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Limits on the human right to water — the politics of social displacement

Francine Rochford*

This article considers the process by which reallocation of water entitlement is occurring in Australian irrigation areas, focusing in particular on Northern Victorian irrigation regions. This process is emblematic of wider strategies addressing climate change: the use of cap and trade — market — mechanisms to achieve re-allocation of resources. Non-norms-based redistribution of resources raises questions of the status of legal rights, and the progressive denormalisation of law. This article will analyse legal norms in Australia as they apply to rights to water as social and property rights. It will consider the diminishing purchase of the normative aspect of law on significant sites of conflict — allowing economic analysis to act as a proxy for conventional policy and normative analysis, and limiting law to a transactional mechanism. However, non-normative analyses fail to address discontent and the potential delegitimisation of law where cultural norms have already been established.

Introduction

Resource allocation is acknowledged to involve questions of substantive distributive justice. Human rights declarations at all levels acknowledge that access to food and water are basic (Universal Declaration of Human Rights, Art 25; World Health Organization 2003; International Covenant on Economic, Social and Cultural Rights; United Nations Committee on Economic, Social and Cultural Rights 2002). The recognition of a human right to water in 2002 'energized' the debate (Salman and Bradlow 2006) by stating that 'the human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses' (United Nations Committee on Economic, Social and Cultural Rights 2002, para 2). However, the 'contours of that right' (McCaffrey 1992, 1) have not been fully explored.

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Typically, when resource allocation issues are discussed as issues of justice, they play out at an intergovernmental level (World Health Organization 2003, 7; Salman and McInerney-Lankford 2004, 45). At present, the right to water has not achieved the status of an accepted norm of international law (Hardberger 2006). However, some legal systems (for instance, South Africa, India and Argentina) have provided constitutional guarantees to the right to water (Bluemel 2004). The South African Constitution at s 27 contains a progressive realisation guarantee of potable water sufficient for a dignified human existence. In Australia, the recently enacted *Water Act 2007* (Cth) does not amount to a constitutional guarantee, although it prioritises critical human needs (s 86A(1)). Under the Act, the Murray–Darling Basin Plan is to be formulated to reflect an ‘environmentally sustainable level of take’ (s 4). Whereas the ‘social’ aspect of a right to water is an objective of the National Water Initiative (NWI) (MDBA 2010b), this has remained a tentative and attenuated right, largely defined by optimisation processes — so that ‘water markets and trading are making a major contribution to the achievement of the NWI objective of optimising the economic, social and environmental value of water’ (NWC 2010, v).

This article seeks to draw normative questions of resource allocation down to the level of legal norms in an existing legal system, and to address problems of application where resolution of allocation issues is carried out against a background of existing legal norms. It will consider in particular the current processes by which water allocation issues are being addressed in the Murray–Darling Basin in Victoria, in eastern Australia. Using recent developments in water resource allocation, it will be argued that substantive legal norms both ground and reproduce cultural understandings of justice, and reallocation of resources on alternative grounds can be experienced as unjust as a result of those cultural understandings. In particular, the use of economic mechanisms to ground allocative decisions can be experienced as illegitimate, as they fail to acknowledge the expectations of stakeholders which have been legitimated by existing norms. Since Victorian water reforms reflect the reforms in other states in the Murray–Darling Basin, as a result of intergovernmental consensus as to the management of water in the Basin (CoAG 1995), these considerations are equally applicable to most eastern states, although details in allocation mechanisms differ.

Reallocating water in the Murray–Darling Basin

The Murray–Darling Basin Plan (the Basin Plan) is currently being formulated. It proposes significant changes in the allocation of water to agricultural communities. Changes in water allocation mechanisms in Australia and overseas have been justified in part by water scarcity and a legacy of overallocation. Pressure to reallocate is increased by the necessity to accommodate interests previously not adequately considered, such as environmental (Beavis, Roberts and Ellis 2010, iv) and Indigenous

interests, as well as growing demand from 'expanding municipalities, industrial development, and other economic activities' (Shupe, Weatherford and Checchio 1989, 414). Much of the Murray–Darling Basin has been in drought for up to a decade (McKernan 2010) and, although drought has more recently been replaced by flood (Lloyd 2010a), reallocation is also a response to the projected effects of climate change: increasing variability in water supply, and hence increased scarcity in some periods, probably coupled with increased severity of flood events (Steffen, Sims, Walcott and Laughlin 2010). The Murray–Darling Basin represents around 40 per cent of Australia's agricultural production, and 70 per cent of its irrigation water use, so pressure for reallocation generates concern primarily among irrigators and communities reliant on irrigated agriculture (Lloyd 2010b). Early reports commissioned by industry bodies have argued that 'major irrigation entitlement cuts in the Murray–Darling Basin could devastate rural communities and cut thousands of jobs' (ABC News 2010; Stubbs, Storer, Lux and Storer 2010). The chair of the Authority has conceded that the report understates employment losses due to projected water cuts (Uren 2010). Irrigator responses to the initial proposals of the Murray–Darling Basin Authority combine lack of confidence in consultation mechanisms with a perception of lack of legitimacy in the process (Wilson 2010). In a critique of electoral legitimacy, one opponent of the plan — Wee Waa businessman Kerry Watts — said that '[j]ust because both sides agreed to it doesn't make it right' (Wilson and Lloyd 2010).

The Basin Plan is one of a number of reallocation programs affecting Victorian irrigators. The North–South pipeline, designed to take 75 gigalitres of water from the Goulburn system to Melbourne, has attracted significant criticism, both from irrigators and from the Victorian Auditor-General (Victorian Auditor-General's Office 2010). Water for this project was delivered through water 'savings' created by 'modernisation' of infrastructure, including channel lining; replacing meters and deeming that to be a 'saving' of water which would otherwise have been delivered improperly to irrigators; and the provision of on-farm infrastructure in return for a reduction in irrigation entitlement. Simultaneous projects involved 'reconfiguration' of irrigation assets, which involved retirement of irrigation assets, including channels, sometimes by transferring maintenance and risk of asset failure to irrigators, and sometimes by closure of those assets.

These projects have occurred in the context of decades of change in the delivery of water resources, including the introduction of the Murray–Darling Basin Commission Cap on diversions, which limited the volume of water capable of diversion from the Basin's rivers for consumptive use (Murray–Darling Basin Agreement 1992: *Murray–Darling Basin Act 1992* (NSW), Sch 1). The restructure of water industries in all states occurred partly as a result of the Council of Australian Governments (CoAG) Competition Principles Agreement (1995) and the National Competition Policy (1995),

which have resulted in the application of commercial principles to water authorities. Indicative changes are the adoption of user-pays strategies, the 'unbundling' of water charges, and the creation of a market for water (for example, the *Water (Governance) Act 2006* (Vic)). These processes have been scaffolded by democratic legitimacy — because state and federal governments have electoral mandates — and in some cases by consultation mechanisms.

Primary legitimating mechanisms for reallocation decisions — such as electoral mandate and consultative processes — are 'procedural legitimacy' mechanisms (Friedman 1975, 116). However, in Australia both mechanisms disguise their primary rationalisations, which arise from economic theory, in particular the utilisation of market mechanisms to optimise resource allocation. In other words, they do not necessarily impart 'deep legitimacy'. This tends to 'de-normalise' negotiations, and reflects a denormalisation of governance mechanism across the Australian legal landscape. Whereas procedural legitimacy is typically sufficient, in most legal systems, to impart substantive approval of rules, it is argued that, where there is no connection between legitimating mechanisms, procedural legitimacy will come under closer scrutiny and may fail. Where there are competing legitimating mechanisms — for instance, where existing procedures are replaced or are not followed — aggrieved citizens find additional grounds for not feeling compelled to follow rules. Thus, where a right to water has been purchased along with land, has inflated the cost of land, is paid for regardless of use, and is central to the economic capacity of the land, it may gain a quasi-property status and contribute to expectations of certainty and security from expropriation. In other words, it becomes a longstanding and accepted cultural norm.

In addition to acknowledging developing ideas of a 'human right' to water, it is argued that the result of the denormalisation of law is capable of being experienced as injustice, because our ideas of justice remain as residues of old norms — the anchorages that provided our political and legal systems with weight and force. Alternative legitimating forces — democratic mandates in particular — fail to suppress the feelings of individual violation that result when laws deliver results contrary to conceptions of justice. It is argued that procedural legitimacy is insufficient to create the foundation for ground-shifting changes in legal rights — those that threaten ideas of private property or the right to earn an income, or those that threaten to widen disparities in access to resources, or to demonstrate disparities in power. A perception that attempts to reallocate water resources are illegitimate has resulted in committed protests against aspects of water reform in Victoria. In response to the diversion of water by the North–South Pipeline and to the compulsory acquisition of land for the pipeline, petitions have been presented to Parliament (Parliament of Victoria, Legislative Assembly 2009, 3764); mothers have been arrested (Parliament of

Victoria, Legislative Council 2009, 5588; *Herald Sun* 2008); farmers (GMW 2009) and academics have been removed from consultative bodies (Millar 2008); protest placards have been strung along post and wire fences on highways and carried on the back of flat-bed trucks into Melbourne; and 'an 84-year-old man has been manhandled by Premier John Brumby's security team ... as the north-south pipeline war escalate[d]' (Higginbottom 2008). More recently, the release of the *Guide to the Proposed Basin Plan* (MDBA 2010a) prompted protests during consultation meetings, including the creation of a bonfire of copies of the Guide (Cooper 2010).

While some commentary has attempted to disparage these protests as understandable attempts to protect self-interest and has conceptualised water as a 'community-owned natural resource' (for example, Toohey 2010), this commentary has tended to ignore the context in which water has been allocated in many rural areas, and the processes of allocation and reallocation that have already occurred. These processes have created, in the initial phase of water allocation, reciprocal obligations — to use water productively and to pay water rates for infrastructure (regardless of availability) on the part of the irrigator, and to provide water infrastructure and water, where it is available, on the part of the state. In the marketised phase of water allocation, irrigators adapted to new terms of water provision, with shares in a water resource amounting to, if not property interests (*Embrey v Owen*, 1851, at 585), then quasi-property interests, separate from land, separately registrable, transferable, divisible, enforceable and secure (Department of Prime Minister and Cabinet 2006, v). The legal infrastructure of water allocation, upon which irrigators have relied, creates and reinforces expectations, amounting to cultural norms.

The 'right' to water

International instruments have asserted the 'right' to drinking water and sanitation. Where a constitutional right to potable water exists, it extends to all citizens, regardless of geography (Blumel 2004). Implementation of such a right, however, does not necessarily ensure delivery of potable water to all citizens. The conditions of service and the amount of water to be provided under the South African constitutional right, for instance, were recently tested in *Mazibuko v City of Johannesburg*, 2009. The City of Johannesburg's installation of pre-paid water meters in the Soweto township of Phiri was argued to have contravened the constitutional duty to provide free water to those who could not afford to pay for it. The court held that the constitutional promise was not breached by the introduction of pre-paid water meters. The City had, in fact, installed water infrastructure, and water was provided, although on terms. There are many parts of the world in which, on the most basic of interpretations of the right to water — the right to potable supply — few countries would be compliant. In Australia, as elsewhere, potable water supplies are not typically provided to rural

residents outside towns. The majority of rural residents are required to maintain their own supplies of potable water through rainwater harvesting or bores, and to maintain their own infrastructure for pumping and filtration. On this measure, Australia has been criticised for failure to provide the infrastructure for clean water to Indigenous communities.

If the parameters of a projected right to water are moved out, do they extend to water for stock or domestic purposes — for gardening, watering animals, or hygiene? Again, most rural residents are required to provide their own infrastructure for the provision of stock and domestic water from a public supply point. Most stock and domestic supplies either are metered or have their usage deemed and accordingly paid for. Where irrigation supplies were available, stock and domestic entitlements were previously a separate right, and they were guaranteed regardless of allocation. However, since the implementation of water reform in major Victorian water districts, a stock and domestic water entitlement no longer exists. It is now part of a high security water entitlement. If high security water is restricted as a result of scarcity, this restriction will apply to stock and domestic rights. Accordingly, the right to domestic water has actually been diminished in rural communities.

The right to water for productive uses is always a more problematic proposition. Bleisch notes that 'it has remained ambiguous both in the United Nations' recommendation of November 2002 and in the subsequent international debate whether the content of the right to access to water is limited to drinking water and related needs to secure environmental sanitation or whether it also includes access to productive water' (Bleisch 2006, 7). What is clear, however, is that changes to the extent of irrigation infrastructure will also have impacts on the availability of water for stock and domestic purposes; the value — and indeed the viability — of farming land; and, because of the economics of settlement, the continued provision of other basic services, such as education and health care, within a reasonable distance. Regardless, therefore, of whether provision of water for productive use is considered to be a human right, the *failure* of water infrastructure has negative effects on the provision of other basic human rights.

Is a democratic process — or other consultative mechanisms — a sufficient normative basis for such a change, which affects one part of the community disproportionately? Where removal of the economic basis of a community — irrigation water — will result in the decline and eventual failure of that community, is the denial of water to a community a breach of their human rights? Where the removal of irrigation water will result in the problem of stranded irrigation assets, and the necessity for further forced retraction of irrigation infrastructure (NVIRP nd), is this a privileging of urban communities over rural communities? Where water resource issues are characterised

in economic terms, the consequences of allocation decisions appear rational and neutral. So, according to Toohey (2010), the farm sector will continue to grow despite a reduction in water:

This doesn't mean that a small number of towns won't be hurt. But governments can't guarantee that no country town will ever suffer a fall in population. Changing fortunes for agriculture and mining have seen many population centres fade while others prosper. And the government could easily afford to fund decent adjustment assistance for people who are hurt by worthwhile reforms. [Toohey 2010.]

From the perspective of the individual, however, this conclusion can appear radically unjust.

Frequently, rights discourses tend to be situated around the provision of basic necessities in developing economies or in the context of war. In a developed economy, where resources are already allocated, the justice of existing resource allocation tends to be focused on the alleviation of poverty, and where re-allocative mechanisms are deployed the concerns of social justice are limited to mitigating the effects on vulnerable communities (for example, Consumer Law Centre Victoria and Environment Victoria 2005, 20). However, in a developed economy, the legal infrastructure exists to create, sustain and protect property rights, and this is fundamental to the existence of the market economy in most developed nations. What are the consequences for conceptions of justice where cultural understandings of property rights are threatened by reallocation? Fundamental law typically has a mechanism for dealing with the resumption of property rights — many constitutions require 'just compensation' for government acquisition of property. In Australia, water rights are not generally considered to be private property rights in the legal sense, and nor is the constitutional guarantee restricted to property rights in the legal sense. Whereas the vast majority of existing allocation mechanisms — excepting, perhaps, any remaining riparian rights — are built upon water as 'common' (Rochford 2004) and the allocation of water occurs on the basis of availability, there is a strong argument that some allocation mechanisms, once fixed, create a private property right in a Lockean sense, or even an economic sense. Substantial labour and expenditure have been employed to convert water as common (or state) property into private property. This would not mean that a particular volume of water on a yearly basis would be assured, but it would mean that the right to *continue to enjoy the right* to be included in the allocation mechanism is a property right on the same basis — provided, of course, that the conditions for continued enjoyment are not breached. Thus, what is at issue is not a right to water per se, but a right to participate in the allocation mechanism.

This is a norms-based theory; Locke's claim was founded in natural law. In modern economies property rights exist, and have their roots in natural law. However, the denormalisation of law has, in this politicised realm, demanded alternative rationalisations of property rights, and these are typically founded in economic theory. A property right is the foundation of a market economy, so property or quasi-property rights are created in order to facilitate market transactions. Threats to property rights harm the market economy because they adversely affect confidence in the security of the market and the economy as an institution. Up to that point, Locke and the market deliver similar results — the institutionalisation of property rights. Indeed, Locke's analysis of the value of cultivated land, enriched with labour, over uncultivated common property is at its core an economic one. The enclosure of land which was then allowed to waste is not justified in either economic or Lockean theory. In economic theory, the market will eventually shift the property to one more able to profit from it; in Lockean theory, this offends the common law of nature. If the produce of the land, rather than being allowed to rot, was traded for another product, or for something that was not perishable, this was the natural course of things, and a reflection of a social agreement or compact as to the value of money:

But since gold and silver, being little useful to the life of man in proportion to food, raiment, and carriage, has its value only from the consent of men, whereof labour yet makes, in great part, the measure, it is plain, that men have agreed to a disproportionate and unequal possession of the earth, they having, by a tacit and voluntary consent, found out, a way how a man may fairly possess more land than he himself can use the product of, by receiving in exchange for the overplus gold and silver, which may be hoarded up without injury to any one; these metals not spoiling or decaying in the hands of the possessor. [Locke 1690, sec 50.]

Land and water rights in Australia were commonly assigned on the basis of these principles. They were based on an understanding of the amount of land and water that would be sufficient for a family, and were subject to conditions on use. At the time, settlor, state and national priorities were broadly concurrent (although, of course, broadly *inconsistent* with Indigenous land uses). The use of land and water by settlers was consistent with state-ascribed uses, tendering payment for water regardless of reception of the benefit. Later analyses of land capacity demonstrated significant defects in the initial system of land and water allocation, compounded by continuing errors in allocating small allotments on marginal ground. The justification for property rights in land was clearly linked to the justification that the land be *used*. The utilisation of land was linked to national and state priorities — that the land should be cultivated, should be enriched with labour, and should no longer be useless.

Modern ideas of the value of agriculture and the value of land in its natural state, however, have undermined the traditional justification of private property. Whereas this has not yet undermined full land title (although it has strengthened the argument for significant controls on land use), it is able to diminish long-established systems of water 'rights' and replace them with unbundled services able to be traded separately from land on a market basis. The actual quantity of water remains dependent on availability, as it did in the past, but the water is measured as a 'share' of available water.

Water re-allocation mechanisms in Australian domestic law

As has already been indicated, the dominant contemporary theme in water resource management has been the adoption of a market paradigm (CoAG 1995; CoAG 2004; NWC 2010). This has been consistent across jurisdictions since the mid-1990s, driven by reforms mandated by the CoAG endorsement of the Productivity Commission Reforms, which prioritise market principles as a mechanism to deliver efficiency. The competition policy reforms brought about by the CoAG agreement in the early 1990s aimed to structurally reform public monopolies and introduce competition in key markets (Tamblyn 2004, 2). The overall tenor of reform as it relates to irrigators has been the introduction of market mechanisms by which, theoretically, water will move to the most efficient use (Environment and Natural Resources Committee 2001, 221), although the effectiveness of market mechanisms to deliver these goals is the subject of debate (Warner and Gerbasi 2007; Trawick 2003).

Interstate consistency in water governance is a relatively new phenomenon; originally, legislative power over water was not reposed in the federal government, and water administration has historically and legally been considered a matter for the states. Section 100 of the Constitution contained an express reservation that '[t]he Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation'. Nevertheless, cooperative management of water in the Murray–Darling Basin has been a significant force: pressure for the adoption of an agreement for management of the Basin preceded Federation (Harvey 2006). The first intergovernmental agreement concerning the waters of the River Murray occurred in 1915, and the River Murray Commission was established in 1917 and was replaced in 1988 by the Murray–Darling Basin Commission, and most recently in 2008 by the Murray–Darling Basin Authority (*Water Act 2007* (Cth), s 171). Cooperative management, however, has not prevented overallocation of water.

The more recent reforms have delivered long-term consequences for infrastructure development and maintenance. Infrastructure for both domestic and productive use

is provided on a 'user pays' basis, and where that infrastructure is considered to be unviable it will be closed down or required to be maintained privately. Thus, the consequences of the adoption of market models in relation to water provision are that water resource decisions are made on an individual basis; risk is individualised, not collectivised, and long-term cushioning of the more serious welfare-related outcomes — farm viability concerns due to increasing water delivery costs, water exiting irrigation districts due to permanent transfer and consequent increases in infrastructure costs, reduced channel viability, increased council rate burdens falling disproportionately on remaining irrigators — occurs as part of the longer-term process of 'structural adjustment' upon which the farm policies of advanced liberalism are based. This process relies upon market signals to move farmers from marginal enterprises to more economically viable ones.

Although various of these market-based reforms have been adopted for some time — including the corporatisation of water authorities, the tradeability of water separately from land, and the adoption of the user-pays principle — the most recent consequences of marketisation have been that, in March 2007, the largest irrigation water supplier in Victoria, Goulburn–Murray Water, imposed 'basin pricing' strategies, intended to recover from customers the cost of water harvesting and storage services (GMW 2008, 24). Separate registration of water share details was enabled on 1 July 2007. Water rights shown on registers as being associated with particular land as at that date became separately tradeable as water shares. On the same date, the reforms have reposed in irrigators an altered form of water entitlement. What was previously called a 'water right' now amounts to a set of 'unbundled' products — a water share, water use and a delivery capacity share — as promised by the White Paper on water (DSE 2004) and introduced by the *Water (Resource Management) Act 2005* (Vic). This process also included the removal of the separate 'stock and domestic' water entitlement.

In parallel processes, rationalisation of irrigation infrastructure was commenced to reduce the areas being irrigated. The Department of Sustainability and Environment had noted that 'some parts of existing distribution systems need to be closed down. They were constructed in an era of bold development and in some places are just too spread out, as well as being on land that has turned out to be unsuited to irrigation' (Department of Sustainability and Environment 2004, 82). Reconfiguration, modernisation and 'irrigation renewal' programs have employed a combination of mechanisms, including the provision of on-farm efficiency works in return for 'retiring' unnecessary infrastructure and the privatisation of irrigation infrastructure by agreement with irrigators or, in the absence of agreement, statutory authority to close down infrastructure. The most critical of these processes, administered under the Northern Victorian Irrigation

Renewal Program (NVIRP), has been the projected retreat to the 'backbone' — the provision of state-maintained infrastructure only to irrigators on certain channels (based on water share held on those channels) and 'connections back' to the backbone by as yet undefined processes. These innovations are projected to result in 'new water' — water saved through efficiency gains, which will then be transferred to irrigator, environmental and urban use.

In the context of a continuing water shortage and increasing farm exits, many irrigators are retaining their land only by selling their water entitlements. There are serious repercussions when vendors with large water entitlements, particularly in gravity irrigation districts, sell their permanent water entitlements. The problem of 'stranded assets' arises, where a small number of irrigators remain on a channel and must pay the cost of the infrastructure. In irrigation systems currently being rationalised, this decision could result in a channel closing, and the loss of irrigation in that area. What were previously 'stock and domestic' entitlements are to be maintained again by ill-defined processes of 'connection back' — presumably through the construction of pipes with metered outlets. However, these issues are defined as 'modernisation', 'rationalisation' and 'renewal'. Farm exits are 'structural adjustments', the pain of which is to be alleviated by 'structural adjustment mechanisms' such as grants to community groups to enable 'community adaptation' and 'empowerment', or to enable remaining farmers to modernise their on-farm infrastructure. A frequent justification for water reallocation to urban use is the contribution by urban authorities — on the basis that it will be recouped from water consumers — to the irrigation renewal program (Ker 2010).

The overarching argument is that it is not 'their' — the irrigators' — water. The water belongs to the state, and there is no canvassing of the arguments that the cost of water was included in the price of irrigated land, that on- and off-farm irrigation infrastructure has been constructed and paid for by irrigators, and that irrigators are now being required to maintain on a private basis infrastructure that is provided by the state in urban areas. The main normative argument that has arisen in relation to this debate has been the projected increase in the cost of water for urban users, and the impact of that on vulnerable urban customers. The debate has deployed virtually no normative language. Recent case law arising from broader water reforms has continued this coy trend: in neither *Arnold v Minister Administering the Water Management Act 2000*, 2010, nor *ICM Agriculture Pty Ltd v Commonwealth*, 2009, have normative arguments played a significant part. Oversight arrangements in Victoria (the Essential Services Commission) and federally (the Australian Competition and Consumer Commission) are largely required to ensure that market mechanisms operate effectively (Rochford 2008).

De-normatising law

The 'denormalisation' of law has been expressed as a problem of modernity; Bell notes that '[t]he real problem of *modernity* is the problem of belief. To use an unfashionable term, it is a spiritual crisis, since the new anchorages have proved illusory and the old ones have become submerged' (Bell 1996, 28). He cites the lack of 'a political philosophy that justifies the normative rules of priorities and allocations of the society'. Kassiola notes that this lack arises because of 'value noncognitivism' — a 'rejection of normative knowledge as beyond human cognition' (Kassiola 1990, 91) — and its replacement by non-normative mechanisms such as the market. Whereas key theorists such as Cohen evoke democratic will formation as the basis of democratic legitimacy and the normative foundation of liberalism (Cohen 1988), he also notes the process of the 'uncoupling of positive legal norms from the body of private morality' (Cohen and Arato 1992, 353). A failure in the perceived legitimacy of democratic will formation, or alternatively a residual normative basis for positive rules, can evoke a crisis of legitimacy. This is particularly the case where major systemic shifts are occurring in the allocation of resources — as will occur with redistribution of water resources — where prior allocations have been legitimated by legal norms, habitual use, tradition and culture, and personal interest.

The role of law in liberal theory tends to focus on its denormalised nature — its legitimacy, it is theorised, is no longer grounded in positive norms, but in democratic will formation based on communication in an idealised 'public sphere' (Habermas 1989). 'A common will ... is not given from the beginning and "discovered", but is formed in a process of deliberation and negotiation where new perspectives may be taken into account, new information added, preferences changed, and so on' (Jacobsson 1997, 70).

However, law does not only require legitimisation; in society it is a site for the reproduction of cultural norms — a legitimising institution in itself. The conservatism of law resists the denormalising pull of modernity (Delaney 2003, 133). Although Habermas asserts that discursive will formation does not require a basis of consensus, but 'refers to the stabilization of mutual behavioral expectations in the case of conflict or to the choice and effective realization of collective goals in the case of cooperation' (Habermas 1989, 145), this does not account for the primary conservatism of the law which does not *only* take account of discursively mediated norms, but gives normative weight to pre-modern institutions. In other words, the project of modernity is not yet complete.

In the incomplete project of modernity, claims to validity work against norms which are not absent, but are only silenced. The silencing of normative values because they have been *overwritten* by legitimising principles which are, it is argued, shorn of

normative force does not render the silenced principle less valid. It merely locates a sphere of social interaction in which the processes of democratic will formation are distorted by power and authority.

The use of procedural legitimacy as the primary claim to legitimacy has been noted in modern democracies (Tribe 1980; Ely 1980). There is peculiar resistance to the idea of normative force *beyond* democratic mandate. In Australia, the idea of a 'fundamental' set of principles has been upheld in some case law, but typically it is limited to the necessity that the Constitution be interpreted in a manner which enables full democratic participation through 'free political speech' (*Lange v Australian Broadcasting Corporation*, 1997; *Levy v Victoria*, 1997; *Coleman v Power*, 2004; but contrast *Langer v Commonwealth*, 1996; *McGinty v Western Australia*, 1996). Other exceptions to that principle have been typified by fair process or separation of powers doctrines (*Attorney-General of the Commonwealth v R*; *Ex parte Australian Boilermakers' Society*, 1957), but have been limited in their resonance as a source of individual rights. The incorporation of values stripped of democratic force was described by Ely:

Contrary to the standard characterisation of the Constitution as 'an enduring but evolving statement of general values', ... in fact the selection and accommodation of substantive values is left almost entirely to the political process and instead the document is overwhelmingly concerned, on the one hand, with procedural fairness in the resolution of individual disputes (process writ small), and on the other, with what might capaciously be designated process writ large — with ensuring broad participation in the processes and distributions of government. [Ely 1980, 87.]

Tribe notes that 'it is not difficult to show that the constitutional theme of perfecting the processes of governmental decision is radically indeterminate and fundamentally incomplete' (Tribe 1980, 1063). He sites his arguments in US constitutional law, instantiating substantive commitments including religious freedom and the protection of property rights. These, he argues, are 'social institutions and substantive values' (Tribe 1980, 1067), and inconsistent with the argument that the Constitution is predominantly concerned only with process. Similarly, in Australian popular commentary on justice and property rights, it is clear that natural law theories retain some purchase. However, these are not explicitly guaranteed by constitutional force, and implied constitutional rights are limited in their application. The Australian Constitution constructs the machinery of government which conforms to protective principles such as the separation of powers, the division of legislative responsibility, responsible and representative government, popular sovereignty, and judicial review (recently considered in *Kirk v Industrial Relations Commission*; *Kirk Group Holdings Pty Ltd v WorkCover Authority of New South Wales (Inspector Childs)*, 2010). However, explicit rights — aside from that of compensation on just terms — are limited to the

right to vote, freedom of religion (s 116) and trial by jury (s 80). Free trade principles are expressed normatively (the freedom of interstate trade in s 92, and the prohibition against interstate discrimination in s 117). Implied rights have included freedom of political speech and the rule of law (*Chu Kheng Lim v Minister for Immigration*, 1992). Significant agitation from civil rights groups for the development of a Bill of Rights in Australia (HREOC 2009) has met opposition from many distrustful of judicial incorporation of 'values' into law.

The most relevant of the constitutional guarantees, and the one recently litigated in relation to water, is appropriation on just terms. In the Australian Constitution itself, appropriation on just terms has its roots in older constitutions, whose justifications were based on normative theory. Whereas the right of the state to resume property is acknowledged in most jurisdictions, it is constrained by the requirement of just compensation. In US jurisprudence, the concept of eminent domain has received extensive commentary. In *Piedmont Triad Regional Water Authority v Unger*, 2002 (at 572), the court noted that 'the power of eminent domain is inherent to the sovereign and recognized by all fifty states and the federal government'. However, the power of the state is subject to the requirement to provide compensation — a right 'designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole' (*Armstrong v United States*, 1960, at 49). The US guarantee of compensation for takings has been sourced to statements of fundamental rights — the Magna Carta, Blackstone and Locke (Christie 2007). The US Constitution was considered to be part of the heritage of the 'rights of Englishmen' (McDonald 1985, 13), including the right to be secure in 'person, property and privileges' (Kmiec 1991). The right to compensation for expropriation of water was applied in *Casitas Municipal Water District v United States*, 2008 (see Christie 2007).

Australia, settled later and in a different intellectual climate, considered the guarantee of 'just terms' belatedly, and apparently in response to the fear that the federal government would, without a constitutional right to acquire, be 'crippled in its future operations if express power were not given in the manner suggested' (Quick 1898, 152). The requirement of 'just terms' seemed, according to Patapan (1997), to be 'good business sense', rather than a desire to protect the rights of the individual and the state. The constitutional guarantee has been broadly defined, but has not been applied to the expropriation of water since water administration is primarily a matter for the states, which do not, in general, have the same constitutional guarantee. However, the federalisation of water resource management by the CoAG reform process and by the enactment of the *Water Act 2007* (Cth) invited attempts by aggrieved landholders who had experienced reduction in their water allocations to seek recourse on constitutional grounds from the High Court. In *ICM Agriculture*

Pty Ltd v Commonwealth, the basis of the applicants' argument was that the object of a funding agreement between New South Wales and the Commonwealth would result in an acquisition of property by the Commonwealth on otherwise than just terms. Although the Commonwealth conceded that 'structural adjustment payments' made by the NSW government would not amount to 'just terms' under the Constitution (at [7]), the court held that the agreement did not amount to an 'acquisition'. The court stated:

... the replaceable and fugitive nature of groundwater; that the licences in issue are a creature of statute and inherently fragile; that groundwater has not hitherto been thought to be a subject of property; and that the rights vested in the State are statutory rights for the purpose of controlling access to a public resource ... all point towards the conclusion that the State gained no identifiable or measurable advantage from the steps that have been taken with respect to the plaintiffs' water licences and entitlements. [*ICM* at [149].]

Arnold v Minister Administering the Water Management Act 2000, decided immediately after *ICM*, came to the same conclusion. The High Court in *ICM* emphasised the 'common' nature of water and noted that the creation of the facility for transfer of allocations could amount to a proprietary right, but in *ICM* the right was 'inherently susceptible of variation' — insufficiently permanent and thus not proprietary in nature (French CJ, Gummow and Crennan JJ). Justices Hayne, Kiefel and Bell distanced themselves from the policy implications of the decision:

The determinative issue in this case is constitutional. That issue neither requires nor permits consideration of any of the large and difficult policy questions that may lie behind the legislative and executive acts which give rise to this proceeding. [At [90].]

Only Justice Heydon, in dissent in *ICM*, considered the policy aspects of the constitutional provision, noting that '[a] democratic electorate would not regard expropriation without compensation in time of peace with equanimity' (at [177]). However, beyond the 'simple protection' of the public, his Honour cited (at [177]) Hayek's attestation of the 'fundamentally significant' function:

The principle of 'no expropriation without just compensation' has always been recognised wherever the rule of law has prevailed. It is, however, not always recognised that this is an integral and indispensable element of the principle of the supremacy of the law. Justice requires it; but what is more important is that it is our chief assurance that those necessary infringements of the private sphere will be allowed only in instances where the public gain is clearly greater than the harm done by the disappointment of normal individual expectations. The chief purpose of the requirement of full compensation is indeed to act as a curb on such infringements of the private sphere and to provide a means of ascertaining

whether the particular purpose is important enough to justify an exception to the principle on which the normal working of society rests. [Hayek 1960, 217–18.]

Justice Heydon linked his argument pointedly to the political question:

The requirement to provide just terms thus compels the legislature to consider the true cost of the legislation, not merely the political pain to be endured, which, where the persons whose property is being acquired have little electoral weight, may be quite small. [At [177].]

His sideways hint that decisions on resource allocation have been made on political grounds — on the basis that the applicants had little electoral weight — illustrates the converse of ethical resource allocation decisions and suggests policy making on the grounds of expedience, echoing Toohey's comment that:

Usually, Labor governments get the wobbles if they risk losing seats by adopting good public policies. But the Gillard government holds no seats in the Murray–Darling basin. It does risk losing a couple in Adelaide, though, if it keeps surrendering to the basin's irrigators. Gillard could save the budget almost \$10 billion and still do the right thing by the Murray–Darling water systems without losing a seat. [Toohey 2010.]

This demands a review of the role of norms in political decision-making, which will not be addressed here. It is sufficient to note that the absence of normative language in the legal questions of resource allocation is problematic.

Conclusions

The Preamble to the European Union Water Framework Directive (2000) (European Parliament and Council 2000) states that '[w]ater is not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such'. Constitutional protections such as those existing in South Africa, Argentina and India keep the rights questions at the forefront of the question of allocation. US processes of adjudication on rivers, language requiring 'beneficial use', and a generally litigious process of reallocation involve the assertion of private rights which are framed in the normative context of rights. Australia, however, has eschewed the 'rights' discourse in water allocation regimes. In Victoria, even the previous terminology of 'water rights' has been replaced with the 'unbundled' *products* made up of water share, water use and delivery capacity share, tradeable on a market and separable, to an extent, from land. The geographical connection with land has also been severed, according to the premise that water be tradeable interstate and interbasin on a 'grid'. Thus, the 'heritage' value of land has also been diminished (contrast Solis, who described agriculturalists' loss of water from agricultural land to urban centres in language such as 'irreconcilable loss') (Solis 2005, 62).

The market is an apparently neutral water allocation mechanism. Water moves only from willing sellers to willing buyers, and when the market is fully enabled there will no longer be a focus for non-economic arguments. However, the market delivers only efficiency and, as Neutze notes, 'efficiency is essentially an interim objective and economics has little to say about what resources should be efficiently used for, nor whether the pursuit of efficiency might compromise some of the final objectives such as equity and environmental quality' (Neutze 2000, 197). He notes that '[m]any writers, including many economists, recognize that equity is an important social objective, but it has by no means been universally incorporated in to economic analysis' (Neutze 2000, 201). Arguments about equity are, according to Neutze, overlooked as 'value judgements' in order to make the discipline more 'scientific'. They are considered to be the province of politicians. However, as politicians are informed by economists, where are those value judgements to be made?

It should be noted that the foregoing is expository only: What is the nature of a rights claim if there is no remedy, if it remains an inchoate right? In a modern, instrumentalist, utilitarian approach to resource allocation, economic efficiency is the only rights claim. It is useful to consider Freyfogle's assertion that:

... private property is a form of power over *people*, not *land* ... [and] private property exists to the extent it is authorized and supported by law. Maybe the law is morally legitimate, maybe it is not. But it is law that defines property rights. Take away the law, take away the public power, and the property rights no longer exist. [Freyfogle 2006, 12.]

Every landowner or owner of a water allocation subject to resumption or diminution by the state knows this. However, distancing claims of right from rights claims is problematic, and should be addressed, because questions of distribution of power *are* normative questions. ●

References

Australian cases

Arnold v Minister Administering the Water Management Act 2000 (2010) 240 CLR 242; [2010] HCA 3

Attorney General of the Commonwealth v R; Ex parte Australian Boilermakers' Society (1957) 95 CLR 529

Chu Kheng Lim v Minister for Immigration (1992) 176 CLR 1

Coleman v Power (2004) 220 CLR 1

ICM Agriculture Pty Ltd v Commonwealth (2009) 240 CLR 140; [2009] HCA 51

Kirk v Industrial Relations Commission; Kirk Group Holdings Pty Ltd v WorkCover Authority of New South Wales (Inspector Childs) (2010) 239 CLR 531; [2010] HCA 1

Lange v Australian Broadcasting Corporation (1997) 189 CLR 520

Langer v Commonwealth (1996) 186 CLR 302

Levy v Victoria (1997) 189 CLR 579

McGinty v Western Australia (1996) 186 CLR 140

English case

Embrey v Owen (1851) 6 Exch 353

South African case

Mazibuko v City of Johannesburg [2009] ZACC 28

United States cases

Armstrong v United States, 364 US 40; 4 LEd2d 1554 (1960)

Casitas Municipal Water District v United States, Case No 2007-5153 (Federal Circuit, 25 September 2008)

Piedmont Triad Regional Water Authority v Unger, 154 NCApp 589, 572 SE2d 832 (2002)

Australian legislation

Murray–Darling Basin Act 1992 (NSW)

Water Act 2007 (Cth)

Water (Governance) Act 2006 (Vic)

Water (Resource Management) Act 2005 (Vic)

International legal materials

International Covenant on Economic, Social and Cultural Rights, GA Res 2200A (XXI), 21 UN GAOR Supp (No 16) at 49, UN Doc A/6316 (1966); 993 UNTS 3; 6 ILM 368 (1967)

Universal Declaration of Human Rights, GA Res 217A (III), UN Doc A/810 (1948)

Other references

ABC News (2010) 'Report says irrigation cuts to slash jobs', 6 August [Online] Available: <www.abc.net.au/news/stories/2010/08/06/2975836/htm> [2010, August 9]

Beavis S G, Roberts J and Ellis D J (2010) *Water-dependent Ecosystems: The Consequences of Irrigation Infrastructure Refurbishment*, Waterlines Report, National Water Commission, Canberra

Bell D (1996) *The Cultural Contradictions of Capitalism* BasicBooks, New York

Bleisch B (2006) *The Human Right to Water — Normative Foundations and Ethical Implications* [Online] Available: <<http://ethique-economique.net/>> [2010, February 4]

Bluemel E B (2004) 'The implications of formulating a human right to water' 31 *Ecology Law Quarterly* pp 957–1006

Christie D R (2007) *A Tale of Three Takings: Taking Analysis in Land Use Regulation in the United States, Australia and Canada* [Online] Available: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=%20882096> [2010, February 9]

Cohen J (1988) 'Discourse ethics and civil society' 14 *Philosophy and Social Criticism* pp 315–37

Cohen J and Arato A (1992) *Civil Society and Political Theory* Massachusetts Institute of Technology

Consumer Law Centre Victoria and Environment Victoria (2005) *Water: Access, Affordability and Sustainability: Issues Paper*

Cooper H (2010) 'Murray–Darling plan gets fiery reception' *Lateline* Australian Broadcasting Corporation, 14 October [Online] Available: <www.abc.net.au/lateline/content/2010/s3038842.htm> [2010, November 17]

Council of Australian Governments (CoAG) (1995) *Intergovernmental Agreement on a National Water Initiative between the Commonwealth of Australia and the Governments of New South Wales, Victoria, Queensland, South Australia, the Australian Capital Territory and the Northern Territory* [Online] Available: <www.coag.gov.au/meetings/250604/index.htm#water_initiative> [2010, February 4]

Council of Australian Governments (CoAG) (2004) *Intergovernmental Agreement on a National Water Initiative between the Commonwealth of Australia and the Governments of New South Wales, Victoria, Queensland, South Australia, the Australian Capital Territory and the Northern Territory* [Online] Available: <<http://nwc.gov.au/resources/documents/Intergovernmental-Agreement-on-a-national-water-initiative.pdf>> [2010, March 3]

Delaney D (2003) *Law and Nature* Cambridge University Press, Cambridge

Department of Sustainability and Environment (DSE) (2004) *Our Water Our Future: Securing Our Water Future Together* Parliament of Victoria, Melbourne

Department of the Prime Minister and Cabinet (2006) *National Water Initiative – Water Trading Study, Final Report, Department of the Environment, Water, Heritage and the Arts* Australian Government [Online] Available: <www.environment.gov.au/water/publications/action/nwi-wts-report.html> [2009, March 17]

Edmonds M and Higginbottom N (2008) 'Farmers oppose north–south pipeline' *Herald Sun*, 3 October [Online] Available: <www.heraldsun.com.au/news/pipeline-land-grab-fury/story-0-111117650102> [2010, February 8]

Ely J (1980) *Democracy and Distrust* Harvard University Press, Harvard

England I (2009) *Corrective and Distributive Justice* Oxford University Press, Oxford

Environment and Natural Resources Committee (2001) *Inquiry into the Allocation of Water Resources* Parliament of Victoria, Melbourne

European Parliament and Council (2000) *Establishing a Framework for Community Action in the Field of Water Policy* European Parliament and Council Directive 2000/60/EC, 23 October

Freyfogle E T (2006) 'Goodbye to the public–private divide' (Winter) *Environmental Law* pp 7–24

Friedman L M (1975) *The Legal System: A Social Science Perspective* Russell Sage Foundation, New York

Goulburn Murray Water (GMW) (2008) *Goulburn–Murray Water Annual Report 2007–08* [Online] Available: <www.g-mwater.com.au/downloads/Annual_Reports/G_MW_2007_08_Annual_Report.pdf> [2010, February 1]

Goulburn Murray Water (GMW) (2009) 'G-MW Board suspends Pyramid-Boort WSC after 12 months of review' [Online] Available: <www.g-mwater.com.au/news/media-releases/2009_media_releases_/mr_g-mw_board_suspends_pyramid_boort_wsc_after_12_months_of_review.html> [2010, February 8]

Habermas J (1989) 'Towards a communication-concept of rational collective will formation: a thought experiment' 2 *Ratio Juris* pp 144–54

Hardberger A (2006) 'Whose job is it anyway? Governmental obligations created by the human right to water' 41 *Texas International Law Journal* pp 533–68

Harvey A (2006) 'The Murray–Darling Basin Agreement: an illustration of the benefits of transboundary water management strategies', Macro Center Working Papers, Center for Macro Projects and Diplomacy

Hayek F A (1960) *The Constitution of Liberty* University of Chicago Press, Chicago

Herald Sun (2008) 'Mother of two frogmarched off Yea farm after pipeline protest', 25 September [Online] Available: <www.heraldsun.com.au/news/victoria/mum-arrested-in-water-storm/story-e6frf7kx-1111117577971> [2009, November 8]

Higginbottom N (2008) 'Brumby guards bully senior' *Herald Sun*, 26 September [Online] Available: <www.heraldsun.com.au/news/brumby-guards-bully-senior/story-0-1111117593319> [2010, February 8]

Human Rights and Equal Opportunity Commission (HREOC) (2009) *Let's Talk About Rights – Human Rights Act for Australia* [Online] Available: <www.hreoc.gov.au/letstalkaboutrights/index.html> [2010, March 4]

Jacobsson K (1997) 'Discursive will formation and the question of legitimacy in European politics' 20(1) *Scandinavian Political Studies* pp 69–90

Kassiola J J (1990) *The Death of Industrial Civilization* State University of New York Press, Albany

Ker P (2010) 'Water firm high and dry as Libs plug pipe' *The Age*, 1 December [Online] Available: <www.theage.com.au/victoria/state-election-2010/water-firm-high-and-dry-as-libs-plug-pipe-20101130-18fb2.html> [2010, December 21]

Kmiec D W (1991) 'The coherence of the natural law of property' 26 *Valparaiso University Law Review* pp 367–84

Levinson L H (1998) 'The legitimate expectation that public officials will act consistently' 46 *American Journal of Comparative Law* pp 549–76

Lloyd G (2010a) 'The drought breaks' *The Australian*, 13 November [Online] Available: <www.theaustralian.com.au/national-affairs/the-drought-breaks/story-fn59niix-1225952583089> [2010, November 13]

Lloyd G (2010b) 'Great dividing rage over water' *The Australian*, 23 October [Online] Available: <www.theaustralian.com.au/news/opinion/great-dividing-rage-over-water/story-e6frg6zo-1225942074914> [2010, November 17]

Locke J (1690) *Second Treatise on Government*, from e-book Project Gutenberg, EBook #7370, text derived from the 1690 edn [Online] Available: <www.gutenberg.org/files/7370/7370-h/7370-h.htm>

McCaffrey S (1992) 'The human right to water: domestic and international implications' 5 *Georgetown International Environmental Law Review* pp 1–24

McDonald F (1985) *Novus Ordo Seclorum: The Intellectual Origins of the Constitution* University Press of Kansas, Lawrence

McKernan M (2010) 'Coming to terms with the reality of a land burnt dry' *The Australian*, 13 November [Online] Available: <www.theaustralian.com.au/national-affairs/coming-to-terms-with-the-reality-of-a-land-burnt-dry/story-fn59niix-1225952595679> [2010, November 14]

Millar R (2008) 'Payback time as state dumps water plan critic' *The Age*, 26 September [Online] Available: <www.theage.com.au/national/payback-time-as-state-dumps-water-plan-critic-20080925-4o4e.html> [2010, February 8]

Murray–Darling Basin Authority (MDBA) (2010a) *Guide to the Proposed Basin Plan* [Online] Available: <<http://thebasinplan.mdba.gov.au/guide/>>

Murray–Darling Basin Authority (MDBA) (2010b) ‘MDBA to commission further study of local community impacts’, media release, 17 October

Murray–Darling Basin Ministerial Council (1995) *An Audit of Water Use in the Murray Darling Basin*

National Water Commission (NWC) (2010) *The Impacts of Water Trading in the Southern Murray–Darling Basin: An Economic, Social and Environmental Assessment* Canberra

Neutze M (2000) ‘Economics, values and urban Australia’, in P Troy *Equity, Environment, Efficiency* Melbourne University Press, Melbourne pp 196–222

Northern Victoria Irrigation Renewal Project (NVIRP) (nd) ‘Connecting to the backbone’ [Online] Available: <www.nvirp.com.au/the_project/the_backbone.aspx> [2010, April 21]

Parliament of Victoria, Legislative Assembly (2009) *Parliamentary Debates (Hansard)*, Fifty-Sixth Parliament, First Session, 10 November, Melbourne

Parliament of Victoria, Legislative Council (2009) *Parliamentary Debates (Hansard)*, Fifty-Sixth Parliament, First Session, 25 November, Melbourne

Patapan H (1997) ‘The dead hand of the founders? Original intent and the constitutional protection of rights and freedoms in Australia’ 25(2) *Federal Law Review* pp 211–36

Quick J (1898) *Official Record of the Debates of the Australasian Federal Convention Third Session*, 20 January–17 March, Melbourne

Rochford F (2004) ‘Private rights to water in Victoria: farm dams and the MDBC cap’ 9 *Australasian Journal of Natural Resources Law and Policy* pp 229–53

Rochford F (2008) ‘Sustainable rural water delivery: balancing resource and social sustainability’ 12 *Australasian Journal of Natural Resources Law and Policy* pp 59–85

Salman S M and Bradlow D D (2006) *Regulatory Frameworks for Water Resources Management: A Comparative Study* The International Bank for Reconstruction and Development/The World Bank, Washington DC

Salman S M and McInerney-Lankford S (2004) *The Human Right to Water — Legal and Policy Dimensions* The International Bank for Reconstruction and Development/The World Bank, Washington DC

Shupe S J, Weatherford G D and Checchio E (1989) 'Western water rights: the era of reallocation' 29 *Natural Resources Law Journal* pp 413–34

Solis P (2005) 'Water as rural heritage: reworking modernity through resource conflict in Edwards County, Kansas' 21 *Journal of Rural Studies* pp 55–66

Steffen W, Sims J, Walcott J and Laughlin G (2010) 'Australian agriculture: coping with dangerous climate change' *Regional Environmental Change* [Online] Available: <www.springerlink.com/content/c0600031q3574k40/> [2010, November 10]

Stubbs J, Storer J, Lux C and Storer T (2010) *Exploring the Relationship Between Community Resilience and Irrigated Agriculture in the MDB: Social and Economic Impacts of Reduced Irrigation Water*, report (Stubbs Report), 4 July [Online] Available: <www.cotton.crc.org.au/content/General/Research/Projects/3_03_05.aspx> [2010, August 9]

Tamblyn J (2004) 'Future challenges facing regulators — a Victorian perspective' ACORE/REGNET/School of Economics Seminar Series

Toohy B (2010) 'Rethinking the Murray–Darling buybacks' *The Australian*, 3 November [Online] Available: <<http://inside.org.au/rethinking-the-Murray-Darling-buybacks/>> [2010, November 17]

Trawick P (2003) 'Against the privatization of water: an indigenous model for improving existing laws and successfully governing the commons' 31 *World Development* pp 977–96

Tribe L H (1980) 'The puzzling persistence of process-based constitutional theories' 89 *Yale Law Journal* pp 1063–80

United Nations Committee on Economic, Social and Cultural Rights (2002) *General Comment No 15*

Uren D (2010) 'Chairman concedes limitations of report' *The Australian*, 9 October [Online] Available: <www.theaustralian.com.au/national-affairs/climate/chairman-concedes-limitations-of-report/story-e6frg6xf-1225936209376> [2010, November 17]

Victorian Auditor-General's Office (2010) *Irrigation Efficiency Programs*, June [Online] Available: <www.audit.vic.gov.au/reports_publications./reports_by_year/2009-10/20100906_irrigation_efficiency.aspx>

Warner M E and Gerbasi J (2007) 'Privatization, public goods and the ironic challenge of free trade agreements' 39(2) *Administration and Society* pp 127–49

Wilson L (2010) 'Water cuts will go ahead despite impact study, says Murray Darling Basin chief' *The Australian*, 19 October [Online] Available: <www.theaustralian.com.au/national-affairs/water-cuts-will-go-ahead-despite-impact-study-says-Murray-Darling-basin-chief/story-fn59niix-1225940632671> [2010, November 15]

Wilson L and Lloyd G (2010) 'Farmer has some water advice for ministers' *The Australian*, 21 October [Online] Available: <www.theaustralian.com.au/national-affairs/farmer-has-some-water-advice-for-ministers/story-fn59niix-1225941432382> [2010, November 17]

World Health Organization (2003) *The Right to Water* World Health Organization, Geneva