: Practice and Procedure* (Butterworths, 1989) 2 [2.6].

<sup>21</sup> See, eg, United States Government, 'Status Report on the Use of Alternative Dispute Resolution in Environmental Protection Agency Enforcement and Site-Related Actions' (United States Environmental Protection Agency, 1999).

<sup>22</sup> Menkel-Meadow, 'Empirical Studies', above n 12.

<sup>23</sup> P Bernie, A Boyle and C Redgewell, *International Law & the Environment* (Oxford University Press, 3<sup>rd</sup> ed, 2009) 116.

<sup>24</sup> *Virginian Railway Company v System Federation No 40*, 300 US 515, 552 (1937).



to the mentally ill, to children, to the poor of all races. They also represent neglected interests that are widely shared by most of us as consumers, as workers, as individuals in need of privacy and a healthy environment. These lawyers have...made an important contribution. They do not (nor should they) always prevail, but they have won many important victories for their clients. More fundamentally, perhaps, they have made our legal process work better.

They have broadened the flow of information to decision-makers. They have made it possible for administrators, legislators and judges to assess the impact of their decisions in terms of all affected interests. And, by helping to open the doors to our legal system, they have moved us a little closer to the ideal of equal justice for all.<sup>25</sup>

In the environmental context, a court, tribunal or other environmental decision-maker which renders decisions pursuant to environmental legislation, is inevitably responsible for taking into account the public interest. Certainly under the framework of an environmental regulatory/approval process, this compels the decision-maker to look beyond the party seeking approval or redress to consider: how a decision might affect the public at large; or the particular aspect of the environment that the statute or regulation seeks to protect. And when one considers the term 'environment', the net is cast very wide indeed! Many environmental statutes give the term 'environment' its broadest meaning, including not only the natural environment and impacts to land, air and water but also the social, cultural and economic environment.<sup>26</sup> For example the New South Wales *Environmental Planning and Assessment Act 1979* defines the term 'environment' as including 'all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings'.<sup>27</sup>

Governmental and political recognition of the citizens' desire to play a more meaningful role in environmental decision-making over the past 30 years has spearheaded the movement to enhance the citizens' ability to both challenge development proposals and to provide more of a balance in the factual data upon which the decision-maker must rely. This, in theory, leads to more informed environmental decisions. A dissent by Justice William Douglas of the United States Supreme Court in *Sierra Club v Morton*<sup>28</sup> signalled his desire to see the standing requirement broadened for environmental litigants. Douglas maintained that the public's interest in protecting the natural world should be sufficient, in and of itself, to confer standing in environmental litigation. He remarked:

Inanimate objects are sometimes parties in litigation. A ship has a legal personality, a fiction found useful for maritime purposes. The corporation ... is a 'person' for purposes of the adjudicatory processes ... So it should be as respects valleys, alpine meadows, rivers, lakes, estuaries, beaches, ridges, groves of trees, swampland, or even air that feels the destructive pressures of modern technology or modern life.<sup>29</sup>

He then continues:

The river, for example, is the living symbol of all the life it sustains or nourishes—fish, aquatic insects, water ouzels, otter, fisher, deer, elk, bear, and all other animals including man, who are dependent on it for its sight, its sound or its life. The river as plaintiff speaks for the ecological unit of life that is part of it. Those people who have a meaningful relation to that body of water—whether it be a fisherman, a canoeist, a zoologist, or a logger—must be able to speak for the values which the river represents and which are threatened with destruction ... Those who have that intimate relation with the inanimate object about to be injured, polluted, or otherwise despoiled are its legitimate spokesmen.<sup>30</sup>

<sup>25</sup> See R Quicho, 'Watching the Trees Grow: New Perspectives on Standing to Sue' in Donna Craig, Koh Kheng-Lian and Nicholas Robinson (eds), *Capacity Building for Environmental law in the Asia and Pacific Region* (Asian Development Bank, 2002).

<sup>26</sup> See, eg, the definition of the term 'environment' in Ontario's *Environmental Assessment Act*, RSO 1990 c E-18, s 1(1).

<sup>27</sup> *Environmental Planning and Assessment Act 1979* (NSW) s 4.

<sup>28</sup> *Sierra Club v Morton*, 405 US 727, 741 (1972).

<sup>29</sup> *Ibid* 742-743.

<sup>30</sup> *Ibid* 744-775. It should be noted that most jurisdictions have moved toward enlightened 'open standing' rules allowing, in many cases, any interested party the right to challenge environmental decisions.



The current discourse, policy and science related to environmental and cultural flows can be seen as an attempt to grapple with public interest in the robust context of regulatory schemes and market mechanisms. It will be interesting to see how inclusive and effective these concepts will be in the Murray Darling Basin Plan.

## ADR in water resources conflicts

In the United States, different forms of ADR have been used in resolution of conflicts surrounding water resource use. The Snoqualmie River dispute has been cited as one of the successful attempts at using mediation to resolve a dispute over a water resource.<sup>31</sup> In this 1973 dispute, several environmental groups were opposed to the building of a flood control dam on the river. The then governor of Washington used mediation to resolve the dispute. This was arguably the first time mediation was used to resolve a non-labour dispute. By the following year, a successful agreement was signed including recommendations on management of the project.

A more critical evaluation of the use of ADR in water disputes is perhaps better demonstrated by the Everglades mediation and its outcome.<sup>32</sup> A dispute over the Everglades, a sub-tropical wetlands in Florida, resulted in a lengthy and expensive law suit involving the federal government and several other parties. By 1991, three years and close to fifteen million dollars had been invested into the law suit, leading to a determination by the court to provide the parties with an opportunity to reach a mediated agreement. A settlement reached several years later between the state and federal regulators led to a premature celebration of the success of mediation. However, subsequent conflicts over this mediated agreement have brought to light the challenges of using ADR to settle environmental conflicts and, more specifically, conflicts surrounding a water resource.<sup>33</sup>

Some of the lessons learnt from the experience in the United States may serve to help understand the best path to adopt in the use of ADR in ECR in Australia. The disputes in the cases cited above help confirm that the very nature of water makes it prone to conflict. This is because water resource management is a complex task involving the allocation of a scarce but essential resource among different users and uses. Disputes over water resources thus present particular challenges to decision makers: 'multiple stakeholders; different, sometimes unconnected regulatory and planning frameworks; short and longer term impacts; intergovernmental wrangling; and a blend of challenging policy, legal, scientific, engineering and fiscal issues all coloured by a high degree of uncertainty.'<sup>34</sup>

In Australia, there has been no dispute over a water resource comparable in scale and magnitude to the Everglades mediation. However, the possibility of such conflicts in future is growing. According to recent environmental reports, the state of water resources in the world water is reaching critical limits and Australia is no exception.<sup>35</sup> As a result, changes have to be made to traditional water uses to accommodate future users and uses. Water use in Australia has been increasing over the last decade. Water scarcity has been experienced in many parts of the continent. Public water storages around the country have, in recent years, been below average

<sup>31</sup> L Dembart and R Cwartier, 'The Snoqualmie River Conflict Bringing Mediation into Environmental Disputers' in R B Goldmann Boulder (ed), *Roundtable Justice Case Studies in Conflict Resolution* (CO Westview Press, 1980).

<sup>32</sup> Robert M Jones, 'Finding the Common Ground. The Everglades Mediation: Reframing the Politics of Consensus' (2002) <[http://consensus.fsu.edu/staffarticles/Everglades\\_Med.pdf](http://consensus.fsu.edu/staffarticles/Everglades_Med.pdf)>.

<sup>33</sup> For a discussion on the complexities of this mediated agreement see Bradley C Karkkainen, 'Getting to "Let's Talk": Legal and Natural Destabilizations and the Future of Regional Collaboration' (2007-2008) 8 *Nevada Law Journal* 811; Carrie J Menkel-Meadow, 'Getting to "Let's Talk": Comments on Collaborative Environmental Dispute Resolution Processes' (2007-2008) 8 *Nevada Law Journal* 835.

<sup>34</sup> Jones, above n 32.

<sup>35</sup> United Nations Environment Programme, *The Greening of Water Law: Managing Freshwater Resources for People and the Environment* (UNON, 2010).



levels.<sup>36</sup> Although the situation has improved following the unprecedented rains experienced in the country in 2010 and 2011, the water resource situation continues to be precarious.

Despite the controversy surrounding the accuracy of scenarios presented by climate change science, the adverse effects of climate change on the environment, including water resources, are undeniable.<sup>37</sup> The volatility of rainfall and resulting water levels in different parts of the world in the recent past seems to confirm that the effects of a changing climate on the ecosystem are real. Increased flooding and prolonged droughts have become a common phenomenon in several countries around the globe. The scarcity of water resources resulting from prolonged droughts intensifies the competition for water by different users including the environment. The arising tension increases the probability of the occurrence of conflict. Flooding, though often viewed as a natural disaster, may also act as a catalyst for conflict, particularly where the public perceive the government is partly to blame for failing to implement environmental policies to mitigate the risk of flooding.<sup>38</sup>

The Murray Darling Basin (MDB), being the most significant agricultural area in Australia, has been, and continues to be, a primary focus of both Commonwealth and interstate attention in water resource management.<sup>39</sup> The MDB cuts across several states: New South Wales, Victoria and Australian Capital Territory as well as parts of Queensland and South Australia. Given its importance, the MDB has been at the centre of conflicts over water. Initially the conflicts revolved around the different agricultural industries. More recently, the conflict is between agricultural use and the environment. The competing demands for water by large-scale mining and industrial scale agriculture have also resulted in conflict.

The Aboriginal peoples inhabiting the area around the Murray River have also always regarded the river as a life force that is central to the life of the inland river country.<sup>40</sup> The different perspectives taken in the formal management systems that have characterised the MDB and the view of the Aboriginal people have sometimes been a source of conflict and may be a source of future conflict.<sup>41</sup>

As demand for scarce water resources continues to increase, the inter-jurisdictional, regional and individual conflicts are likely to grow more intense. It is paramount, thus, to draw lessons from environmental conflict resolution in aspects other than water to determine the best path for water conflict resolution.

## Challenges of ECR: implications for water resource conflict resolution

A reflection on the use of ADR thus far in ECR has identified certain challenges, particularly where ADR is adopted as a substitute for adversarial processes. Some of the challenges associated with ADR are as a result of its nature and inherent characteristics. ADR, by its very nature, requires the existence of a set of circumstances in order for it to be successful. These circumstances have been defined in various ways<sup>42</sup> but there is consensus that the following must be present:

1. The ability to identify and include in the process *all* relevant parties;
2. The representation of the parties by interest in order to reduce the number of individual

<sup>36</sup> Alex Gardner, Richard Bartlett and Janice Gray, *Water Resources Law* (Lexis Nexis Butterworths, 2009).

<sup>37</sup> Richard H Moss et al, 'The Next Generation of Scenarios for Climate Change Research and Assessment' (2010) 463 *Nature* 747.

<sup>38</sup> See, eg, media reports in which different parties were blamed for recent Queensland floods, eg, Hedley Thomas, 'Bligh's "tough people" owed a tough inquiry', *The Australian* (Sydney), 14 January 2011.

<sup>39</sup> A Gardner, R Bartlett and J Gray, *Water Resources Law* (Lexis Nexis Butterworths, 2009).

<sup>40</sup> Jessica K Weir, *Murray River Country: An Ecological Dialogue With Traditional Owners* (Aboriginal Studies Press, 2009).

<sup>41</sup> *Ibid.*

<sup>42</sup> See, eg, Jeffrey, above n 20; Menkel-Meadow, 'Getting to "Let's Talk"' above n 33.

- participants to those who represent a 'different' interest;
3. Crystallisation of issues so as to sufficiently define the underlying matters in a dispute;
  4. There must be an incentive for the parties to settle the dispute;
  5. The ability of any mediated settlement to be implemented and, where subject to review by an adjudicative body, the likelihood of the agreement being ratified.

One of the most fundamental challenges of the use of ADR for environmental conflicts and therefore for water conflicts too, is that the likelihood of all the above circumstances prevailing in a dispute is remote. We discuss below the difficulties of achieving the essential elements listed above.

### Inclusion of all Parties and Representation

In a water conflict context, it would be difficult, if not impossible, to ensure the participation of all the parties likely to be affected in a particular case. In the case of conflict over the governance of the MDB, for instance, the list of parties would be interminable. The six governments involved in the partnership agreement would definitely want to be included. It is likely, as is evident from past experience, that the Commonwealth government would and should be a Party in the context of its corporation's power. Members of the public in all six states could also claim interest. A variety of industries supported by water from the MDB would also seek to protect their interests and the list would continue to expand. It would be difficult, if not impossible, to ensure the participation of all these parties in an ADR process. The diverse nature of their interests in the matter would also make it difficult to achieve representation. In such a multi-party negotiation, a few of the parties to a dispute could easily gang up or exclude others.<sup>43</sup> Of more concern, however, would be that a mediated agreement that was not subject to ratification by a court would not be binding on those who were not parties to the mediated settlement agreement.

### Crystallisation of issues

Water resource conflicts are—as are all environmental conflicts—complex problems due to their multi-faceted composition. They involve ecological, social and cultural considerations. In addition, one of the primary features of these conflicts is the surrounding scientific uncertainty that makes information a primary source of conflict.<sup>44</sup> This makes it difficult to define the issues in the dispute. Besides, some of the issues in these types of disputes are complex and involve changes in value systems, making it difficult for a mediated agreement to be reached.

In such circumstances, there would be some merit in using ADR as a scoping exercise while still safeguarding the adversarial process for purposes of defining and dealing with the more complex issues. The adversarial process has, over the years, developed as a powerful engine for the resolution of factual and technical disputes.<sup>45</sup> The process of information gathering prior to the trial, the rules on evidence and the tool of cross examination all provide tools for testing the scientific evidence provided in support or opposition of a particular intervention for credibility. This is particularly useful in a conflict over water resources in which economic, social, political and ecological interests are likely to be at the centre stage. Were the adversarial process to be substituted with an alternative ECR tool, these benefits would most probably be lost or at the very least diminished.<sup>46</sup>

<sup>43</sup> Menkel-Meadow, 'Getting to "Let's Talk"', above n 33.

<sup>44</sup> Christie, above n 4.

<sup>45</sup> See Stuart L Smith, 'Science in the Courtroom. Value of an Adversarial System' (1988) 15(2) *Alternatives* 18.

<sup>46</sup> Michael Jeffrey, 'Science and the Tribunal. Dealing with Scientific Evidence in the Adversarial Arena' (1988) 15(2) *Alternatives*; S Smith, 'Science in the Courtroom. Value of an Adversarial System' (1988) 15(2) *Alternatives* 24.



Experience so far with the use of non-adversarial ECR in administrative processes has demonstrated challenges. The requirement for the use of mediation as opposed to a court process in disputes over whether a decision to proceed with a particular project/development, is now a common feature in environmental policy and law. Such disputes end up being settled through negotiation involving the relevant regulatory authority and the proponent. Decision-making in such a situation is informed by prior set standards which are based on best science and technology. Given the uncertainty prevalent in environmental science and the absence of cross examination and argument, a real risk of failing to reveal the limits and bias of the information provided exists. This could affect the quality of the decision made by the regulator.

Apart from the lack of scientific expertise, a further factor may undermine the quality of decision-making under the non-adversarial forms of ECR. The regulators often exercise their decision-making in situations complicated by the economic or political situation of the country. As they are ultimately government agents, the pressure from such factors may lead to bias in comparison to an adversarial process with an independent judge. It is precisely this concern that has, over many years, fuelled the movement for increased public participation in environmental decision-making processes before unbiased, apolitical decision-makers such as courts and quasi-judicial tribunals. In many jurisdictions around the world, citizens no longer trust their governments (and by extension government agencies such as the 'Environmental Protection Agency' or the 'Murray-Darling Basin Authority') to make decisions that are perceived to be contrary to government policy. This concern is more likely to be addressed in the context of a court proceeding where the government regulatory agency is treated equally with all other parties, subject to cross-examination and subject to an adverse ruling if the court finds the arguments of other parties more persuasive.<sup>47</sup>

Both adversarial and non-adversarial environmental decision-making processes have provisions including the participation of the public. It is in this context that the financial capability of participants to a negotiating or adversarial process, more often than not, determines the level and quality of their participation. The process of gathering information related to a conflict on water resource use is often an expensive exercise requiring the input of technical experts. Nevertheless, the expenses are necessary for ensuing high quality decision-making. In the absence of proper 'intervenor funding', particularly in cases involving the public interest, parties in opposition are at a distinct disadvantage because proponents are, in most cases, well-funded corporates or government itself. In the context of court proceedings, the well-established practice of courts in some jurisdiction not to require security for costs and/or to make an award of costs against public interest litigants (even if unsuccessful) does not ensure *effective* public participation. Parties in opposition must have sufficient resources prior to the matter coming before the court or tribunal in order to be in a position to retain the necessary technical assistance in the form of experienced legal counsel and expert witnesses in order to place the 'best' evidence before the decision-maker on what can be considered a level playing field. It should be emphasised that the proper resourcing of the 'opposing' parties to an environmental dispute is not so much a matter of fairness but rather a necessity in order to achieve better and more balanced decisions.<sup>48</sup> Whereas it is true that non-adversarial forms of dispute resolution are often much cheaper than litigation, the former run the risk of compromising the quality of the decision-making process in a bid to keep down the costs.

<sup>47</sup> It is interesting to note that the new Liberal Premier of NSW, Barry O'Farrell, has pledged to repeal the infamous Part 3A of the *Environmental Planning and Assessment Act 1979* (NSW), that allowed the Planning Minister to call in and constitute the Consent Authority for 'major projects', including all critical infrastructure projects. This politicisation of NSW planning process introduced into law by the former Labor government was undoubtedly a factor in Labor's crushing defeat in the 26 March 2011 election.

<sup>48</sup> For a comprehensive discussion of the funding issues see M I Jeffery, 'Intervenor Funding as the Key to Effective Citizen Participation in Environmental Decision-Making: Putting the People Back into the Picture' (2002) 19(1) *Arizona Journal of International and Comparative Law* 643.

Parties are often reluctant to embark on a process of negotiation upon realizing they may lack the resources to do so effectively. The technical experience and skill required for data collection and analysis in some environmental matters makes this a challenge. The problem of costs is thus not limited to the adversarial process but extends to non-adversarial conflict resolution systems. Innovative solutions must be found on how to provide the necessary resources to all interested parties so as to ensure the input of all for better decision-making.

### Incentive to mediate/negotiate

For a successful mediation to result, the parties must have an incentive to resolve the dispute using non-adversarial ECR. In the Everglades dispute discussed in the foregoing section,<sup>49</sup> the recognition by all parties that the legal proceedings would likely be too rigid, time-consuming and inadequate was a major contributing factor in the successful settlement of the dispute.<sup>50</sup>

Such an incentive may not exist in the case of conflicts over water resources. The multiplicity of parties and stakeholders makes it difficult to have any common or shared views including the incentive to mediate. As is evident from the further conflicts arising from the Everglades case, the solution may lie in the use of multiple forms of dispute resolution as opposed to the selection of ADR over the court process. In many cases involving complex issues, however, the only way to effectively resolve the dispute may be an 'imposed' solution by a court or tribunal.

### Ability to Implement Mediated Agreement

One of the reasons given for the successful outcome of the use of ADR in the Everglades dispute was the commitment by an important government official to implement the resulting outcome. As observed by Karakkainen and Menkel-Meadow, this was a crucial contributing factor to the success of the mediated process.<sup>51</sup> It is therefore important to evaluate the possibility of implementation of a mediated agreement before embarking on one for the resolution of a conflict. This is particularly germane in ensuring that the mediated agreement is binding on stakeholders who were not parties to the mediated settlement.

Apart from the factors discussed above, a further risk associated with ADR must be considered before ADR can be adopted as the preferred or exclusive form of ECR in water issues. A viable signed agreement is often the indicator of a successful process. The mediator's credibility and competence is measured against his success in helping parties achieve a signed agreement. Given this pressure, the mediator may, in some cases, compromise in terms of quality decision-making for purposes of getting the signed agreement. This, at times, is not necessarily the best option in terms of the quality of the decision to be made. An often forgotten advantage of a court-based decision-making process over mediation or other alternative forms of dispute resolution, is the fact that it is an 'open and transparent' process where all participants are privy to all of the evidence and positions put forward by every other party or stakeholder, and not subject to the discretion of the mediator when negotiating with parties separately. One does not run the risk that a mediated settlement is achieved because the opposition has been 'bought off' as is sometimes the case in the siting of waste disposal facilities where adjacent property owners have been offered above market prices for their properties in return for consenting to a mediated settlement. Unless such settlement agreements are subject to ratification by a court, there is no assurance that the environmental considerations have been properly addressed.

<sup>49</sup> Jones, above n 32.

<sup>50</sup> Karakkainen, above n 33.

<sup>51</sup> See Ibid; Menkel-Meadow, 'Getting to "Let's Talk"', above n 33.



## Concluding comments

Environmental law is unlike other branches of law where ADR has been used with more success, such as contract, labour and family law. The development of environmental law is closely associated with sustainable development. The concept of sustainability is an ideal that touches on the complex maze of social, political, economic as well ecological aspects of reality. Sustainability, being an ideal, requires environmental law to play not just the traditional role of regulating but also of inculcating values. Modern water law systems are being developed with this foundation of sustainability and thus they too revolve around values.<sup>52</sup> This makes conflicts surrounding water complex. The possibility of reaching a mediated settlement in these types of disputes is difficult and thus ECR calls for a more reflective approach that does not disregard the positive aspects of litigation. As mentioned earlier, mediation is useful in providing stakeholders with the information necessary to ensure effective public participation. Using litigation for this purpose is almost always more time consuming and costly. Its principal use in large complex disputes involving multiple stakeholders should be directed toward scoping the individual areas of dispute in order to separate those issues for which agreement is possible and those for which it is not. The hard core issues upon which there is little or no real prospect for agreement are then brought before the court or tribunal for adjudication. The use of mediation as a scoping technique, where it has been tested in jurisdictions like Ontario, Canada, has resulted in a more efficient use of judicial resources. In turn, this leads to reduced costs without sacrificing the other positive benefits attributed to apolitical, transparent, unbiased, legally binding and procedurally fair decision-making.

The ultimate objective of ECR in water conflict is the improvement of decision-making to ensure sustainability in water resource management. Any successes in application of ECR to water conflict must therefore be evaluated on this basis. Research from other jurisdictions, on the use of non-adversarial forms of ADR for environmental conflict resolution, have led to the conclusion that agreements arising from ADR require long-term monitoring and management to ensure effectiveness.<sup>53</sup> This is because these agreements tend to be more precarious in so far as they are dependent on the will of the political leadership at time of the agreement for their implementation.

It is inappropriate to rely on non-adversarial processes for water conflict resolution on the basis of the successes that have been associated with the use of other forms of conflict resolution such as mediation, facilitation and arbitration. There is limited potential in water disputes to actually achieve a settlement with respect to such diverse interests among a large number of stakeholders. A more effective approach to address contemporary environmental issues revolving around water would be to encourage a complementary use of both ADR mechanisms and litigation to achieve different purposes at different stages of the process of dispute resolution. ADR can and should serve as an important tool for scoping, identifying the main issues in the dispute and the more complex ones that are unlikely to be settled through negotiation.

Other problems associated with the adversarial process may be eliminated or at least ameliorated through the creation of quasi-judicial tribunals which, while seeking to draw on the benefits of a more formalised court-based adversarial system, allow more flexibility in terms of process, a tendency not to insist upon adherence to the rules of evidence and a more interventionist role of the adjudicators on the basis of the fact that the issues before the tribunal affect the public at large and not only the specific parties before it. Their effectiveness is dependent on many factors, and experience indicates that a balance must be struck between flexibility and efficiency in order to achieve their objective.

<sup>52</sup> Douglas Fisher, *The Law and Governance of Water Resources: The Challenge of Sustainability*, New Horizons in Environmental Land Energy Law Series (Edward Elgar, 2009).

<sup>53</sup> Menkel-Meadow, 'Getting to "Let's Talk"', above n 33.



The incidence of conflict over water resources is likely to increase as water scarcity grows and the adverse effects of climate change on water resource are felt. The goal of sustainability must inform all aspects of the water policy and law, including the resolution of conflicts over water. Whereas experience over the last two decades has demonstrated the benefits associated with the use of ADR, a comprehensive approach to ECR should not exclude the adversarial process as a tool for dispute resolution; it also has a long history of success despite its perceived shortcomings.

**Keywords:** environmental conflict resolution; alternative dispute resolution; water disputes; sustainability; public interest

