

ISSN 2206-1991 Volume 2 No 1 2017 https://doi.org/10.21139/wej.2017.007

THE IMPACT ON DEVELOPMENT AND INVESTMENT OF WATER LAW AND POLICY FRAMEWORKS IN NORTHERN AUSTRALIA: A REVIEW

M Hartley

INTRODUCTION

Northern Australia (or "the North") is defined as all of the Northern Territory (NT) and those parts of Western Australia (WA) and Queensland (QLD) north of the Tropic of Capricorn. The vast land mass of the North, and the fact that the Australian Constitution does not confer a direct power to the Federal Government (Commonwealth) with respect to water resources, means that water resources of the North are governed by four distinct jurisdictions: the Commonwealth, NT, WA and QLD. The resulting regulation is individualistic to the jurisdictions, meaning that there is no consistent water law across northern borders despite the sharing of water resources between WA and the NT and, to a greater extent, the NT and QLD. This can prove challenging for developers and investors interested in the land and water resources of the North.

The water resources of the North are regulated through each State and Territory's water legislation: *Rights in Water and Irrigation Act 1914* (WA) (**RiWI Act**), *Water Act 1992* (NT) (**NT Water Act)**, and the *Water Act 2000*

(QLD) (**QLD Water Act**). There are also myriad water sharing plans governing water resources of the North, with four in WA, four in the NT (with another four in development) and 11 in QLD. While each policy must be consistent with relevant state or territory water legislation, and often interacts with broader state policies regarding use of water resources, local policies within water sharing plans provide important detail with respect to licensing and sharing of resources during times of restriction. Further, there is no requirement that water policies take consistent approaches across the northern jurisdictions.

Philosophical concepts concerning the use of water resources support each of these laws and policies and also vary across the three jurisdictions. Although each northern jurisdiction is a signatory to the Intergovernmental Agreement on a National Water Initiative (NWI) (CoAG, 2004), QLD is the only jurisdiction to have implemented a majority of its recommendations. Water law reform debate continues in WA (where a reform Bill has been with parliamentary

drafters since March 2016) and review of water licences (but not water legislation itself) served as a pillar of the NT Labour Government's successful election campaign in 2016.

Consequently, it is difficult to determine with certainty the future philosophies likely to underpin water resources law and policy in both of these jurisdictions and this article does not endeavour to do so.

Rather, this paper reviews the current water law and policy frameworks in the North, focusing primarily on their impact on development and investment in the region. Within the context of the Commonwealth's White Paper on Developing Northern Australia (Section 1), the paper specifically focuses on the legal aspects of water rights (Section 2), including recoupment procedures (Section 3) and water resources policies (Section 4) in each jurisdiction and their potential integration and challenges. The paper concludes that the under-developed water law frameworks in some northern jurisdictions have the potential to create investor uncertainty and that this must be addressed as a first step before any real progress can occur with respect to reducing barriers to northern development.

SECTION 1: INVESTING IN THE NORTH

In June 2015 the Australian Government released the White Paper on Developing Northern Australia (Australian Government, 2015). The White Paper emphasised the untapped economic potential of Northern Australia, which is host to 40% of Australia's land mass, has an available skilled workforce, strong governance and natural resources. With close geographical proximity to Asia, a burgeoning middle class in Asia escalating demand for produce, and a large potential for economic development, Northern Australia is considered ripe with opportunity. The Government also emphasised economic integration with Asia through Free Trade Agreements, which has a primary consequence of facilitating the development of Northern Australia. The White Paper seeks to change the business dynamic in Northern Australia, creating a climate attractive to investment opportunities supported by Commonwealth planning, rather than ad hoc state management.

Areas such as horticulture, aquaculture and agriculture are considered three viable industries in the North.

Although they are water intensive in their own ways,



the resulting product can be cultivated year round and benefit from the rainfall during the wet season. The horticulture and agriculture industries already exists in the North: the Ord River Irrigation Area (ORIA) in north-east WA, Darwin, and the Burdekin Irrigation District in QLD each successfully produce a range of fruits and vegetables for the domestic off-season market and provide much-needed exports to the Asian markets, and agricultural opportunities manifest in the form of pastoral properties that export their produce overseas. In combining the two opportunities, growers in the ORIA are actively looking at moving into the cattle feed market and complementing existing agriculture by producing grasses for local feedlots to fatten stock prior to export. As to the aquiculture market, Project Sea Dragon - a complex prawn farm operation that is integrated in three locations across two jurisdictions (WA and the NT) - has recently settled on a location in Kununurra for its processing plant and will utilise available groundwater resources (Brann, 2015).

State and Territory Governments and the Commonwealth are all eager for immediate investment in the North since its reignited interest and recognised potential for substantial economic growth. However, the aspirational connectivity of the "North" presented in the White Paper is currently undermined by Australia's federalist model with regards to water policy, which means that the North is regulated by individual, inconsistent and varied laws between the jurisdictions. Historically, the Murray-Darling Basin (MDB) presented similar jurisdictional issues and now provides useful lessons for proactively avoiding poor policy outcomes and consequential over-allocation of water resources. These lessons are particularly salient for the North as it faces the prospect of fast-paced development occurring in the absence of consistent water law frameworks.

The North needs to learn from and avoid the ongoing challenges present in the MDB that have not only substantially impacted the sustainable viability of the region, but also the economic growth and social fabric of the communities (Australian Government, 2016). To this end, the North needs to adopt a whole of systems approach from day one. This approach has been recognised in the White Paper. The Commonwealth has committed \$500 million to the National Water Infrastructure Development Fund. \$200 million of that Fund will be directly used to secure water

resources in the North, primarily through infrastructure developments. Insecurity of water resources in Northern Australia has prompted a water resource assessment of the region's major waterways, which has so far found that there are only enough water resources to support one tenth of the 17 million hectares otherwise available for agriculture (Australian Government, 2015). The law must now take up the challenge of ensuring that these resources are not secured and developed without reference to allocation limits and desired sustainability outcomes.

Legislative consistency for water resources must be a cornerstone of sustainable development of the North. Key aspects of this consistency include the proprietary status of water rights, their perpetual and tradeable nature, and whether they can be recouped by state or territory governments. Each of these are considered in the next section of this paper.

SECTION 2: LICENSING ACCESS AND USE OF WATER RESOURCES IN THE NORTH

Navigating water law principles across disparate legal frameworks presents a primary challenge for developers in the North. Four overarching principles best demonstrate the legal differences between water rights across the North: the principles of proprietary, perpetual, and tradeable water rights and their recoupment status. The first three principles were critical to the NWI framework. They, and an understanding of recoupment provisions, are equally essential to developers and investors in the North, who must understand the risk with respect to water rights that results from these differences before seeking to develop in these jurisdictions. The following section examines these principles as they exist in each framework, from the least to the most flexible, but does not provide a comprehensive review of all licensing requirements in each jurisdiction.

Western Australia

The RiWI Act presents one of the least flexible licensing regimes of the North in terms of its lack of NWI principles and legislated recoupment requirements. Most water licences in WA are granted as a licence to take water under the RiWI Act (s 5C). Land ownership or access to land are pre-requisites to obtaining these licences (sch. 1 cls. 3(a) and (b)) and, as a result, the framework for their trading is cumbersome and requires administrative involvement. Although the legislative

framework provides for trading (sch. 1 divs. 7 and 8), several water plans in northern WA create further barriers to trade by restricting its occurrence between different categories of users (Hartley, 2015). Some water allocation plans, including for example the *Pilbara Groundwater Allocation Plan 2013*, provide no specific detail regarding water trades and transfers between agricultural consumptive users and leave questions open as to its occurrence and operational mechanics. In the absence of local plans providing detail for water trades, the State's *Operational Policy 5.13 - Water entitlement transactions for Western Australia* provides detail on aspects of trading including eligibility, limits and transferring between industry sectors (DOW, 2010).

Critically, water rights in WA are neither perpetual nor considered property rights. The creation of either requires the completion of long awaited and much discussed water resources law reform, and no update can be provided on its progress (Hartley, 2016). In granting a water licence, a user usually obtains a licence for a specified volume and for a duration of between five and 10 years. Although some licences allow for the Department to adjust the volume of water a user is entitled to during a dry year, WA water legislation does not actually contain any specific provisions for this mechanism. By quick comparison, NWI-compliant water legislation separates the perpetual right to access water from the seasonal allocation that is based on yearly water availability and specific hydrological conditions. This allocation system is evident in both the NT and, more transparently, QLD.

Northern Territory

The NT Water Act also lacks critical NWI principles. A licence is required for all beneficial uses outside of stock and domestic use, and the Act creates separate licences to take or use surface water (s 45) and groundwater (s 60). Water licences in the NT are not unbundled from land but, in contrast to WA, there is no statutory pre-requisite to licence eligibility of land ownership or access to land. The NT Water Act is silent on eligibility requirements but does contain provisions that transfer a water licence with land in circumstances where the land is transferred during the licence period (s 92). Also, licence application forms require the applicant to state their relationship to the land, for example whether they are an owner, occupier or lessee of the property (Northern Territory Government, 2016).

The NT Water Act requires that individual water allocation plans ensure the licensed right to take or use

water is able to be traded (s 22B(5)(c)). This has been considered judicially to mean that plans must ensure this ability as opposed to the section itself providing a direct right to trade allocations (MacFarlane and Another v Minister for Natural Resources, Environment and Heritage). As a result, although the framework for trading may exist in water allocation plans, it is by no means legislatively well developed. A possible consequence of this system to developers is a lack of internal consistency within the NT about trading provisions, restrictions and requirements.

Licences in the NT are not perpetual, are granted for a maximum of 10 years (unless there are special circumstances justifying an extended licence) and terms and conditions can be amended by the Controller



of Water Resources (**Controller**) by notice served on the licensee (s 93). Their status as a property right is largely unconsidered at law. The proprietary status of water licences is usually determined by reference to general property indicia, which includes the ability of a licence to be defined, traded (and, therefore, have a value), alienable and stable (Gray and Lee, 2016, p. 290).

Water licences in the NT can be traded (with water allocation plans defining specific rules) and have a specifically defined volume that serves as the maximum water entitlement. However, they are not alienable from land and can be revoked in full or in part by the Controller at the time of renewal (see Section 3, below). It is relevant that the NT Water Act provides that, subject to the Act, the property in and the rights to the use, flow and control of all water in the Territory vests in the Crown. In the absence of any other explicit reference to property, and the absence of at least two critical NWI components in the NT Act (perpetual and clearly specified water access entitlements) (National Water Commission, 2014), a summary conclusion is that water licences are unlikely to be considered property.

The NT Water Act also confers the Controller with the authority to declare beneficial uses of water within a water control district (s 22A), which can determine the permissible activities within districts. There are seven categories of beneficial use, including consumptive beneficial use for agriculture and aquaculture, and non-consumptive beneficial use for the environment and cultural rights (s 4(3)). The existence of a legislated beneficial use may also impose a challenge on developers in terms of limiting their flexibility to consumptively use water if a proposed activity is not considered a beneficial use. Notably, however, the likelihood of this occurring is minimal because the beneficial uses cover most current and foreseeable types of development in the North.

Queensland

The QLD Water Act is the most flexible framework for water licensing in the North and incorporates primary NWI principles. It legislates a three-tiered water licensing system: water allocations, interim water allocations and water licences. A water allocation is a legal right to a share of available water in a catchment. Water allocations are detached from land rights and obtain their own separate title, so land ownership or access to land are not pre-requisites to obtaining water

allocations (s 127). Although s 127(d) requires an entity to specify the purpose for which water will be taken when registering a water allocation, water allocations nevertheless fully implement the NWI principle of separating land and water resources and, as a result, effectuate water trading. Water allocations can be leased, traded independently from land, subdivided and sold, akin to normal real property. Importantly, water allocations exist in perpetuity and are considered proprietary in status (Gray and Lee, 2016).

The QLD Water Act also provides for interim water allocations, which provide a volumetric share in the water resource that is operated as a supply scheme. These allocations necessarily involve the delivery of water from infrastructure such as dams and are converted to water allocations following the execution of Resource Operation Plans (see Section 4, below). However, unlike water allocations, interim water allocations can only be held by landholders (s 190). The third type of licences in QLD water law are water licences, which are attached to the land title, cannot be traded independently of that land parcel, and are not considered proprietary in nature. Water licences only exist in areas without Water Resource Plans, which necessarily means these areas are less developed and unregulated systems and are being phased out.

In terms of development and investment in the North, the water allocations that exist in QLD are the water rights most likely to be beneficial to investors. Incidentally, they also offer the most certainty and flexibility with respect to any water rights in Northern Australia. Their perpetual nature - and the benefits that flow from this in terms of proprietary rights and tradeability - ensure flexibility, the ability to trade between users in a good or bad season and, most relevantly, the least government interference. In practical terms the government reduces or augments allocations on an annual basis according to seasonal water availability, but the permanency of the right and the existence of a trading market enable the making of quick investment decisions according to seasonal climatic and market conditions. This is a primary consideration for some users of the North's water resources, particularly horticulturalists who will often plan crops immediately prior to planting, based on an assessment if current market conditions.

SECTION 3: RECOUPMENT PROCEDURES IN THE NORTH

Another primary reason that developers may prioritise investing in northern QLD as opposed to WA or the NT is the operation of recoupment policies. QLD is the only northern jurisdiction to exclude recoupment policies from the administration of water rights. With the exception of water licences, the QLD Government cannot recoup water allocations and interim water allocations. This is in marked contrast to water licences, which can be revoked by the government after a period of two years' non-use on the basis that a licence is granted with the expectation that the full entitlement will be used.

The NT and, to a greater extent, WA seek to enforce the recoupment policy in circumstances where the Controller (NT) or Minister (WA) is of the view that a water resource is fully allocated or is approaching full allocation. Alternatively, they may do this where current low levels of use are impacting the prospect of future developments obtaining water rights.

In WA, state policies and some local water allocation plans, backed to a questionable extent by the RiWI Act, enable the government to recoup in whole or in part licences that have not been used over a specified timeframe. The specific timeframe varies between plans: the timeframe in the *Ord Surface Water Allocation Plan* is two consecutive years (DOW, 2013, p.51), whereas the *Pilbara Groundwater Allocation Plan* does not provide a specific timeframe and so reverts to the legislative provision that requires the looser definition of consistent take (RiWI Act, sch. 1, cl. 24(2) (d)) as complemented by the Departmental policy guidelines (WRC, 2003).

The WA Department of Water has in the past successfully relied on the recoupment provisions of the RiWI Act to adjust water access entitlements (AWE) (More v Water and Rivers Commission; Kirwan v Department of Water). Emerging legal analysis suggests that it might be ultra vires to do this on renewal of licences on the basis that neither the division incorporating recoupment provisions (Division 6 - Amendment, suspension, cancellation and surrender of licences) or licence renewals (Division 5 - Renewal of licences) envisage amendments to the specific volume of the licence, which is set as the AWE but forms a separate part of the licence (Ord Irrigation Co-operative

Ltd v Department of Water, noting that judgment is currently reserved). This is a previously unexamined legal argument the consequences of which will be analysed once the relevant judgment is available.

The existence of recoupment policies is necessarily vexed in areas like the North where there is a push for development and investment but interested entities are keen to ensure their access to and use of water resources is secure and transparent. Attempts by the WA Department of Water to recoup water have historically been opposed through litigation, most notably in 2004 (More v Water and Rivers Commission), 2011 (Kirwan v Department of Water) and 2015 (Ord Irrigation Co-operative Ltd v Department of Water). Although there is no specific recoupment provision in the NT Water Act similar to the RiWI Act, the NT Water Act permits groundwater licences to be granted subject to any specified terms and conditions (s 60(2)). It also contains a general provision allowing the Controller to amend or modify the terms and conditions in a manner specified in a notice provided to a licensee, or suspend or revoke a licence (s 93). Information regarding the consequences of non-use and a required minimum percentage to show "full use" are generally provided as conditions to licences. Further, some water allocation plans - most notably the Alice Springs Water Allocation Plan 2016 (Part 16.2(4)) and the Water Allocation Plan Tindall Limestone Aguifer, Katherine 2016-2019 (cl.37(ii)) (Tindall Limestone Aquifer Plan) - also contain provisions that allow the Controller to revoke an unused licence in part or in full.

In 2016, the NT water Controller reportedly issued several licensees with notices requiring an explanation for consecutive non-use of the full entitlement held in areas covered by the Tindall Limestone Aguifer Plan and Oolloo Aquifer Water Allocation Plan (yet to be completed) (Fitzgerald, 2016). In the absence of specific legislative provisions, attempts by the government to recoup water like this could be deemed outside the power of the Controller or the Government more generally and be deemed illegal. Any appeal of decisions to recoup a portion of water from a licensee could engage similar jurisdictional questions to those recently argued in WA. Although the NT is in the process of preparing a relevant recoupment policy for water resources in the Territory, there is no publicly accessible information about its possible inclusions.

The fact that this level of uncertainty exists with respect to these licences is unlikely to be either

attractive or satisfying to developers. Decisions like this increase risk in an area already marred with government intrusion and a lack of transparency or consistent policy application. The effect is that licensees, and therefore future developers, have minimal security and certainty over water rights. This increases the potential for sovereign risk, which can negatively impact the interest of developers and investors.

SECTION 4: IMPLICATIONS FOR DEVELOPMENT OF WATER PLANNING FRAMEWORKS IN THE NORTH

A key distinction between WA and NT on the one hand and QLD on the other is the existence of planning principles in water legislation. QLD is the only northern jurisdiction to contain explicit legislative objectives concerning water planning, which in legal terms requires the Act to be administered so as to implement water allocation plans for the sustainable allocation and extraction of water (s 2(1)(i)). Although the objects of the RiWI Act do not mention planning requirements, through a somewhat complex process the planning principles of the RiWI Act can be connected to the objects. This is because the objects require the

sustainable management of water resources, their equitable use (which has a necessary connection to water sharing), the fostering of community consultation and participation in the administration of the control of resources, and integrated management of water resources (RiWI Act, s 4(1)). The NT Water Act does not contain an objects or equivalent section. Hence, it is only in QLD that compliance with planning processes is explicitly required and the objects concerning water planning can be relied on to resolve any uncertainty and ambiguity.

A primary consequence of this system to developers and investors in the North is that there is no legislative transparency or consistency across all jurisdictions regarding the status of the plans. Understanding the legal status of water allocation plans is critical to developers looking to invest in areas that contain these plans, because the plans often contain locally-specific information on licensing and certain policies (for example, the recoupment policy) that the legislative framework does not cover in detail.

Under administrative law principles, policy that is not explicitly supported by legislation has no binding effect on a decision maker (*Drake v Minister for Immigration and Ethnic Affairs (No 2)*). This is in contrast to policy



that has undergone parliamentary scrutiny and is considered binding. Nevertheless, there is a rebuttable presumption that any policy should be applied regardless of whether it is legislatively supported, which is achieved through demonstrating cogent reasons as to why application of the policy would be unjust in the circumstances (*Drake v Minister for Immigration and Ethnic Affairs (No 2)*).

Much has been written regarding the implications of WA water policy being non-statutory and, therefore, forming a relevant consideration only in any administrative or legal review of a new or augmented water rights application (Gardner, Bartlett and Gray, 2009). In brief, WA legislation provides for statutory water plans but due to administrative reasons these have never been adopted. Relevantly, no water plan in the WA third of Northern Australia is statutory. The consequence is that a plan is only one of many factors that must be considered in the granting of water rights when an application has been made. More specifically, the decision maker must consider the merits of each application for water rights even in circumstances where the plan indicates a lack of available water for further consumptive use (that is, where granting a licence would result in over-allocation) (Gardner, Bartlett and Gray, 2009).

This situation is replicated to a lesser extent in the NT. The NT Water Act contains legislative provisions that support the creation of water allocation plans and all NT water plans are created under these provisions (s 22B). Although they are statutory plans by virtue of being created under a provision of the Act, they are not subjected to parliamentary scrutiny during their creation. This likely weakens their application and, if an appeal was brought concerning their effect, they too would be considered a relevant consideration only (MacFarlane and Another v Minister for Natural Resources, Environment and Heritage).

QLD is the strongest jurisdiction with respect to the legal effect of statutory plans, which are enacted as subordinate legislation. Their statutory nature arises largely as a result of the water law framework being NWI-compliant. In the immediate period of implementing the NWI, QLD had a two-tiered water planning process, which comprised Water Resource Plans (WRPs) and Resource Operations Plans (ROPs). Under this system WRPs provided information as to the sharing of resources between consumptive (for example, irrigators) and non-consumptive (for example,

the environment) users. WRPs included requirements as to monitoring and ecological outcomes, strategies to achieve those outcomes, trade restrictions and objectives as to water security and environmental flows (Tan et al, 2012, 39). ROPs served to implement WRPs and effectuated the NWI-required separation of water licences from land title to create water allocations as tradeable entitlements.

In 2014, QLD introduced a new water planning framework that included replacing WRPs with Water Plans. The Act allows the grandfathering of the old plans so that current plans will remain valid until their ten year timeframe expires, at which point they will be replaced with new water plans. Water Plans contain the same substantive information as the previous plans but create a more flexible framework for responding to changing requirements of water resources. By virtue of being statutorily created the provisions of QLD water plans must be applied. In practical terms for developers, this means that a statutory allocation limit cannot be augmented by a licence application and that in general there is more certainty about restrictions and opportunities that exist within the resource.

At a rudimentary level the distinction to be drawn between these plans is one of policy versus subsidiary legislation: water plans in WA and the NT remain administrative policy, whereas QLD water plans are subsidiary legislation and have been scrutinised by parliament prior to their enactment. As a consequence investors can feel confident that a water allocation plan in QLD provides legally enforceable detail on the availability of water resources in a plan area and that allocations will not be granted in excess of the stated sustainable (maximum) allocation limit.

The practical effect of a statutory water plan is a legally entrenched water allocation limit and rules that are unlikely to allow developers to argue their way towards greater access to water resources. In simple terms, statutory plans create a transparent and consistent framework, which developers will look to favourably in pursuing development in any jurisdiction. A transparent and consistent framework means less government imposition, legal clarity with respect to water rights and, potentially most critically, reduced likelihood of sovereign risk.

CONCLUSION

Developing the North sustainably will require an innovative water law framework that accounts for limitations on the use of water resources whilst maximising their potential for productivity. Understanding the hydrology of the water resources is a critical first step, but the law must be in a position to integrate this understanding in the creation of flexible and consistent frameworks. It is legally complex to create an agreement between all northern jurisdictions with respect to water access and use frameworks. Whilst this option should nevertheless be explored, a less complex and more immediate option (but not a solution) is to examine how each jurisdiction regulates its water resources and understand the challenges and opportunities the frameworks create for developers.

Therefore, this article has reviewed relevant water law and policy across the North to provide clarity with respect to the frameworks and signpost some significant challenges that exist for developers. It is plain that the jurisdictional divide across all northern jurisdictions with respect to both water rights and policies creates a fragmented framework for developers who may wish to operate in more than one jurisdiction. Limiting sovereign risk is critical to developing the North, but requires transparency and consistency. For example, perpetual entitlements and well developed trading frameworks would provide clarity as to the status of water rights and facilitate a smoother transition between the jurisdictions for developers. Similarly, jurisdictions that continue to incorporate recoupment procedures must be clear and transparent so that interested entities understand the risks over water rights before investing in the jurisdiction. Water law barriers should not stall sustainable northern development; however, in their current form they have the potential to confuse and concern developers. The effective resolution of these barriers is an area of legal opportunity that requires thorough and urgent analysis.



REFERENCES

Australian Government 2015: Our North, Our Future: White Paper on Developing Northern Australia, Australian Government.

Brann, B 2016, 'Project Sea Dragon settles on location for prawn processing plant near Kununurra', ABC Rural, 18
November 2016, http://www.abc.net.au/news/2016-11-18/prawn-processing-plant-in-kununurra-for-project-seadragon/8034884.

Department of Lands Resource Management, Northern Territory Government 2016, Approved Form 14

Application for Grant or Renewal of Licence to Take or Use Groundwater https://nt.gov.au/ data/assets/pdffile/0015/202281/application-for-grant-or-renewal-gwelform-14.pdf>.

Department of Water Western Australia (DOW) 2010, Operational policy 5.13 Operational Policy 5.13 - Water entitlement transactions for Western Australia.

Department of Water Western Australia (DOW) 2013, Western Australian Government, Department of Water, Ord Surface Water Allocation.

Fitzgerald, D 2016, 'Top End Water Licence Holders Asked To Explain Usage Well Below Allocation', ABC Rural, 24 October 2016, http://www.abc.net.au/news/2016-10-24/nt-water-controller-tackles-under-utilisation/7955960.

Gardner, A, Bartlett R, and Gray J 2009, Water Resources Law, LexisNexis Butterworths, Australia pp. 292-293.

Property indicia were first described by Lord Wilberforce in National Provincial Bank v Ainsworth [1965] 1 AC 1175, 1247-1248 and most recently discussed with respect to water in Gray, J and Lee, L 2016, 'National Water Initiative styled water entitlements as property: Legal and practical perspectives', Environmental and Planning Law Journal, vol. 33, p. 284-300.

Hartley, M 2015, 'Trading Irrigation Water for Hydroelectricity: Trade prohibitions and possibilities in the East Kimberley', Water: Journal of the Australian Water Association, vol. 42, no. 5, pp. 68-72.

Hartley, M 2016, 'Watertight or watered down? An update on water law reform in Western Australia', Australian Environment Review, vol. 30, no. 8, p. 208-213.

Murray-Darling Basin Authority 2016, Northern Basin Review: Technical Overview of the Socio-Economic Analysis – Interim Report, MDBA Publication number 40/16 http://www.mdba.gov.au/sites/default/files/pubs/NB-social-economic-technical-overview-web-final.pdf.

National Water Commission, 2014: Australia's water blueprint: national reform assessment 2014, Appendix C Northern Territory http://www.nwc.gov.au/publications/topic/assessments/australias-water-blueprint-national-reform-assessment-2014>.

Tan, P, Baldwin, C, White, I and Burry, K, 2012, 'Water planning in the Condamine Alluvium, Queensland: Sharing information and eliciting views in a context of overallocation', Journal of Hydrology, vol. 474, pp. 38-46.

Water and Rivers Commission (2013) Statewide Policy No 11, Management of Unused Licensed Water Entitlements.

Cases

Kirwan v Department of Water [2011] WASAT 137.

MacFarlane and Another v Minister for Natural Resources, Environment and Heritage, 2012: 271 FLR 458, 466, [39].

More v Water and Rivers Commission [2006] WASAT 112.

Ord Irrigation Co-operative Ltd v Department of Water (DR340/2015).

Drake v Minister for Immigration and Ethnic Affairs (No 2) (1979) 2 ALD 634, 635, 640.

THE AUTHOR



Dr Madeleine Hartley is a Solicitor at Kingfisher Law. Madeleine is an expert in urban and regional water issues, having completed her doctorate in law at the University of Western Australia with field work in Western Australia, New South Wales and Colorado; and complementary

environmental, Indigenous and dispute resolution law studies in Canada. She advises corporations, farmers and growers of food and fibre in some of the most remote and distant parts of Australia on irrigation policy; acquiring, selling and trading water licences; reviewing adverse licensing decisions, water related contracts and insurance matters.