TRENDS IN THE RECOGNITION OF INDIGENOUS WATER NEEDS IN AUSTRALIAN WATER REFORM: THE LIMITATIONS OF 'CULTURAL' ENTITLEMENTS IN ACHIEVING WATER EQUITY

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In this article, we analyze the disparity in access to water resources between indigenous and non-indigenous Australians, the regional differences in the effectiveness of indigenous strategies to assert and negotiate their interests in this reform process and the consequent regional disparity in indigenous water rights recognized or contemplated in policy and at law. We provide a case study of New South Wales' (hereafter NSW) only Cultural Access Licence held by the Nari Nari Tribal Council of Hay to exemplify trends in the recognition of indigenous water rights. This case study raises questions not only about the efficacy of 'cultural' entitlements but also matters of equity, particularly the transaction costs that indigenous groups may bear when accessing water under this special measure. In light of these limitations, we ask whether a group like the Nari Nari Tribal Council could satisfy their diverse and evolving water management strategies by alternate means or must they and other indigenous groups rely upon an obscure and restrictive form of entitlement that privileges pre-colonial practices? Two distinct possibilities are environmental water allocations and commercially valuable tradeable licences. For either to work, governments would need to commit to reallocating entitlements to indigenous people with direct purchase of entitlements from willing sellers being the least contentious. Strategies that seek indigenous participation in mainstream environmental water management along with substantive water property rights to underpin economic activity are more likely to result in a reallocation of water to meet the needs of indigenous populations than 'cultural' entitlements.

INTRODUCTION

In the last decade, much of which has been marked by drought, Australian governments have developed a legal and policy framework to reform water governance and management.[3] Australian governments have embarked on a program to transform a flawed system of water allocations and entitlements across seven jurisdictions under the Australian federation into a more sophisticated national system aimed at achieving sustainable management and use of water resources.[4] To meet these aims, governments have created, among other things, legal entitlements for environmental allocations and market-based trading instruments.[5] These reform initiatives have included attempts to improve access to water resources for Aboriginal and Torres Strait Islander (together and generally referred to as indigenous) people and to enhance their participation in water planning. In this article, we analyze the disparity in access to water resources between indigenous and non-indigenous Australians, the regional differences in the effectiveness of indigenous strategies to assert and negotiate their interests in this reform process, and the consequent regional disparity in indigenous water rights recognized or contemplated in policy and at law.

Indigenous people have a large stake in water resource management arising from their customary systems of resource management and governance, which are now partially recognized by the common law, and an extensive and growing land base under their control. Indigenous economic disadvantage provides further rationale for considering the socio-economic impacts of water reform. Governments have often allocated water entitlements with little regard or knowledge of indigenous interests and many indigenous people believe that water resource management is amplifying inequities.[6]

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3 Daniel Connell, Lisa Robins and Stephen Dovers 'Delivering the national water initiative – institutional roles, responsibilities, and capacities' in Karen Hussey and Stephen Dovers (eds) *Managing Water for Australia: the Social and Institutional Challenges* (CSIRO 2007) 127.

4 A water access entitlement is defined as a perpetual or ongoing entitlement to exclusive access to a share of water from a specified consumptive pool as defined in the relevant water plan, whereas a water allocation refers to the specific volume of water allocated to a specific water resource access entitlement in a given season, defined according to rules established in the relevant water plan. See National Water Commission *Entitlements, Allocations and Sustainable Yields* (2005) available at http://www.water.gov.au/IntegratedAssessment/Waterresourcedevelopmentinprioritygeographicareas/EntitlementsAllocationsAndSustainableYields/index.aspx?Menu=Level1_6_1_1.

5 M D Young and J C McColl 'Double trouble: the importance of accounting for and defining water entitlements consistent with hydrological realities (2009) 53(1) *The Australian Journal of Agricultural and Resource Economics* 19.

6 Sue Jackson, Poh-Ling Tan and Jon Altman 'Indigenous freshwater planning forum: proceedings, outcomes and recommendations' (Report to the National Water Commission 2009) available at http://nwc.gov.au/rnws/planning/indigenous-water-planning-forum/indigenous-water-planning-forum.

The current distribution of water entitlements in Australia is transparently inequitable. A comparison of indigenous land ownership and water entitlements demonstrates the extent of the inequity: indigenous people own almost 20 per cent of the country's land mass,[7] while indigenous specific water entitlements are at present such a minuscule figure that is estimated at less than 0.01 per cent of Australian water diversions.[8] This estimate of 'indigenous specific' water entitlements does not include provision of water under licence for irrigation, pastoral activities or industrial use which, although not well documented, is acknowledged as small in the agricultural heartland of Australia, the Murray-Darling Basin.[9] Provision of water for these licensed purposes is available to any Australian person or entity – whether indigenous or otherwise – to buy at market prices, or inherit with land titles granted prior to the separation of land and water titles.[10]

The Crown regulated the use of water and granted licences to settlers for more than 200 years before it recognized indigenous rights to land and water and, in the latter case, to a very limited extent. It is not simply the historically determined concurrence of colonial settlement and agricultural, pastoral and other land use patterns that exclude indigenous people from water entitlements and allocations, however. Unlike the US, where legal rights to water for indigenous people were recognized in 1909, in Australia it was not until the High Court decision of 1992 that native title was recognized.[11] After 1993, when federal legislation gave statutory recognition to native title, litigation led to recognition of hunting, gathering and fishing rights for the purposes of satisfying the personal, domestic or non-commercial needs of native title holders; they were recognized as part of the 'bundle' of legal rights and interests comprising native title.[12] While native title law has belatedly recognized the injustice done to indigenous people in dispossessing them of their land estates, there has been no similar recognition of water injustice. The allocation and more recent redistribution of water rights have failed to take into account indigenous needs.[13] According to Sheehan and Small,[14] this acute situation gives rise to the question: 'Is a new form of Aboriginal dispossession now subtly occurring?'

With the market-based water rights system now well-established in southern Australian regions, this inequity has become evident, especially in agricultural areas where the water resource is fully or over-allocated. Moreover, because in northern and central Australia indigenous claims to land have been far more successful than in the southern, eastern agricultural zones, and because water rights were attached to land titles, there is an emerging regional disparity between indigenous populations with respect to accessing water under policy and law. In north Australia, indigenous land holdings are very substantial, demand for water is low and seasonal availability high.[15] As new property is created in water in that region, providing opportunities to ensure that access is open to indigenous communities for commercial activities is high on the water policy agenda.

This article provides an analysis of the legal model for recognizing indigenous interests in water that has emerged from neo-liberal reforms to water governance, including the creation of property in water. This model rests on inclusion of indigenous interests within the statutory water law frameworks through two mechanisms: including indigenous representation and participation in multi-stakeholder water planning processes and granting of entitlements to indigenous groups to a 'cultural' allocation of water for non-consumptive purposes (hereafter referred to as a cultural entitlement).[16] Through the latter mechanism,

7 Jon Altman, Geoff Buchanan and Libby Larsen 'The environmental significance of the indigenous estate: natural resource management as economic development in remote Australia' (Centre for Aboriginal Economic Policy Research Discussion Paper No 286/2007 Australian National University 2007) 9. Altman, Buchanan and Larsen estimated that the indigenous estate constituted 16.0 per cent of the Australian landmass, while 0.5 per cent of the New South Wales landmass and 44.8 per cent of the Northern Territory land mass was owned by indigenous people or entities.

8 The NSW allocation under a Cultural Access Licence described below represents 0.002 per cent of Australia's total water consumed by agriculture, industry and households in 2000–01; see Ian Prosser (ed) *Water: Science and Solutions for Australia* (CSIRO Publishing 2011).

9 Jon Altman and Bill Arthur 'Water licences and allocations to indigenous people for commercial purposes: an Australia wide scoping exercise' (Report for the National Water Commission, Centre for Aboriginal Economic Policy Research 2009).

10 All Australian jurisdictions now allow water entitlements to be held independently of land ownership and water to be traded within and between catchments. See Lee Godden and Mahala Gunther 'Realising capacity: indigenous involvement in water law and policy reform in south-eastern Australia' (2010) 20 *Journal of Water Law* 243, 246.

11 *Mabo v Queensland (No 2)* (1992) 175 CLR 1.

12 Maureen Tehan 'A hope disillusioned, an opportunity lost? Reflections on common law native title and ten years of the *Native Title Act*' (2003) 27 *Melbourne University Law Review* 523.

13 Australia's National Water Commission acknowledged the failure of water planning to account for indigenous economic interests in its biennial assessments of progress on water reform in 2009 and in 2011: National Water Commission 'Australian water reform 2009: second biennial assessment of progress in implementation of the national water initiative' (National Water Commission September 2009) available at http://www.nwc.gov.au/reform/assessing/biennial; National Water Commission 'The national water initiative – securing Australia's water future: 2011 assessment' (National Water Commission September 2011) available at http://www.nwc.gov.au/reform/assessing/biennial. See also Tony McAvoy 'Water – fluid perceptions, transforming cultures' (2006) 1(2) *eJournal* 97; Jason Behrendt and Peter Thompson 'The recognition and protection of aboriginal interests in New South Wales rivers' (2004) 3 *Journal of Indigenous Policy* 37; Jon Altman and Michelle Cochrane 'Indigenous interests in water: a comment on the water property rights – report to COAG from the Water CEOs Group Discussion Paper' (Centre for Aboriginal Economic Policy Research Paper Australian National University 21 February 2003).

14 John Sheehan and Garrick Small 'Aqua nullius' (paper presented at the Pacific Rim Real Estate Conference Fremantle Australia January 2007) available at http://www.prres.net/index.htm?http://www.prres.net/Proceedings/2007proceedings.asp.

15 See Sue Jackson and Jon Altman 'Indigenous rights and water policy: perspectives from tropical Northern Australia' (2009) 13(1) *Australian Indigenous Law Review* 27; William Nikolakis 'Providing for social equity in water markets: the case for an indigenous reserve in Northern Australia' in R Quentin Grafton and Karen Hussey (eds) *Water Resources, Planning and Management* (Cambridge University Press 2011) 629.

16 Another mechanism involved considering indigenous interest in water as a component of the existing rights-based regimes for land claims. In Australia, there are two main sources of land rights: the *Native Title Act 1993 (Cth)* regimes and statutory land rights schemes, eg *Aboriginal Land Rights (Northern Territory) Act 1976 (Cth)*. These schemes are discussed in Godden and Gunther (n 10).

licensed indigenous uses are afforded varying degrees of exclusivity within a regulatory scheme for allocating and trading water.

A particular focus of this article is on the creation of indigenous specific entitlements in the State of NSW, where the *Water Management Act 2000 (NSW)* explicitly includes in its objects recognition of the interests of, or benefits to, indigenous people from the use of water.[17] NSW has the most advanced range of entitlements of this kind and it is in that State we can see significant limitations to the model, which should be of particular interest to advocates of cultural entitlements.

This case study of NSW's only Cultural Access Licence (held by the Nari Nari Tribal Council) exemplifies trends in the recognition of indigenous water rights. The case was selected for analysis because the group uses water as a key tool in its natural resource management activities; accessing water under a range of licence types and participating in the water market.[18] This case study raises questions not only about the efficacy of the cultural entitlement but also matters of equity, particularly the transaction costs that indigenous groups may bear when accessing water under these special measures. It is acknowledged that the Nari Nari case is an unusual one, arguably unique in Australia, a situation arising from the special water access mechanisms and legislative intent of the *Water Management Act 2000 (NSW)*. It nonetheless makes an important contribution to the literature on indigenous participation in the Australian water market.[19]

Not all mechanisms within the legal model for recognizing indigenous interests in water suffer the shortcomings of the cultural entitlement approach, but it is only in northern Australia where alternatives are being contemplated and implemented. The establishment of indigenous water reserves for commercial uses in some Northern Territory allocation plans is one notable development in water management that could set a precedent in indigenous water rights for other parts of Australia. At least two water plans in draft in the Northern Territory are likely to see substantial volumes of water allocated to indigenous land owners for commercial use, potentially as much as 25 per cent in one plan area, as a result of indigenous advocacy for water reform.[20]

AUSTRALIAN WATER LAW AND NATIVE TITLE

Haisman[21] identifies a number of defining characteristics of the Australia system of water rights, including:

- a federal system of governance with a constitution that leaves water rights as a matter of sovereign state administration
- some of the world's older systems of administratively granted usufruct rights
- a semi-arid inland climate
- a culture of pioneering that drove intense development of water resources in agricultural areas.

Absent from this description is the existence of the customary water law and management systems maintained by indigenous people since British occupation in 1788, but ignored by European settlers for more than two centuries.[22] During the colonial and post-colonial period, much of Australia's wealth was built on exploiting water resources for irrigation, mining and urban water supply, involving a progressive exclusion of Aboriginal and Torres Strait Islander peoples' interests in water.

Indigenous customary systems were recognized in 1992 in the High Court's *Mabo* decision. That decision and the *Native Title Act 1993 (Cth)* (hereafter NTA) marked a turning point in Australian water governance. *Mabo* constituted legal acknowledgement of pre-existing Aboriginal occupation of land through the recognition of native title. Subsequent native title litigation led to the judicial interpretation of native title as a bundle of rights, including various rights to water. When the NTA was passed, the scope was defined to include rights over waters located within traditional estate boundaries. It confirmed Crown ownership of water and minerals, while guaranteeing rights to customary use of resources for sustenance (hunting, gathering and fishing). In addition, a right to protect sites or areas of significance that include waters has been recognized as a native title right.[23]

17 *Water Management Act 2000 (NSW)* s 3. The numerous consultative mechanisms established by Australian water agencies have been described and analyzed elsewhere: see Poh-Ling Tan 'Legal basis for indigenous water access' (paper presented at Indigenous Water Forum 19 February 2009) available at http://waterplanning.org.au/news-and-events/national-indigenous-water-planning-forum; Sue Jackson, Poh-Ling Tan, Carla Mooney, Suzanne Hoverman and Ian White 'Principles and guidelines for good practice in indigenous engagement in water planning' (2012) *Journal of Hydrology* (special issue in press) available at http://dx.doi.org/10.1016/j.jhydrol.2011.12.015; Godden and Gunther (n 10); Jessica Weir *Murray River Country: An Ecological Dialogue with Traditional Owners* (Aboriginal Studies Press 2009); Monica Morgan, Lisa Strelein and Jessica Weir 'Indigenous rights to water in the Murray Darling basin' (Discussion Paper No 14 Australian Institute of Aboriginal and Torres Strait Islander Studies 2004); Rural Solutions 'Aboriginal access to water across Australia' (Department of Water, Land and Biodiversity Conservation (SA) 2008).

18 For a detailed account of the water management strategies of the Nari Nari Tribal Council, see Sue Jackson, Brad Moggridge and Cathy Robinson 'The effects of changes in water availability on indigenous communities of the Murray Darling basin: a scoping study' (Report to the Murray Darling Basin Authority 11 October 2010). The case study draws on interviews from a number of informants with expertise in NSW water management including Dave Miller, an officer of the then NSW Department of Environment and Climate Change, Gregory Packer, cultural officer from the Murrumbidgee Catchment Management Authority, James Maguire, an officer of the then NSW Department of Environment, Climate Change and Water and Krista Hay, officer of the Nari Nari Tribal Council.

19 See Altman and Arthur (n 9); Jackson and Altman (n 15).

20 Nikolakis (n 15).

21 Brian Haisman 'Impacts of water rights reform in Australia' in Bryan Randolph Bruns, Claudia Ringler and Ruth Meinzen-Dick (eds) *Water Rights Reform: Lessons for Institutional Design* (International Food Policy Research Institute 2005) 113, 114.

22 Sue Jackson 'Aboriginal access to water in Australia: opportunities and constraints' in R Quentin Grafton and Karen Hussey (eds) *Water Resources, Planning and Management* (Cambridge University Press 2011) 601; Behrendt and Thompson (n 13); Aboriginal and Torres Strait Islander Commission and Lingiari Foundation *Onshore Water Rights Discussion Booklet* (Lingiari Foundation 2002).

23 Michael O'Donnell 'Briefing paper for the water rights project by the Lingiari Foundation and ATSIC' in Lingiari Foundation *Background Briefing Papers: Indigenous Rights to Waters* (Lingiari Foundation 2002).

Generally a right to take water for drinking and domestic use accompanies other rights such as access, camping, hunting, fishing and foraging. Section 211 of the NTA expressly preserves customary rights to hunt, fish and gather traditional resources, including by implication aquatic resources, without the need for a licence. Godden and Langton[24] observe that in this sense it comprises particular rights to utilize water.[25]

Where the necessary connection and other requirements for native title are satisfied, the content of rights to water within a native title claim are generally regarded by the courts as usufructuary in character, and a number of native title determinations have recognized limited, non-exclusive and non-commercial rights to use water without the need for a licence. These 'soft' rights contrast with the 'hard' property rights recognized in the US decision of 1909 in *Winters v United States*[26] (*Winters* case), which have provided 'tribal seats at the bargaining table'[27] and proven effective in delivering substantial water rights, federal funds and management authority over a range of tribal activities.

Godden and Langton[28] argue that the characterization of native title rights in water as usufructuary is not the only possible interpretation that might be given to claim evidence relating to connection to waters under section 223 of the *Native Title Act 1993*.[29] In *Commonwealth v Yarmirr*[30] in relation to coastal and offshore areas, the court held that native title included rights of access, fishing and hunting, visiting and protecting places with cultural and spiritual importance and safeguarding traditional knowledge. A customary right to fish was non-exclusive. The issue of indigenous rights to water per se, fishing and offshore areas in respect of statutory land rights regimes was recently considered in *Northern Territory of Australia v Arnhem Land Aboriginal Land Trust* [2008] HCA 29 (30 July 2008).

Typically, as Godden and Gunther further observe, native title rights in relation to water where recognized are not interpreted on the evidence as conferring an interest akin to a fee simple, that is beneficial (private) property right, but rather a 'right to water as ancillary to the exercise of native title rights'.[31] Thus, while indigenous rights to water are conceived by the Australian legal system as having a usufructuary, non-exclusive character related to a bundle of rights formulation,[32] jurisprudence in other common law countries provides a wider spectrum of potential legal understandings of the nature of such rights.[33] This narrow interpretation has been used to preclude indigenous people from accessing commercially viable volumes of water.[34]

Tarlock, for example, compares the Australian characterization of water rights under the *Native Title Act 1993* to the tribal rights recognized in the USA:

> Australian Aborigines can claim rights for a variety of spiritual and subsistence uses based on traditional use of the land, but because custom is the foundation of Mabo rights they must empirically prove the physical enjoyment of these rights on specific lands. Ironically, this approach has contributed to the characterisation of Aboriginal rights as *lesser* usufructuary rights compared to the superior water right recognized in *Winters*. For example, a lower federal court, in *Western Australia v. Ward*, used the familiar analogy of property as a bundle of sticks to conclude that the common law does not protect a spiritual connection to land and thus Aboriginal title is a 'fragile divisible interest which can be extinguished piece by piece'.[35] Aboriginal peoples, therefore, enjoy a much weaker legal position compared to Indian tribes in the United States.[36]

It is clear at a general level that native title can exist in relation to waters where it is not extinguished. The NTA provides a specific future acts regime with respect to water in section 24HA, although the position arguably remains undecided at law as to whether the future acts regime may extend to the water planning processes under this section.[37] While it is clear that the grant of water leases, licences, permits and authorities will result in the suspension of native title rights to the extent of any inconsistency[38] and compensation will be payable,[39] the exact status of water planning has not been definitively determined.

Despite the existence of indigenous legal rights to water in regions where the water resource is fully developed, the priority of chronological possession of land and water rights has affected both the capacity of indigenous people to retain customary connection and attain recognition of legal rights to water bodies. It is a poignant coincidence that the peak of water resource development in Australia's most important agricultural zone, the Murray-Darling basin, occurred when extractions were capped at 1993/94 levels, and that this point marks the moment the NTA came into effect.[40]

24 Lee Godden and Marcia Langton 'Indigenous involvement in water management, policy and regulation development' (unpublished report Australian Institute of Aboriginal and Torres Strait Islander Studies 2009).

25 See *Native Title Act 1993 (Cth)* s 211(2): 'If this subsection applies, the law does not prohibit or restrict the native title holders from carrying on the class of activity, or from gaining access to the land or waters for the purpose of carrying on the class of activity, where they do so: (a) for the purpose of satisfying their personal, domestic or non-commercial communal needs; and (b) in exercise or enjoyment of their native title rights and interests'.

26 *Winters v United States* 207 US 564 (1908).

27 A Dan Tarlock 'Tribal justice and property rights: the evolution of Winters vs United States' (2010) 50(2) *Natural Resources Journal* 471, 477.

28 Godden and Langton (n 24).

29 The narrow construction of the *Native Title Act 1993 (Cth)* s 223 is an acknowledged concern and has been the subject of proposals for reform, including a proposal by the current Chief Justice of the High Court of Australia: see Chief Justice Robert French 'Lifting the burden of native title' (2009) 93 *Reform* 10, 11.

30 *Commonwealth v Yarmirr* (2001) 184 ALR 113.

31 Godden and Gunther (n 10) 249.

32 See Lisa Strelein *Compromised Jurisprudence: Native Title Cases Since Mabo* (1st edn Aboriginal Studies Press 2004).

33 Richard Bartlett *Native Title in Australia* (2nd edn Butterworths 2004) 114.

34 For discussion see Strelein (n 32) 129.

35 Katy Barnett 'Western Australia v. Ward: one step forward and two steps back: native title and the bundle of rights analysis' (2000) 24 *Melbourne University Law Review* 462.

36 Tarlock (n 27) 492.

37 The section provides that: 'this section applies to a future act that consists of the making, amendment or repeal of legislation in relation to the management or regulation of: (a) surface and subterranean water; or (b) living aquatic resources'.

38 *Native Title Act 1993 (Cth)* s 24HA(4).

39 ibid s 24HA(5).

40 Jackson (n 22).

Subsequent legislative amendments have further narrowed the scope of native title rights to water. In 1998, native title holders lost the short-lived right to negotiate over water resource developments. Decoupling of land and water rights since 2000 has restricted the economic development potential of land recently claimed under statutory land rights regimes in NSW, unless claimants purchase water on the open market. In combination, these factors restrict the number of indigenous groups that have water rights recognized as a matter of law, the nature and extent of those legal rights, how much effective control any legal rights give rights holders, and the quantum of benefit derived from water-based enterprises on indigenous land. This complex of issues has had a profound impact on indigenous efforts to govern water resources, as the Nari Nari example from NSW demonstrates.

WATER POLICY REFORM: THE NATIONAL WATER INITIATIVE

During the 1990s, when native title law was developing in Australia, there were profound reforms to water law and policy[41] to separate land and water titles, allocate water for the environment and institutionalize a water market. These reforms did not acknowledge indigenous expectations for access to water resources and participation in water resource decisions until 2004, when Australia's state and territory governments agreed to the current national water policy (Intergovernmental Agreement on a National Water Initiative (NWI)). Building on the 1994 Council of Australian Governments' Water Reform Framework Agreement, the NWI has been described as the most significant change in water policy since Federation in 1901.[42]

The NWI calls for clear entitlements to water, trade in water entitlements, transparent statutory-based water planning and environmentally sustainable management of water. The NWI also provides for the recognition of indigenous needs 'in relation to access and management'[43] in water access entitlements and planning frameworks. According to the NWI, indigenous access is to be achieved through water planning processes that:

- include indigenous representation in water planning, wherever possible
- incorporate indigenous social, spiritual and customary objectives and strategies for achieving these objectives, wherever they can be developed
- take account of the possible existence of native title rights to water in the catchment or aquifer area
- potentially allocate water to native title holders and
- account for any water allocated to native title holders for traditional cultural purposes.[44]

Indigenous people did not negotiate the terms of current national water policy[45] and not until 2009 were they involved in an advisory capacity to the federal Minister for Water who oversees policy implementation.[46] Notwithstanding that national water policy now includes an acknowledgement of indigenous interests in water, there remain numerous problems[47] not least that the policy stresses cultural difference as the basis of indigenous recognition.[48] Godden and Gunther observe that the nature of the water allocation envisaged under the NWI to address indigenous needs 'appears similar to that which is available for native title holders for traditional purposes'.[49]

The NWI outlines policies to guide governments in amending their legislative and administrative regimes but legal recognition has been particularly slow to respond,[50] with only limited inclusion of indigenous interests in the water allocation and distribution frameworks that comprise the statutory regimes for water across south-eastern Australia.[51] In reforming their water sectors, Australian States, which retain the ultimate power to legislate and regulate water, have responded in a variety of ways with varying rates of progress. Water legislation in Victoria, Tasmania, Western Australia and the Northern Territory makes no express provision for indigenous interests. In Western Australia, native title rights to land and water in the vicinity of a major irrigated agricultural zone on the Ord River, were addressed by way of a negotiated agreement which resisted recognizing substantial water rights. By and large, consultative mechanisms have been the mechanism preferred by signatories to the NWI.[52]

41 See for example Karen Hussey and Stephen Dovers (eds) *Managing Water for Australia: the Social and Institutional Challenges* (CSIRO 2007).

42 Connell, Robins and Dovers (n 3).

43 Commonwealth of Australia and the Governments of New South Wales, Victoria, Queensland, South Australia, the Australian Capital Territory and the Northern Territory 'Intergovernmental Agreement on a National Water Initiative' (25 June 2004) [25(ix)] available at http://www.nwc.gov.au/__data/assets/pdf_file/0019/18208/Intergovernmental-Agreement-on-a-national-water-initiative2.pdf.

44 ibid [52]–[54].

45 The process of developing the policy was described by one participant as the 'most tightly controlled, non-consultative process ever seen in the water sector': Tim Fisher 'Water sustainability or sell-out? The national water initiative in perspective' (2004) 40 *Australian Options* 20, cited in Sue Jackson 'Indigenous interests and the national water initiative (NWI): water management, reform and implementation' (Background Paper and Literature Review CSIRO Sustainable Ecosystems October 2007) 62.

46 Jackson, Tan and Altman (n 6).

47 Godden and Gunther (n 10); Sue Jackson and Joe Morrison 'Indigenous perspectives on water management, reforms and implementation' in Karen Hussey and Stephen Dovers (eds) *Managing Water for Australia: the Social and Institutional Challenges* (CSIRO 2007) 23.

48 Michael O'Donnell *Indigenous Rights in Water in North Australia* (Northern Australian Indigenous Land & Sea Management Alliance March 2011) available at http://www.nailsma.org.au/projects/water_policy.html. O'Donnell considers that the NWI offers a more expansive interpretation of indigenous needs. He refers to the definition of water access entitlement in paragraph 25 as 'a perpetual or ongoing entitlement to exclusive access to a share of water from a specified *consumptive pool* as defined in the relevant *water plan*': at 220 and further, that paragraph 25 is not qualified by 'any requirement for the finalisation of native title claims, nor land ownership by Aboriginal groups, nor is it limited to the recognition of Indigenous cultural values only': at 185. O'Donnell acknowledges that north Australia jurisdictions at least have overlooked that paragraph in their compliance reports.

49 Godden and Gunther (n 10) 249.

50 Altman and Cochrane (n 13); Jackson and Altman (n 15).

51 Godden and Gunther (n 10).

52 National Water Commission 'The national water initiative – securing Australia's water future: 2011 assessment' (n 13).

Despite the existence of NWI guidelines stating that water plans should *immediately* include consideration of indigenous water use, water plans rarely specifically address indigenous requirements. The most recent assessment of progress on water reform by the National Water Commission (NWC), describes implementation of the indigenous provisions, finding some improvement in consultation and engagement effort. Importantly, however, the assessment notes that the national policy has had little effect on the distribution of water to indigenous users or uses. The NWC states that, as a consequence of the NWI:

> ... there has been increased recognition of the cultural values of water resources and advances in the engagement of Indigenous Australians in water management. Most jurisdictions have established consultative mechanisms intended to engage Indigenous people in water planning ... Nevertheless the full intent of the NWI parties' commitments on Indigenous interests in water has not yet been achieved. Many water plans do not consider Indigenous cultural values and economic development, *leaving the cultural and economic expectations of Indigenous Australians as an unmet demand on the water system.*[53]

Seven years after the introduction of the policy it is apparent that there are significant impediments to improving access to water for indigenous people. We define access in this context as the ability to make use of a resource.[54] With respect to the Australia's agricultural heartland, the MDB, Godden and Gunther[55] go so far as to say that the regulatory regimes and allocation institutions have 'failed either to engage effectively with Indigenous groups, or to address the legal and conceptual challenges to understanding traditional water use, values, rights and responsibilities'.[56]

Within the limits established by judicial interpretations of native title during the post-*Mabo* era, and in response to the small window afforded by the NWI to meet water needs variously described as 'non-consumptive', 'cultural', 'spiritual' or 'traditional', indigenous advocates and their representative organizations have sought legal and policy reforms to statutory water frameworks to enable the grant of specific indigenous entitlements. It is to those mechanisms we now turn.

STATUTORY 'INDIGENOUS-SPECIFIC' ENTITLEMENTS

Water legislation in NSW and Queensland (Qld)[57] are the only Australian statutes that provide for special mechanisms to deliver an indigenous share of water in allocation decisions.[58] NSW's legislative framework is the more advanced, hence the singular attention given to it in this article. The *Water Management Act 2000 (NSW)* (the Act) explicitly includes recognition of the interests of, or benefits to, Aboriginal people from the use of water in its objects.[59] The Act's principles include the protection of features of major cultural, heritage or spiritual significance and the need to provide benefits to Aboriginal people in relation to their spiritual, social, customary and economic use of land and water.[60]

The State's water management objectives include providing clear and legal access entitlements to enable Aboriginal communities to gain an increased share of the benefits of the water economy, particularly the market in water. A number of mechanisms are employed to meet the objectives of the Act, including:

- Aboriginal people are entitled to be represented on management committees: at least two people are required on both Water Management Committees and the State Water Advisory Council, and therefore to provide input to the establishment of water sharing plans (WSPs)[61]
- provision for Aboriginal people to exercise their native title rights so long as those rights are limited to the use of water for traditional purposes (native title rights provided for under the Basic Landholder Rights provisions of the Act)
- a new category of licence (Specific Purpose Licence), which includes Aboriginal cultural and Aboriginal commercial access licences
- the establishment of a trust to assist Aboriginal people to participate in water markets and
- a commitment to assess applications for new/amended water supply works and use approvals to ensure that the grant of the application will not impact on Aboriginal cultural heritage.

According to the Office of Water[62] each of the State's WSPs recognize that extractions as part of a native title right may increase over the term of a plan, in the event that native title is granted. Holders of native title are permitted to take and use water in exercising their native title rights without the need for a licence. Approval is required for native title holders to build dams or bores (wells) and regulations limit the amount of water they can take each year.

Recognition of native title rights to water has had a negligible impact on the distribution of entitlements in NSW. A review of the 35 WSPs in operation reveals that

53 ibid 9 (emphasis added).

54 Harpipriya Rangan and Marcus B Lane 'Indigenous peoples and forest management: comparative analysis of institutional approaches in Australia and India' (2001) 14 *Society and Natural Resources* 145.

55 Godden and Gunther (n 10).

56 ibid 243.

57 Kate Cranney and Poh-Ling Tan 'Old knowledge in freshwater: why traditional ecological knowledge is essential for determining environmental flows in water plans' (2011) 14(2) *The Australasian Journal of Natural Resources Law and Policy* 71. Cranney and Tan argue that, although indigenous interests appear to have high priority in Queensland, because they are included in the legislation's definition of sustainable development, the Water Act contains no specific mechanisms to 'identify these interests and ensure trade-offs are transparent ... [leaving it] open to criticism that the recognition of Indigenous connections through the water planning process is merely symbolic'.

58 Tan (n 17).

59 *Water Management Act 2000 (NSW)* s 3.

60 ibid.

61 Water sharing plans establish rules for sharing water between the environmental needs of the river or aquifer and water users, and also between different types of water use such as town supply, rural domestic supply, stock watering, industry and irrigation. For background see http://www.water.nsw.gov.au/Water-licensing/About-licences/Water-access-licences/New-access-licences/default.aspx.

62 Office of Water (NSW) 'National Water Initiative Implementation Plan' (June 2006) 'National reforms' available at http://www.water.nsw.gov.au/Water-management/Law-and-policy/National-reforms/National-reforms/default.aspx.

only 2 have provided an allocation for native title.[63] For instance, an attempt was made to meet potential native title requirements in the Apsley WSP,[64] which provides 0.01 ML/per day for native title purposes to an Aboriginal community residing on the Apsley River. This amount was determined using a formula based on per capita residential water use,[65] not any considerations relating to spiritual or cultural objectives or aspirations. According to an officer of the water agency, there was considerable discussion about the nature of this right, both in-house and with the affected Aboriginal community.[66] In this case, the community had a water frontage and was therefore entitled to a basic landholder right to water for domestic and stock purposes, making articulation of the difference between the basic right and the native title right difficult.[67] This landholder riparian right is available to all landholders in all Australian jurisdictions.

The Act[68] also provides for the grant of specific purpose access licences to be accessed by Aboriginal people or communities for either cultural community development or commercial purposes.[69] Such licences are to be determined in accordance with WSPs that apply to areas that are generally characterized by low water usage.

A cultural access licence (CAL) is described as a licence that 'allow(s) communities to access water for important cultural purposes such as manufacturing traditional artefacts, hunting, fishing, gathering, recreation, cultural and ceremonial purposes. An Aboriginal cultural licence can also be used for drinking, food preparation, washing, and watering domestic gardens'.[70] The NSW Government states that these licences will generally be granted, as long as the water is not used for commercial activities. CALs are capped at 10 ML per licence per annum. The first and only CAL was allocated to the Nari Nari Tribal Council in 2005.

In addition to CALs, there are Aboriginal commercial licences, which are intended to 'provide opportunities to get involved in water-related businesses'.[71] These licences can be used for commercial enterprises owned by Aboriginal people and could include: irrigated cropping; irrigated pasture; aquaculture; and non-agricultural activities, such as manufacturing or crafts. Commercial licences are not available to Aboriginal groups in the Murray-Darling basin, which is subject to a 'cap',[72] meaning that total extraction cannot increase beyond the 'capped' limit. Aboriginal commercial licences are only permitted under restricted terms in the coastal river areas and within those areas, provided that this additional extraction would not negatively impact on ecological values that are dependent on high flows.[73] Like all specific purpose licences, Aboriginal commercial licences cannot be traded, and are granted for a set term that is consistent with the purpose of the licence. A volumetric limit of 500 ML per annum applies. No commercial licences have been granted to date.

Jackson[74] and Tan[75] note that only one Aboriginal access licence has been allocated and that NSW, like other jurisdictions, appears to be waiting for native title cases to be proven in the courts or resolved by negotiation before addressing water requirements for native title in plans. Delays are evident despite an NWI requirement that water plans take account of the *possibility* of native title. Further information is required to explain the poor uptake of the specific purpose entitlements, which could be attributable to unattractive terms, low awareness or lack of interest in irrigated agriculture amongst the indigenous population. It is also possible that the costly requirement for water storage and infrastructure capacity precludes many indigenous people or communities from this entitlement, for water must be pumped from rivers during higher flows and stored for use as needed.

It is not clear from any descriptions of the NSW framework how the Aboriginal specific allocations were determined and whether any attempt will be made to evaluate their impact: do the apparently arbitrary volumes permitted meet indigenous needs? These innovative mechanisms are not supported by policy infrastructure such as consistent guidelines, transparent methods for determining allocations and robust measures for meeting objectives (targets, standards, indicators). Haisman describes as 'trivial' the quantities of water at stake, stating that 'they have had limited impact on the allocation schemes that were in place before the recognition of native title'.[76]

Moreover, Behrendt and Thompson[77] mount a strong critique of the effect of NSW's legislative framework, noting the low priority afforded Aboriginal interests vis-à-vis a broad range of competing interests, the unenforceable nature of policy initiatives and the

63 In NSW a native title holder means a person who holds native title rights pursuant to a determination under the *Native Title Act 1993 (Cth)*. As there are so few determinations to date this level of proof may continue to limit substantially and, for some time, the number of instances in which water is allocated for native title purposes. See Jennifer McKay 'Legal issues in water resources planning regimes – lessons from Australia' in Donna Brennan (ed) 'Water policy reform: lessons from Asia and Australia' (Proceedings of an International Workshop held in Bangkok, Thailand 8–9 June 2001).

64 Water Sharing Plan for the Apsley River Water Source 2003 (NSW).

65 Dave Miller (personal communication 2 February 2009).

66 ibid.

67 ibid.

68 The Aboriginal access licences are provided by the *Water Management (General) Regulation 2011 (NSW)*.

69 Access licences entitle licence holders to specified shares in the available water within a particular water management area and to take water at specified times, rates or circumstances from specified areas or locations. See http://www.water.nsw.gov.au/Water-licensing/About-licences/Water-access-licences/New-access-licences/default.aspx.

70 Department of Natural Resources (NSW) 'Water Management Plans, Information for Aboriginal Water Users' Fact Sheet available at http://www.naturalresources.nsw.gov.au/water/info_aboriginal_water.shtml.

71 ibid.

72 The cap limits the total extraction amount to the 1994 level of development, effectively preventing the issuing of any new water licences on inland rivers.

73 Rural Solutions (n 17).

74 Sue Jackson 'National indigenous water planning forum: background paper on indigenous participation in water planning and access to water' (Report prepared for the National Water Commission 2009) available at http://www.csiro.au/Organisation-Structure/Divisions/Ecosystem-Sciences/Indigenous-Water-Planning-Forum.aspx.

75 Tan (n 17).

76 Haisman (n 21) 123.

77 Behrendt and Thompson (n 13).

minimal protection of native title rights and interests in the face of over-allocation of the resource.

INDIGENOUS STRATEGIES FOR MEETING WATER NEEDS

Indigenous people place great importance on the instream values that sustain customary life-ways,[78] and it is this interest that has motivated some indigenous organizations to advocate for indigenous specific 'cultural' entitlements (such as entitlements for the purpose of 'protecting' indigenous cultural life). In southern Australia, rather than maintain a sustained case for substantive water rights and water equity, indigenous advocates have relied predominantly on a weak strategy of arguing for entitlements on the basis of cultural difference. For example, in the Murray-Darling basin, indigenous groups, such as the Murray Lower Darling River Indigenous Nations, are calling for 'cultural flows'.[79] Cultural flows are defined in the following terms: 'Cultural flows are water entitlements that [would be] legally and beneficially owned by the Indigenous Nations of a sufficient and adequate quantity and quality to improve the spiritual, cultural, environmental, social and economic conditions of those Indigenous Nations'.[80] This definition reveals the initial confusion: the simple and misleading contrast of environmental flows to 'cultural flows'. Secondly, the definition confuses entitlements, allocations and flows.

That the term should be avoided in relation to the difficult problem of securing water allocations for indigenous groups becomes evident as we explore the genealogy of the term. The adoption of the term 'cultural flows' by indigenous groups with whom Jessica Weir undertook her doctoral research constitutes an unfortunate elision of the religious and secular interests of indigenous people in water phenomena, as well as an infelicitous use of the term used by cultural theorists, such as Homi Bhabha, Arjun Appadurai[81] and others, with no particular precision to refer variously to the flow of culture with displaced or 'borderland' populations, the problem of hybridity and cultural flows that follow capital and labour flows. As used by these cultural theorists, its use as anthropological shorthand for cultural shifts is underpinned by postcolonial theory and analysis of global social change, as in: the 'syncretic, adaptive politics and culture' of hybridity, as Bhabha puts it, the intent of his theorization of hybridity in questioning 'the imperialist and colonialist notions of purity',[82] as well as 'nationalist notions' and the potential of the theory to 'do away with all claims to authenticity, to all forms of essentialism, strategic or otherwise'.[83]

Anthropologist Weir,[84] who used the idea of 'cultural flows' to carry this sense of cultural change and hybridity as an inherent dynamic in the water allocation politics with which her indigenous informants along the Murray River contended, and indigenous water policy advocates have given the phrase too much work to do: this cultural work as well as the legal and administrative work of a water allocation category.

Anthropologist Strang has expressed the ethnographic nature of a people's relationship with a river and the long history of regulation that has intertwined with the cultural interpretations and, in Strang's case, the cultural group involved were the residents of Dorset, England. Without the baggage of anthropological primitivism, a tendency so strong in Australianist work, we can see that Strang has rigorously dealt with these contentious problems. She has elucidated how 'human engagements with water – in the home, and through interaction with rivers and water supply infrastructure – mediate individual, familial and wider collective identities in a shifting cultural "fluidscape" of social, spatial, economic and political relationships'. In Dorset, as much as in Aboriginal society on the Murray River, water, '[a]s a material substance, essential to every organic process ... literally constitutes human "being", providing a vital "natural symbol" of sociality and of human-environmental interdependence'.[85] Further, Strang writes: 'Its particular qualities of fluidity and transmutability lend themselves to a stream of metaphors about flows and interconnections, and to ideas about spatio-temporal change and transformation. Moving constantly between internal and external environments, water facilitates scheme transfers between conceptual models of physiological, social and ecological processes'.[86]

We are reminded by Strang's scholarship that if rigorous logic and analysis had been applied in the Australian case, we may not have the overloaded and weak concept of 'cultural flows' wielded to resolve problems in the political economy of water. 'Cultural flows' is evidently a metaphor that has been deployed to carry far too much cultural and legal meaning. In Strang's case, her study of metaphors explores how 'water imagery dominate[s] discourses about individual and cultural identities and the maintenanceor dissolutionof social boundaries'.[87] Water regulation in Australia should not have to carry the cultural and political weight of capturing cultural identity, especially when marginalized indigenous groups require water allocations for basic

78 See for instance Marcus Finn and Sue Jackson 'Protecting indigenous instream values in water management: a challenge to conventional environmental flow assessments' (2011) 14(8) *Ecosystems* 1232; Marcia Langton 'Earth, wind, fire and water: the social and spiritual construction of water in Aboriginal societies' in Bruno David, Bryce Barker and Ian McNiven (eds) *The Social Archaeology of Australian Indigenous Societies* (Aboriginal Studies Press 2006) 139.

79 Jessica Weir (n 17).

80 Murray-Darling River Indigenous Nations *Echuca Declaration* (2007) 2 available at http://www.nailsma.org.au/nailsma/publications/downloads/MLDRIN-NBAN-ECHUCA-DECLARATION-2009.pdf.

81 Homi K Bhabha *The location of culture* (Routledge 2004); Arjun Appadurai *Modernity at Large: Cultural Dimensions of Globalization* (University of Minnesota Press 1996).

82 Bhabha (n 81) 64.

83 Others have noted his realization that 'the only place in the world to speak from was at a point whereby contradiction, antagonism, the hybridities of cultural influence, the boundaries of nations, were not sublated into some utopian sense of liberation or return. The place to speak from was through those incommensurable contradictions within which people survive, are politically active, and change'; see Bhabha (n 81) 67.

84 Weir (n 17).

85 Veronica Strang 'Substantial connections: water and identity in an English cultural landscape' (2006) 10(2) *Worldviews* 155.

86 ibid.

87 ibid.

community and environmental needs, and are delayed in their aspirations by the confusion caused by the term 'cultural flows'.

As much as it might be of high priority to indigenous people to have every agency involved in water management and allocation recognize their cultural values, it is likely that the conventional language and categories of the regulatory regime are incapable of carrying this load. This is a problem of incommensurability as between a cultural domain and a regulatory system. Translated simplistically to fresh water flows to which indigenous cultural values might be applied (in ways not specified), the term 'cultural flows' fails as a conceptual tool; it is unnecessary and also exceptionalist and essentialist.

Advocates of the 'cultural flow' concept seek to leverage water allocations for indigenous purposes off the success of the 'environmental flow' concept; one that has seen substantial statutory allocations to the environment to restore or maintain aquatic health.[88] The 'cultural flow' concept has not been adequately and precisely defined, however: the water rights underpinning the notion are unclear and the vague terms pertaining to cultural value concepts from heritage management discourse do not readily translate into present water policy terminology and frameworks.

The indigenous populations of these areas have been marginalized in the water economy[89] and perplexed public officials have appeared to accept their argument that a cultural flow is a viable mechanism.[90] The concept has gained attention in policy circles because it appears to accord with a preconception that indigenous groups have no significant demand for water resources. The political sensitivities are not trivial in this region, where allocations are capped and in the process of being reallocated to the environment. To meet the expectations of indigenous communities for resource rights may require reductions in the consumptive water use by other users on a scale not considered acceptable by influential groups within the majority non-indigenous population. New allocations would raise the highly controversial problem of restorative and distributive justice in water planning that arises from the historical denial of indigenous water rights. To date, natural resource agencies have responded by allocating funds to research into proofing the concept,[91] which will prove challenging given the multiple values underpinning its definition.

McAvoy argues that: 'There is no place in modern river management systems for the protection of Indigenous spiritual values'.[92] He advises that they must 'continue to use the mechanisms at hand'.[93] Further, he warns: 'real impact on the commercial market in water and therefore river management will only occur when Indigenous people are water owners themselves'.[94]

In north Australia, on the other hand, where indigenous people comprise approximately one-third of the population[95] and hold title to very large areas of land, indigenous advocates are successfully making the case for substantial, secure and tradable water rights. Indigenous advocates have used the language of the water entitlement framework, such as an 'indigenous reserve', a concept understood by water managers, amenable to quantification and able to be managed by indigenous corporations and the state water agencies under the current law of at least one jurisdiction.

In the case study below on the Nari Nari Tribal Council's (NNTC) governance of water, the stark contrast in strategic choices and legal rights available to indigenous groups in the south, as against the north Australian indigenous context, reveals the need for more elaborate and robust laws and policies that go beyond the essentialist notions underpinning cultural entitlements. The Nari Nari case reveals the diverse and interdependent ways in which indigenous people use and value water, not just for customary subsistence use but for economic and environmental purposes. It therefore shows the shortcomings of approaches to indigenous water rights that privilege pre-colonial use as the basis for contemporary claims for water over recognition of diverse and evolving interests in water, including opportunities for livelihoods.

INDIGENOUS WATER ENTITLEMENTS IN THE MURRUMBIDGEE CATCHMENT NSW

The case of Nari Nari tribal council

The Nari Nari people are members of a clan group of the larger Wiradjuri Nation, which has interests in land and water in the Murrumbidgee catchment in the vicinity of Hay, NSW (see map p 118). The Nari Nari is the only Aboriginal group entitled to water under the Murrumbidgee Regulated River WSP developed by the Murrumbidgee Regulated River Committee in 2004.[96] Nari Nari watering activities contribute to biodiversity and cultural heritage management on their properties and, through annual water trading with a neighbouring farmer, contribute to the local agricultural sector.

The NNTC, formed as a not-for-profit indigenous environmental conservation organization in 2000, holds five water entitlements and manages 11,300 ha of riverine land. It has completed projects in cultural site protection, revegetation, bank stabilization and water efficiency to the value of A$1.2 million. In 2001, the Indigenous Land Corporation,[97] on behalf of the NNTC, purchased three pastoral leases, Toogimbie,

88 Angela H Arthington and Bradley J Pusey 'Flow restoration and protection in Australian rivers' (2003) 19(5) *River Research and Applications* 377.

89 Jackson (n 22).

90 National Water Commission 'The national water initiative – securing Australia's water future: 2011 assessment' (n 13).

91 Jackson (n 13).

92 McAvoy (n 13) 97.

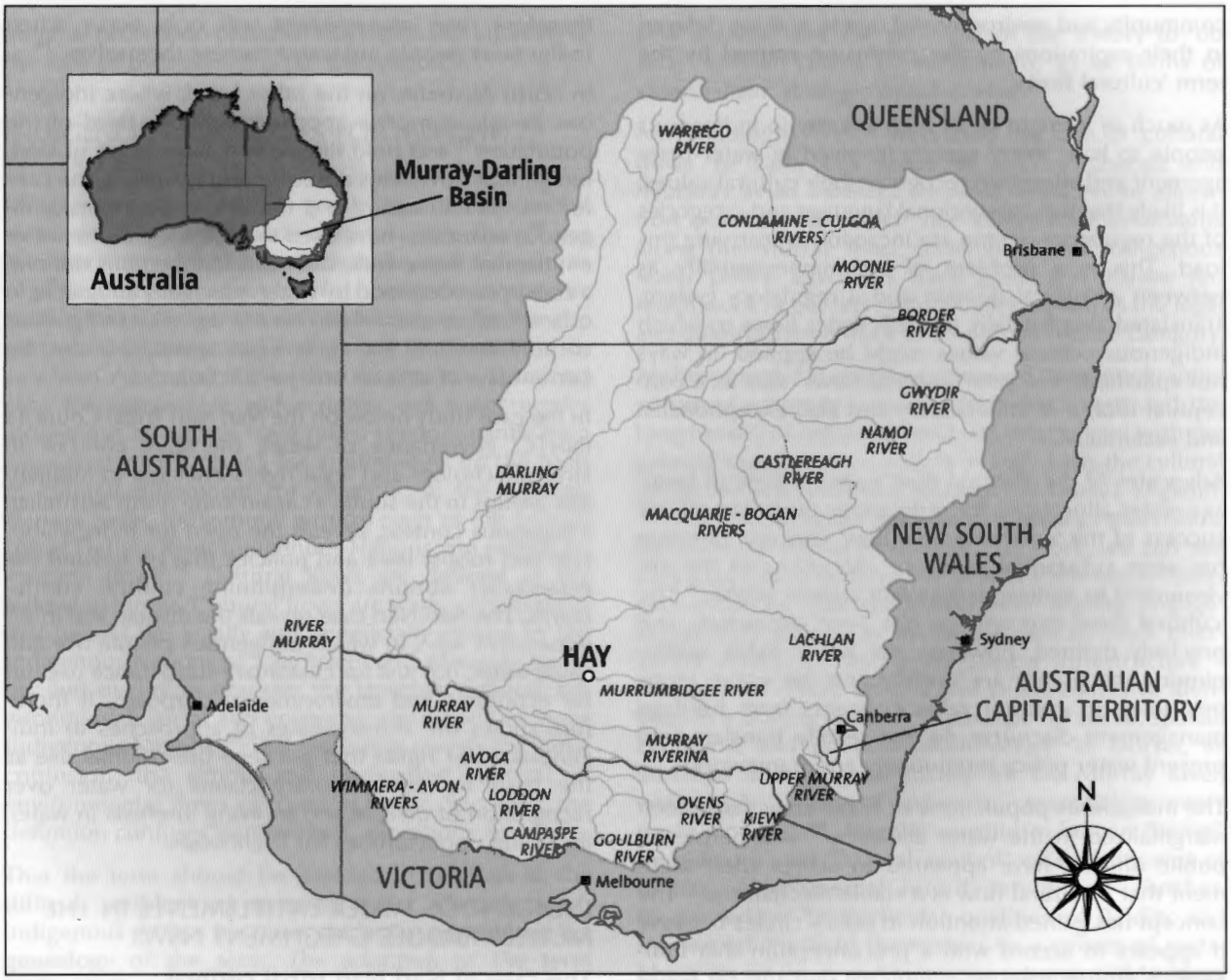
93 ibid.

94 ibid.

95 Altman, Buchanan and Larsen (n 7).

96 In 2006, just over 11,500 indigenous Australians lived in the Murrumbidgee region, a figure that represented approximately 17 per cent of the entire Murray-Darling basin's indigenous population: Jackson, Moggridge and Robinson (n 18) 105.

97 The Indigenous Land Corporation is an independent statutory authority of the Australian Government, established in 1995. The enabling legislation is the *Aboriginal and Torres Strait Islander Act 2005 (Cth)*. Its purpose is to assist indigenous people to acquire and manage land to achieve economic, environmental, social and cultural benefits.



Map of the Murray-Darling Basin showing Hay on the Murrumbidgee River, NSW.

Lorenzo and Glenhope Stations, situated 40 km west of Hay. These properties include regionally important environments such as plains rangelands, seasonal floodplain wetlands and an 18 km riparian zone along the Murrumbidgee River.

In 2004, almost half of Nari Nari land was declared an Indigenous Protected Area (IPA) as part of Australia's protected area system. The declaration was made under International Union for Conservation of Nature Category IV – Habitat/Species Management Area: Protected Area managed mainly for conservation through management intervention. Since owning this land the community has set about restoring the environmentally degraded and fragile wetlands; an objective requiring diversion of water from the Murrumbidgee River. The group's environmental objective is clearly stated in the management plan for the IPA:

> ... NNTC works closely with the Murrumbidgee Catchment Management Authority to provide a cyclical water allocation (Aboriginal Cultural Usage/Cultural Access Licence), pumped from the river onto the floodplain, to mimic natural flows. Given the regulations of the river system, natural flooding has not occurred since 1994, therefore NNTC has undertaken to restore this area with artificial flows.[98]

A portion of Nari Nari land (outside the declared IPA) is leased to a local farmer and, despite the drought and other challenges facing the rural industry, some farming is undertaken on that portion. Income from this commercial agreement and government funding for environmental management allows the NNTC to meet all financial responsibilities and help support the local economy.[99]

According to the Murrumbidgee Regulated WSP, the NNTC is entitled to use water under five categories of licence (see Table 1), including a CAL held by the Murrumbidgee Catchment Management Authority.[100] With these entitlements, the NNTC has designed a watering regime to achieve multiple market and non-market benefits. The group temporarily trades a high security entitlement (see Table 1) to underwrite the annual purchase of the water obtained under the CAL to meet its cultural and environmental objectives. Despite the public benefit from its management activities, the NNTC receives no environmental water or water to satisfy native title rights.[101] Nari Nari's largest

98 Nari Nari Tribal Council 'Toogimbie indigenous protected area plan of management 2008–2013' (2007) 11.

99 ibid 4.

100 Gregory Packer (personal communication November 24 2011).

101 According to the Murrumbidgee WSP there are no extractions to satisfy native title rights. However, there is provision for native title rights and basic landholder rights to increase during the 10 year term of the WSP. The water supply system is managed to ensure sufficient

Table 1: Nari Nari water entitlements[102]

Licence/ Approval	*Primary holder*	*Category*	*Share component (ML)*
40AL402433	Nari Nari Tribal Council Inc	Domestic and stock	58
40AL403234	Nari Nari Tribal Council Inc	Regulated river (high security)	3
40AL403235	Nari Nari Tribal Council Inc	Regulated river (general security)	1944
40AL403236	Nari Nari Tribal Council Inc	Domestic and stock	171
40AL403237	Nari Nari Tribal Council Inc	Regulated river (high security) (Aboriginal cultural)	500

entitlements are regarded as 'consumptive' uses as the flow passes into a wetland or onto a farmed area and cannot later be diverted.

The WSP specifies that CALs be available for use each water year. The combined volume used on these licences cannot exceed 2150 ML per annum. The CAL is a high security licence so it receives 95 per cent allocation before any general security allocation is made. CAL water is to be ordered and managed by Aboriginal people for use on sites and wetlands for specific cultural purposes such as recreational or cultural activities, including cultural teaching.[103] The mandatory licence conditions do not permit commercial gain but water allocation can be traded between licences so long as the purpose is consistent with a cultural use. Part 11 of the WSP describes these and other mandatory conditions:

> All regulated river (high security) CAL shall have mandatory conditions that only allow the taking of water by Aboriginal persons or communities for personal, domestic and communal purposes including the purposes of drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, and gathering, and for recreational, cultural and ceremonial purposes.[104]

The NNTC was the first group to receive water through a CAL in 2005. Since then a number of CALs have been held by the NNTC and allocated volumes have varied from approximately 300–1900 ML per annum.[105] To date, the NNTC has tended to be the only applicant for the CAL.

The Nari Nari's restoration efforts demand more water than they can afford to access under the CAL and yet the current allocation is not completely used each season (CALs cannot be carried over into the next water season). This underutilization seems to be due to the low number of Aboriginal groups with the necessary title and infrastructure for watering, low awareness in the community, the cost of the water as well as the complexity of the application process.[106] A representative of the council attributes this outcome to the 'user pays' principle: 'That water was put in the valley for Aboriginal people. But now we've got user pays in the community you can't use all that water'.[107]

The NNTC argues that water allocations used for environmental purposes should be free because their allocation for wetland water is equivalent to the government's 'environmental water'.[108] According to Ian Woods of the NNTC, it is possible to apply to the NSW water agency to have the water costs waived, provided they can demonstrate key environmental outcomes. The NNTC has not taken this course of action.

It is important to appreciate that the Nari Nari were able to order and deliver the water because of the existence of farm infrastructure on their properties. While the licence itself is free there are significant transaction costs: the delivery of water ordered from the licence on a quarterly basis incurs standard charges that are costly and difficult to administer.[109] Each year the NNTC spends a considerable amount of time and effort conforming to the complex regulatory system as explained by a NNTC representative:

> The first year we weren't aware we had to pay for it. It cost us $10,000. For two years it cost us $16,000 for 900 ML ... If you haven't pumped it all by June 30 (end of the water year) you'll still pay for it.
>
> We've got to go to Sydney in person to lodge the licence. At the Department they don't know anything about it. It's all new. It's got no reference, but we've been using it for five years.[110]

NSW's water agency and other natural resource management groups consulted see more widespread usage of the CAL as desirable[111] and it is acknowledged that the procedures need to be simpler and faster.[112] Efforts are underway to improve equality of access and transparency in the assessment of proposals from Aboriginal groups by the Murrumbidgee CMA.[113]

water is set aside to supply these rights. See Department of Infrastructure, Planning and Natural Resources (NSW) 'A guide to the water sharing plan for the Murrumbidgee regulated river water source' (September 2004) available at http://www.water.nsw.gov.au/Water-management/Water-sharing-plans/Plans-commenced/Water-source/Murrumbidgee-Regulated-River/default.aspx.

102 Jackson, Moggridge and Robinson (n 18).

103 James Maguire (personal communication 15 April 2010).

104 Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2003 (NSW).

105 The current allocation of 500 ML represents 0.02 per cent of surface water diversions in the Murrumbidgee region: CSIRO 'Water availability in the Murrumbidgee: a report to the Australian Government from the CSIRO Murray-Darling basin Sustainable Yields Project' (CSIRO 2008) 155 available at http://www.csiro.au/en/Outcomes/Water/Water-for-the-environment/WaterAvailabilityInMurray-DarlingBasinMDBSY.aspx.

106 Jackson, Moggridge and Robinson (n 18).

107 ibid 99.

108 ibid 98.

109 Krista Hay (personal communication 6 April 2010).

110 Jackson, Moggridge and Robinson (n 18) 99.

111 ibid.

112 ibid.

113 Matters of equal access and cost are now being considered by the NSW Office of Water and a new model for managing the CAL is under development. The new model, if adopted, could alleviate tensions between indigenous water users, the CMA and the water agency. The Office of Water is encouraging indigenous groups to apply for an allocation under the CAL, as well as assisting indigenous groups to benefit from environmental watering. See Jackson, Moggridge and Robinson (n 18).

There are valuable lessons from the NNTC engagement with the statutory framework. Having an indigenous share of water entitlement has given the group a 'seat at the table' in the water planning process; however, there are a number of significant shortcomings that warrant further attention and debate, particularly amongst advocates for cultural entitlements.

First, the Nari Nari Tribal Council has been unable to access the volumes of water required to meet its management objectives, in some part because of the cost of purchasing water but also because the volume of the share is insufficient. The current allocation does not mimic a flood event and is therefore ineffective in terms of fish breeding.[114] According to Ian Woods of the NNTC, more water and improvements to infrastructure could bring further benefit:

> If we had infrastructure and water we could regenerate that country real good ... If you go down there you can get old man weed, swans, ducks, frogs ... We can't afford to buy what we want. The IPA won't fund us to pay for water or land rates on the IPA. We can't afford the purchase price and the pumping costs. We'd love all the water. We used the whole 2150 ML for two years but it got too expensive.[115]

Those aware of the circumstances facing the Nari Nari have questioned the practice of charging Aboriginal people for water management activities that have clear public benefit outcomes such as environmental restoration and heritage protection.[116] This example also shows that there are capital constraints to accessing water that need to be addressed in a water justice program. The entitlement is inaccessible to groups without title to land or water infrastructure like pipes and pumps. Lessons from the US, where there were substantial impediments to realizing the benefit from 'hard' property rights won in the *Winters* case, should be understood. For many years the 'dry' water rights were unable to be mobilized into 'wet' water rights for lack of capital and infrastructure.

The second limitation relates to inter-group equity as well as sufficiency of allocation. The current CAL, which is capped at 2150 ML per annum in the Murrumbidgee catchment, cannot possibly satisfy the needs of multiple groups who are likely to consider that every wetland needs 'cultural water'. The volumes required to restore the health of customary estates to a standard that enabled traditional owner groups to reinstate cultural practices in one of NSW's most heavily allocated catchments would undoubtedly exceed the small volumes for Aboriginal use permitted by the NSW entitlement framework.

A WATER JUSTICE PROGRAM BASED ON TRADABLE WATER RIGHTS

The NNTC has a valuable and secure irrigation entitlement that equates to four times the volume of the CAL (Table 1). This entitlement is currently leased to a neighbouring farmer on an annual basis and the income from this water trade subsidizes the conservation activities undertaken on the IPA. Presently the NNTC receives more income from the farm and water lease than from the government-run IPA program, which is designed to support its conservation management activities.

Nari Nari representatives argue that trading general security licensed water is critical to their enterprise but they do not want to sell their water on a permanent basis. Could other indigenous groups similarly make use of secure, flexible and valuable entitlements such as these – that is, tradable water rights of the scale required in commercial land management – to meet their domestic, economic, and cultural needs? If there were a program for water justice for indigenous people similar to the one suggested at the inaugural Indigenous Water Planning Forum in 2009,[117] indigenous groups managing land for environmental and commercial purposes, as most aspire to do, would have the flexibility and freedom of choice to utilize water under the full range of water use categories according to local preferences and evolving needs. At that Water Planning Forum, participants called for the establishment of a financially sustainable Indigenous Water Fund to underwrite the indigenous purchase of entitlements. In over-allocated systems, equitable access might require government investment in buy-backs to redistribute entitlements.

We suggest that a series of regional indigenous trusts[118] could hold water for both consumptive commercial and non-consumptive environmental uses. In the same manner that environmental agencies are entering water markets to purchase water rights for environmental use,[119] governments could purchase entitlements for indigenous use. In regions where water is traded, trustees could recover costs by temporary trading. Entitlements might be used to derive an income to devote to cultural or environmental purposes (following the Nari Nari approach) or used directly by an indigenous owned water-dependent enterprise such as a farm, pastoral lease, aquaculture, or silviculture operation. Under such a system, indigenous groups may wish to trade shared water entitlements with environmental entitlements. It is conceivable that private support from members of the public and philanthropic organizations could be forthcoming in the form of tax deductible donations to these trusts and for them to enter into counter-cyclic trading agreements.[120] Like

114 Rural Solutions (n 17) 11.

115 Cited in Jackson, Moggridge and Robinson (n 18) 100.

116 Jackson, Tan and Altman (n 6); Rural Solutions (n 17).

117 See Jackson, Tan and Altman (n 6); McAvoy (n 13).

118 For a discussion of the NSW Aboriginal Land Council's proposal for an indigenous water trust see McAvoy (n 13). McAvoy explains the rationale behind that proposal: 'The theory was, and remains, that in a commodified world the only real power to control exploitation is to own the commodity. If Aboriginal people own significant quantities of water they can then make the decision to use the water, so to speak be keeping it in the river or by extraction ... The Cabinet Office or the Department of Land and Water Conservation did not like the concept of an Aboriginal water bank and cited as the reason that the water market was still developing and thought to be too volatile, and therefore an expenditure of Government money in such a fashion would be reckless'.

119 The Australian Government has committed A$4.6 billion over 12 years up to 2018–19 to purchase water in the Murray-Darling basin.

120 See Young and McColl (n 5) 6.

the Native American tribes of the Western US,[121] indigenous groups could then develop a water management portfolio, including trading water to sustain various activities, as well as sophisticated conservation and restoration programs.

As noted in Jackson, Tan and Altman,[122] the NWI does not provide sufficient guidance for the resolution of competing claims to water and regional differences need to be taken into account in the national dialogue over indigenous water access. In the interests of restoring access in many stressed water systems and preventing inequitable distribution in under-allocated systems, a set of principles should include process and substantive requirements (eg prescription of minimal standards for water allocation, quality and sustainable development of the resource, socio-economic assessment to include impacts on indigenous values and livelihoods).

The need for a restorative justice initiative as proposed above is less warranted in these terms in many areas of north Australia, where colonization and settlement occurred more than 100 years later than in the south and where water resources are both not yet fully allocated nor traded. Although water use is increasing and there is a pressing need to ensure extractions are sustainable, new entitlements can be more easily created without impinging on the rights of other water users. In these jurisdictions,[123] there is the opportunity to assign property rights differently and avoid the marginalization of indigenous interests seen in southern Australia.

In north Australia, during the past five years indigenous advocates have lobbied vigorously for secure and tradable entitlements[124] and there is an emerging consensus concerning the need to establish an indigenous specific allocation from the consumptive pool.[125] Indigenous water reserves have been provided for in the *Cape York Peninsula Heritage Act 2007 (Qld)* and the Northern Territory's statutory water sharing framework. Western Australia's legal framework does not support the concept of indigenous reserves.[126]

In Queensland, the *Cape York Peninsula Heritage Act 2007 (Qld)* establishes a requirement for an indigenous water reserve in a wild river declaration[127] or a water resource plan pursuant to the *Water Act 2000 (Qld)* for the 'purpose of helping indigenous communities in the Cape York region achieve economic and social aspirations'.[128] O'Donnell observes that the water right provided in the *Cape York Peninsula Heritage Act* is not a native title right or interest but a statutory right for the benefit of indigenous communities.[129]

The Queensland Government has so far allocated only small volumes of water to indigenous communities under this mechanism. For example, in the Wenlock Basin Wild River Declaration 2010 (Qld), the indigenous reserve was set at 5000 ML, in the Archer Basin Wild River Declaration 2009 (Qld) it was set at 6000 ML and in the Water Resource (Mitchell) Plan 2007 (Qld) the reserve was set at 5000 ML. Each allocation is to be granted as a water licence, as prescribed in the *Water Regulation 2000 (Qld)*, and is subject to a modest fee.[130] As an indication of the relative size of the indigenous reserves, in the neighbouring Gulf of Carpentaria region, where water use is regulated by the Gulf Water Resource Plan, reserves and existing entitlements are limited to 1.5 per cent of the total annual discharge to the Gulf of Carpentaria.[131] Research conducted for the Archdiocese of Brisbane in response to a government inquiry into the wild rivers legislation suggests that higher rates of extraction than allowed under the Act could be sustained and indeed are required to improve indigenous livelihoods in the region.[132]

The degree to which indigenous people can benefit from the reservations is determined by the *Wild Rivers Act 2005 (Qld)*, which substantially restricts the types of development permitted in a declared area. It has been argued that the fact that no new dams or weirs are permitted on a wild river or its main tributaries 'affects the scale of (irrigation and agricultural) activities and consequently viability' of some enterprises.[133] Whether the government has struck the right

121 Rosalind H Bark and Katherine L Jacobs 'Indian water rights settlements and water management innovations: the role of the Arizona Water Settlements Act' (2009) 45(5) *Water Resources Research* W05417.

122 Jackson, Tan and Altman (n 6).

123 Northern Territory, Western Australia and Queensland.

124 See North Australian Indigenous Land and Sea Management Alliance and the Indigenous Water Policy Group 'A policy statement on north Australian indigenous water rights' (November 2009) available at http://www.nailsma.org.au/nailsma/forum/downloads/Water?PolStatement?web?view.pdf; Jackson and Altman (n 15). The focus of the policy statement goes beyond resource rights, stating that 'maintaining water flows is fundamental to ensuring the vitality and existence of Indigenous heritage and spirituality'.

125 O'Donnell (n 48); Department of Natural Resources, Environment, The Arts and Sport (NT) 'Living rivers, sustaining landscapes, livelihoods and lifestyles. A discussion paper for framing a living rivers strategy' (April 2009) available at http://www.nt.gov.au/nreta/water/livingrivers/pdf/discussion_paper.pdf. O'Donnell defines the consumptive pool as that water allocated for commercial purposes in the context of the water planning framework under the National Water Initiative.

126 O'Donnell (n 48) 236.

127 A declaration is made under the *Wild Rivers Act 2005 (Qld)*. The Act is not geographically specific to Cape York but a number of rivers that are located in the region come within its ambit. Several have been declared. The barrister for some affected Aboriginal groups, Greg McIntyre, notes that: '[T]he *Wild Rivers Act 2005 (Qld)* (WRA) was enacted with the purpose of preserving "the natural values of rivers that have all, or almost all, of their natural values intact"' and, if so, then the conflict with the native title rights of many in the declared river basins becomes evident. He argues that their native title rights are impaired by the WRA if the negotiations have not achieved the consent of the native title holders. The WRA 'declares that its purpose is to be achieved mainly by establishing a framework that includes the declaration of wild river areas, including high preservation areas, preservation areas, floodplain management areas and sub-artesian management areas'. See Greg McIntyre 'Native title: speaking for their country' available at http://www.onlineopinion.com.au/view.asp?article=9554&page=0.

128 *Cape York Peninsula Heritage Act 2007 (Qld)* s 27.

129 O'Donnell (n 48) 177.

130 ibid 178.

131 Dr Joanne Copp 'Wild rivers policy – likely impact on sustainable development' (Social Responsibilities Committee, Anglican Diocese of Brisbane 2010) p v, available at http://www.anglicanbrisbane.org.au/www/sites/default/files/Attachment%20B%20Sustainable%20Development.pdf.

132 ibid.

133 ibid. Copp is critical of the basis for structuring the unallocated water reserves, which have been designed to 'support economic growth based on existing patterns. There are currently very low levels

balance in assessing and advancing multiple and often competing economic, environmental and social objectives on Cape York has been the subject of much debate and two parliamentary inquiries.[134] Concerns have been raised for instance about the lack of consent from residents and people with interests in the land subject to these declarations[135] and the disregard for submissions made by those same people during the consultation process. For the purposes of this article, the point to emphasize is that the Queensland indigenous water reserves allow economic use but are severely restricted in volume and the controls on land use imposed by environmental protection legislation applying to Cape York are very likely to limit the commercial value of those reserves.

More promising as an economic development mechanism is the Northern Territory's Strategic Indigenous Reserve (SIR), which entered policy discourse as a means of satisfying the NWI requirement to grant water access entitlements to address indigenous needs.[136] The existence of this reserve in water plans would overcome two barriers to justice in the Australian system of water allocation. First, as 'late entrants' to a water market with economic aspirations that are still taking shape, indigenous people could be assured of access to water for commercial purposes. Secondly, according to O'Donnell, the reserve also allows those 'indigenous people without land rights or native title guaranteed access to water for development purposes'.[137]

Although the *Northern Territory Water Act 1992 (NT)* does not specifically recognize the appropriateness and need for an indigenous specific allocation from the consumptive pool for commercial purposes, a reservation has recently been declared for a groundwater resource in the Katherine region. The Water Allocation Plan for the Tindall Limestone Aquifer, Katherine 2009–2019[138] mandates 680 ML for indigenous commercial development if the existence of native title is recognized within five years of the commencement of the plan. This amount of water was determined by the percentage of the plan area land under native title claim – some 2 per cent approximately.[139] For as long as the native title determination is unresolved, there remains no indigenous specific allocation.

A similar reserve is being discussed in negotiations between indigenous representative organizations and the NT water agency in relation to the Water Allocation Plan Tindal Limestone Aquifer Mataranka.[140] In that plan area, indigenous people comprise approximately 65 per cent of the population and hold a large proportion of the land.[141] Consideration is given in the draft allocation plan to setting the indigenous reserve at 25 per cent of the consumptive pool to enable indigenous land owners to benefit from water resource development in that area, while ensuring sufficient water to meet environmental, social and cultural objectives.

CONCLUSION

In addressing the implicit goals of Australian national water policy relating to indigenous people, recent attention has been given to the creation of indigenous specific entitlements, and one licence has been granted for indigenous use in NSW. Analysis of this attempt to emphasize 'cultural values' in water allocation decisions shows that indigenous uses are relegated to a category of 'cultural' activities poorly understood by the water policy and management sector and, according to current approaches, one that tends to require negligible amounts of water.

Specific cultural entitlements are currently favoured by some indigenous advocates who invoke cultural differences as the basis for claims for indigenous access and control of water under a separate category of use. We argue that foregrounding ethnic or cultural differences gives rise to a dilemma that indigenous organizations and communities must confront. There is a risk that a preoccupation with separate allocations of water to meet indigenous cultural preferences could marginalize indigenous people from access to other very large 'pools' of water – the consumptive pool, from which irrigation and other agricultural users access water, and the rapidly growing environmental water pool.

Foregrounding ethnic or cultural differences gives rise to a paradox that operates on two levels. On one level, the role of culture in constructing the waterscapes and features of conservation value deserving of environmental water allocations or flow is rarely, if ever, understood or recognized by environmental advocates, aquatic ecologists or water planners, who exclude indigenous epistemologies and ontologies from their resource assessments. As a consequence, indigenous people have little or no say over decisions affecting the distribution of water and, ultimately, environmental

of development due to a range of constraints. Without appropriate infrastructure, and without major changes to the Wild Rivers Act, there will be neither significant infrastructure nor significant development in the future'.

134 Senate Legal and Constitutional Affairs Committee, Parliament of Australia *Wild Rivers (Environmental Management) Bill 2011 (2011)*; House Standing Committee on Economics, Parliament of Australia 'Inquiry into indigenous economic development in Queensland and review of the Wild Rivers (Environmental Management) Bill 2010' (2011); Jon Altman 'Wild rivers and indigenous economic development in Queensland' (Centre for Aboriginal Economic Policy Research Topical Issue No 6/2011) available at http://caepr.anu.edu.au/Publications/topical/2011TI6.php.

135 ABC Television 'Noel Pearson interviewed by Leigh Sales' *Lateline* (15 July 2009) available at www.abc.net.au.

136 O'Donnell (n 23) 19. O'Donnell observes that the indigenous groups are contemplating a reserve that could be accessible by the grant of licences (entitlements) at no charge and are salable as a temporary trade only. The reserve would be primarily for economic use but could be directed to social and cultural purposes if considered appropriate by the indigenous group concerned.

137 O'Donnell (n 48) 237.

138 Department of Natural Resources, Environment, The Arts and Sport (NT) 'Water allocation plan for the Tindall Limestone Aquifer Katherine 2009–2019' available at http://www.nt.gov.au/nreta/water/kwac/wap.html.

139 This figure is comparatively small for Northern Territory regions, where across the entire jurisdiction indigenous people own approximately 50 per cent of the land base and as much as 85 per cent of the wetter coastal regions.

140 Department of Natural Resources, Environment, The Arts and Sport (NT) 'Draft water allocation plan for the Tindall Limestone Aquifer Mataranka' 2011 available at http://www.nt.gov.au/nreta/water/mwac/comment.html.

141 ibid.

quality. These decisions are currently made by experts and powerful social groups on narrow economic and ecological criteria that exclude indigenous economic and ecological interests as merely 'cultural' in a tautological fashion.

On the second level, by foregrounding 'cultural' uses or values in water allocation decisions, indigenous requirements and needs are relegated to a reified and token category of use that counter-intuitively tends to require negligible amounts of water. If pre-colonial use was the true standard for allocating water to indigenous needs it would require that we take seriously the dependence of subsistence economies on unregulated rivers, high in water quality with low rates of sedimentation, well-functioning vegetation communities and abundant wildlife. Doing so would require allocations to the environment of a magnitude arguably far larger than is contemplated in current water reform debates in developed regions of Australia, and perhaps other decisions like dam releases that would be unacceptable to entrenched agricultural interests and dependent regional settler communities. As argued by Guerrero in relation to the US, returning even a fraction of the water that American Indians are entitled to could re-establish their heritage and agricultural economies and could remove dependence on state welfare.[142] Many parallels occur with the Australian situation. A secure water resource basis is a key to many forms of economic development and cultural identity.

In summary, the inequity in water allocation levels to indigenous groups, including both the disparity between the indigenous and non-indigenous sectors and that between the indigenous populations of northern and southern Australia, are now evident and represent an acute injustice. Improvements to indigenous economic, social and cultural outcomes from further development of Australia's water economy may require restitution in some circumstances and preventative action in others.

The property rights system pertaining to water recognizes limited native title rights but does not prioritize these 'non-consumptive, non-commercial' rights. Fraser's[143] claim that the 'politics of recognition has replaced the politics of redistribution in Anglo-American countries' resonates in the natural resource domain in Australia.

The small, indeed inadequate, volumes allocated in the case of the Nari Nari Tribal Council highlight the question of water justice. In light of these limitations, we ask whether a group like the Nari Nari Tribal Council could satisfy its diverse and evolving water management objectives by alternate means or must it and other groups rely on an obscure and restrictive entitlement that privileges pre-colonial practices? Two distinct possibilities are environmental water allocations and commercially valuable general purpose licences. For either to work, governments would need to commit to reallocating entitlements to indigenous people with direct purchase of entitlements from willing sellers being the least contentious. Strategies that seek indigenous participation in mainstream environmental water management along with substantive water property rights to underpin economic activity are more likely to result in a reallocation of water to meet the needs of indigenous populations.

142 Marianna Guerrero 'American Indian water rights: the blood of life in native North America' in M Annette Jaimes (ed) *The State of Native America: Genocide, Colonisation and Resistance* (South End Press 1994) 189.

143 Nancy Fraser 'From redistribution to recognition? Dilemmas of justice in a "postsocialist" age' (1995) July–August *New Left Review* I/ 212.