

REGISTRATION OF WATER TITLES

Key issues in developing systems to underpin market development

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Abstract

Over the last two decades there has been significant progress towards the development of active markets in water as a key instrument in achieving the more efficient and sustainable use of our limited water resources. In order to enable markets to deliver their full potential benefits, however, it has increasingly been recognised that there was a need for more clearly defined and secure property rights for water users whilst providing for adaptive management of the environment. It has also become apparent that the separation of water from land titles – while an essential initiative required to unleash value from water trading - entailed a range of financial, legal and related issues that were perhaps not fully anticipated at the time the COAG water reforms were introduced. This paper discusses some of the key issues that need to be addressed in establishing effective titling registration systems for water as an asset separate from land.

Introduction

The purpose of this paper is to discuss some of the key issues that need to be addressed in establishing effective titling registration systems for water as an asset separate from land. The paper commences with an overview of the development of water markets in Australia through the establishment of tradeable property rights or water entitlements. It then examines some of the key issues to be addressed in developing the new titling systems needed to support the security of and trading in these water entitlements. Finally, the paper outlines current and future policy directions being adopted by governments in Australia.

This paper draw heavily on a report prepared by ACIL Tasman in association with Freehills for Land and Water Australia and AFFA entitled ‘An Effective System of Defining Water Property Titles’, as well as on work undertaken for the Australian Bankers’ Association.

The evolution of water trading

State control over allocation of water

The first water laws in Australia were based on English common law that gave rights to use water in streams and rivers to the adjacent (riparian) landholders. This soon came to be seen as inadequate for Australia given the inherent uncertainty of supply and the consequent need for storage and delivery infrastructure to enable water to be used when and where required. Under the influence of Alfred Deakin, early Australian statutes during the late nineteenth and early twentieth centuries therefore sought to limit riparian rights and vested the right to “the use and flow, and to the control of water resources” in the Crown (ie each of the States).

With rights to manage natural resources, including water, clearly vested in the States (rather than the Commonwealth), each of the States actively developed water resources as a key driver of economic and social development for much of the twentieth century. During this ‘development’ phase, water was available virtually on demand on a ‘first come first served’ basis. Each State developed statutory licensing systems whereby rights to use water were granted, in the form of statutory privileges (such as licences and permits) to take water. Potential users simply applied to state agencies for licences, and there was an expectation of – if not a legal right to - automatic renewal.

These licences were issued based on the area of irrigable land and crop needs and were tied to the land on which the water was to be used. As such, these licences were inextricably tied to land and not separately tradeable as assets in their own right.

Pressures for change

While there was limited pressure on the resource in terms of competing resources, this approach to resource management was not an issue. From around the 1970s and certainly by the 1980s, however, viable options for increasing supply were diminishing. At the same time, demand for water was increasing: water use increased by 65% between 1983-84 and 1996-97. There was also increasing recognition of the environmental damage (eg. the salinisation of land and impacts on the aquatic ecosystem) associated with existing water extraction and usage patterns.

As the squeeze between competing uses for the water (both from consumptive users and from those wishing to see more water allocated to the environment) and caps on supply began to bite, increasing public and government attention was devoted to managing limited water resources in a more efficient and sustainable way. The focus of water resource management in Australia shifted from the development of new water resources and further investment in infrastructure, to the re-allocation of water through trading, as well as the provision of water for the environment.

A major step in the evolution of water allocation arrangements in Australia away from administrative allocation by governments towards a market-based approach was the 1994 Council of Australian Governments agreement. This committed jurisdiction to reforms including:

- Separation of water entitlements from land title, clear specification of entitlements in terms of ownership, volume, reliability, transferability and, if appropriate, quality;
- Development of water markets so that water maximises its contribution to national income, subject to the physical, social and environmental constraints of catchments;
- Establishing formal allocation of water for the environment based on the best scientific information available; and
- Consultation and public education on issues such as water use, pricing reforms, and water allocation and trading.

Further impetus to water trading as a mechanism for re-allocating water resulted from limits imposed on water diversions because of growing concern for the health of the waterways. In particular, in 1997 the Murray Darling Basin Commission (MDBC) capped the level of extraction from the Basin at the 1993/94 levels.

Establishment of tradeable property rights

A pre-requisite for an effective market is a clearly specified property right that people can understand and are able to trade. In economics jargon, an efficient market requires property rights that are:

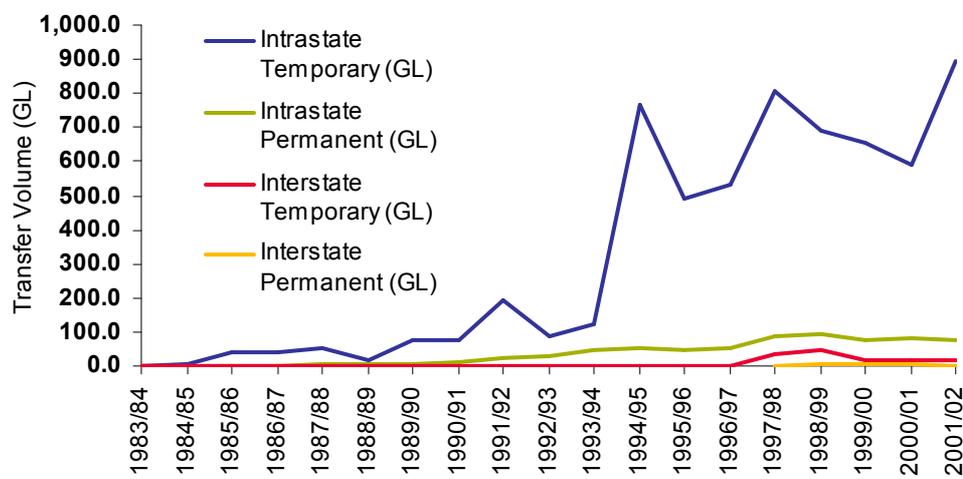
- Clearly specified;
- Secure;
- Exclusive;
- Enforceable; and
- Transferable and divisible.

As noted above, in the past water licences were typically attached to land, had uncertain security and were often imprecisely defined – making trade in water entitlements difficult or impossible. Since the 1994 CoAG agreement, however, there has been a thrust towards new entitlements that clearly define users’ rights to water, thereby enabling them to be traded. The key elements of this conversion have been the specification of entitlements with clearly defined volumes and reliability, separation of entitlements from land, and, as discussed in more detail shortly, “unbundling” of various components of entitlements such as the associated works and use approvals and delivery capacity.

Removing the link between land and water to enable water to be traded as an asset separate to land has occurred only gradually. It commenced with temporary trading of current season water allocations between irrigators within the same region, but has now extended to permanent trades of the underlying entitlements and to inter-regional and interstate trades. In several jurisdictions, linkages between water and land are maintained in that water can still only be held by landholders, and hence “re-attaches” to land after a transaction.

This process has progressed sufficiently to support a sizeable volume and value of water trading in most Australian jurisdictions. The majority occurs within the Murray Darling Basin, which accounts for 71.1% of the total area of irrigated crops and pastures in Australia¹ (see Figure 1).

Figure 1: **Water trading in the Murray Darling Basin**



Data source: Murray Darling Basin Commission

¹ <http://www.mdbc.gov.au/education/encyclopedia/irrigation/irrigation.htm>

Over the last two decades, there has clearly been significant progress towards the development of active markets in water (separate from land) as a key instrument in achieving more efficient and sustainable use of water resources. There is considerable evidence that water trading has in practice facilitated the movement of water from low value to higher value uses. Water trading has also increased the flexibility available to individual water users in how they operate, manage their risks and utilise their capital.

Need for better trading systems

Despite this, water markets in Australia are still at a relatively formative stage, while changes continue to be made to the regulatory and water allocation frameworks. At the heart of recent policy debate about water allocation and trading has been the question of whether current patterns of water usage are ecologically sustainable. Balancing the need for secure property rights for productive economic activity with the need for adaptive management of the environment as scientific knowledge improves over time was a key driver of the recent National Water Initiative agreed to by the Commonwealth and State Governments.

Significantly, however, the operation of efficient water markets is seen by most stakeholders - including many environmentalists - as being a key part of the solution to making best use of an increasingly scarce resource, rather than being the problem. Indeed, a key part of the new national water framework is to fast-track “an efficient water market structure, expanding markets to their widest possible geographic scope”.

In order to enable markets to deliver their full potential benefits, however, it has increasingly been recognised that the legal, administrative and regulatory arrangements underpinning the market needed significant reform. Amongst the most important outstanding issues are refinement of property rights and title registration processes in a manner consistent with efficient trading.

Role of titling/registration systems

A titling system can be seen as the legal and administrative mechanism to underpin the operation of a property rights regime. In the words of Small (2002) “property titling represents an administration mechanism to give certainty to the legal existence of a property right and thereby support its economic value”. The term ‘title’ is taken here to refer to the legal instrument held as evidence of the right, rather than the right itself².

Titling systems perform two main functions: enforcement of current property rights and facilitation of trade.

The title to a property right can be crucial to the security and enforceability of the underlying property right. Without title that provides an appropriate degree of certainty of the right, the incentives for efficient trade and investment may be substantially undermined. Even though one person may value an asset or resource more than another, they are unlikely to be prepared to pay potentially considerable amounts of money to purchase it if it is not clear that they will in fact gain secure rights to it.

² While the term ‘title’ is generally used to refer to private ownership, for the purposes of this paper we assume that this ‘ownership’ might be ownership of a lesser property right.

Similarly, the incentives for investment will be blunted if there is significant likelihood of future expected returns being expropriated. The title to a property right can therefore play an important role in providing the necessary assurance to the right holder that the right is secure enough to warrant investment.

The ability to use assets as collateral for loans is also impacted by the quality of title to a property right. If there is uncertainty over the legal existence of a property right over an asset, or the ability to have and protect an interest (eg a mortgage) in that asset, its ability to be used as collateral for financing productive activity will be reduced.

In addition to helping to assure the 'security' of a property right, a titling system also plays a key role in the way in which transfers of ownership of that property right are effected. Unnecessarily cumbersome systems could add to the 'transactions costs' of market participants and discourage trading.

Titling/registration systems can therefore play a key role in efficient market operation through underpinning the security of the property rights and through lowering transactions cost (eg reducing the need to verify title).

Different titling/registration systems apply to asset such as land, water, cars, shares, and other natural resources such as fishing quotas and logging. In other cases, there is no formal or public titling system and ownership is essentially determined by possession.

This suggests that the most effective system of titling system may vary according to factors such as:

- The nature of right being administered
- The physical nature of the asset or resource;
- The nature of the transactions that need to be administered with respect to the rights or entitlement;
- The extent of the unbundling/divisibility of resource;
- The value of the asset involved;
- The cost of establishing and operating the titling system; and
- The extent to which the asset underpins investment.

While there are many different titling systems in place for different resources, all the systems that could be considered formal are essentially one of two types: a 'recording system', frequently known as 'registers of deeds'; or a 'registration' system, more technically 'registers of rights'.

The Torrens system applied to land in Australia is a 'register of right'. A fundamental principle of the Torrens system is that, subject to certain exceptions, a person who becomes the registered proprietor of the land will obtain an indefeasible title. Essentially this means that the registered proprietor's title in that land cannot be affected or defeated by any existing estates or interests, other than registered interests that are noted in the Register. The register is intended to provide a record of all dealing with respect to particular land. Accordingly, a purchaser should only have to search the Register in order to ascertain the state of the title and should not have to go behind the 'curtain' of the Register.

Under the ‘old title’ system, in order to verify a proprietor’s title to the land, a person intending to deal with the land (for example the purchaser) had to rely upon the written records of previous dealings in relation to the land.

The perceived advantages of the Torrens land title system is that it reduces the transactions costs associated with verifying title and provides a greater quality of title that is more conducive to investment and the provision of financing using land as collateral. It needs to be recognised however, that there are alternative potential approaches to managing these risks (eg title insurance market) as have emerged in other countries. In addition, it does not necessarily follow that a Torrens land titling system is appropriate for all types of assets or resources.

Notwithstanding the nature of the water entitlements as inherently less secure ‘property rights’ than fee simple title to land, the question arises as to the most effective form of ‘titling’ system for this asset.

Key issues in developing titling regimes for water

Background

In the past, water licence registers maintained by responsible authorities constituted simply a record of licences. Such registers provided an appropriate way of recording and administering statutory based privileges. However, as water entitlements developed into divisible, tradeable and often highly valuable assets, and increasingly became de-linked from ‘Torrens title’ land titles, registration systems needed to serve an additional purpose – providing certainty of title and facilitating trading markets.

It has become increasingly apparent that old licence registration systems were inadequate to the role required of them in this new environment. These inadequacies were highlighted by a case of fraudulent sale of non-existent water entitlement in Victoria during the 1990s.

It has also become apparent that the separation of water from land titles – while an essential initiative required to unleash value from water trading - entailed a range of financial, legal and related issues that were perhaps not fully anticipated at the time the COAG reforms were enunciated. For example, while the overall value of combined land/water assets should in principle be increased when both elements can be traded separately, the value of a piece of land may be much diminished without an associated right to use water on that land. This has potentially significant implications for:

- The security of loans secured through mortgages on land (rather than over the water entitlement);
- The transfer of water entitlements as a result of directions in the Family Court or provisions in wills (eg the intent of the deceased may not be fulfilled under wills, where, as is common, land is left to the son, and the residual to the daughter).
- The rating base for local government.

This is not to suggest that these issues are insurmountable or justify not proceeding with market-based water allocation reforms. Rather, it emphasises the need for a range of issues to be addressed in establishing the titling systems for water as an asset separate from land.

While all jurisdictions have a legislative basis for a water entitlement register, these registers are in different forms and various stages of implementation. Some States have adopted systems similar to the Torrens land titles system. Some registers are managed by departments responsible for water resource management, in other cases the register is managed or will be managed by the Land Titles Office (or equivalent). Irrigation schemes also maintain their own registers.

The overarching aim in developing these new water entitlement registration systems is to ensure that they support the efficient operation of water markets by reducing transaction costs of trading and providing appropriate security over title, while at the same time integrating effectively with natural resource management processes and objectives.

The nature of water entitlements

The design of an effective system of registering entitlements depends, in part, on the nature of the entitlements themselves.

The current system of entitlements across Australia is in a state of transition, as jurisdictions progressively convert from ‘old’ forms of licensed entitlements to ‘new’ entitlements. Even after conversion, however, it is important to recognise that the property right held by users is a conditional one. The rights to manage and control water itself vest in the Crown, which then provides conditional rights to private users to use the water by issuing licences or entitlements. The rights conferred by these “access entitlements” typically encompass conditional rights to access or withdraw water, rather than ownership of the resource itself.

Notwithstanding the conditional nature of these rights, the increasing propensity of governments to cap extractions or “claw back” water for the environment (particularly in New South Wales) has however engendered a debate about ‘property rights’ and in particular whether compensation should be payable where conversion of entitlements has resulted in perceived attenuation of pre-existing entitlements to water, and the level of such compensation. The recent Intergovernmental agreement on the National Water Initiative established a risk assignment framework to apply to reductions in the availability of water for consumptive use that more clearly defines and quantifies the risks to be borne by users and Government respectively.

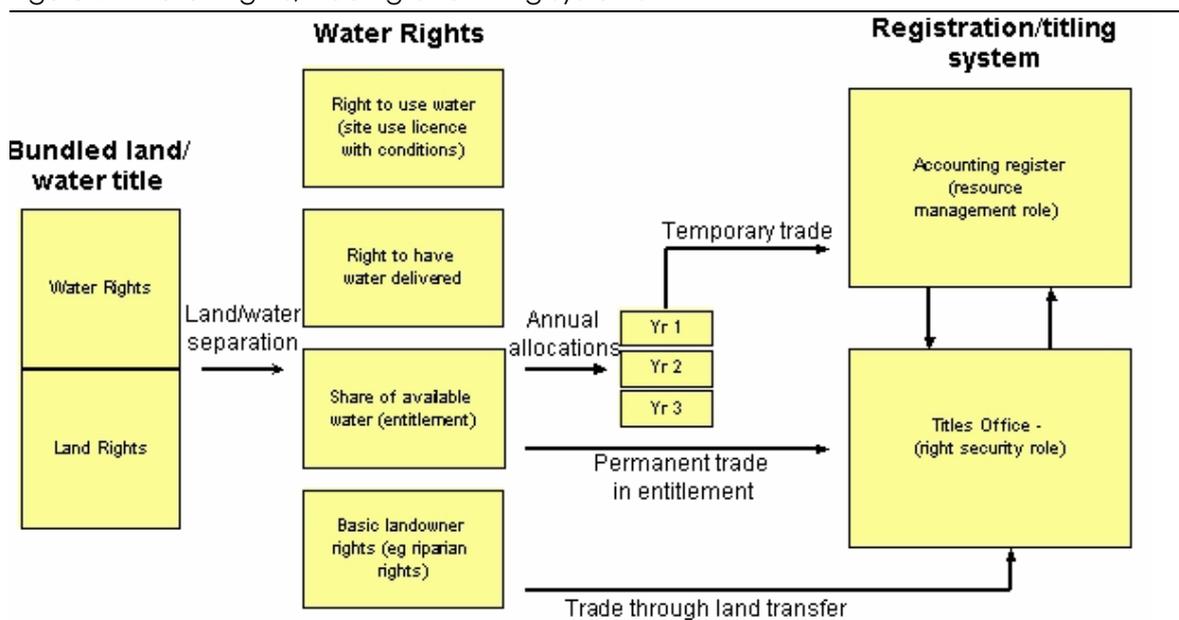
There also appears to be growing consensus - now codified in the National Water Initiative - on the appropriate way of specifying water entitlements. Specifically, the National Water Initiative defines *water access entitlements* as a ‘perpetual or ongoing entitlement to exclusive access to a share of water from a specified consumptive pool as defined in the relevant water plan’. Thus water entitlements confer a number of rights and obligations:

- **Entitlement** – the long-term interest (share) in a varying stream of periodic allocations.
- **Allocations** – a unit of opportunity (usually a volume of water) as distributed periodically. The actual volume of water may vary year-by-year depending on water availability.
- **Delivery** – the right to have an allocation of water delivered to a certain off-take location or obtain water from a particular location.
- **Use** – permission to use allocations with specified conditions and obligations to third parties.
- **Transfer** – the right to be able to transfer all or part of the entitlement or allocation
- **Obligations** – the responsibilities associated with holding of an entitlement.

In the past, many of these components tended to be “bundled” together within the one licence. There is now a trend towards “unbundling” these components into separate instruments and allowing some to be traded separately. Unbundling of water entitlements is now extending beyond the separation of water from land, to separate property rights and instruments for other components of the water entitlement itself, as illustrated below. For example, in Queensland, water allocations specifying entitlements to water are separated from site use licences and from contracts with suppliers for delivery. Similar unbundling has occurred in New South Wales and South Australia, and has recently been foreshadowed in the Victorian Government’s recent White Paper (Department of Sustainability and Environment, 2004).

While unbundling of water entitlements may improve the efficiency of water markets, it also has significant implications for the titling/registration system for those entitlements. For example, a system is needed to record transactions in both the underlying entitlement (i.e. permanent trades) as well as to account for annual allocations of water under those entitlements and any ‘temporary’ trades. The extent of unbundling affects the nature of the right that is being registered, and also raises issues as to whether there is a need to link the registration systems for unbundled rights in some way, as illustrated in Figure 2. The Victorian Government’s White Paper foreshadows developing a new system to keep track of linkages between unbundled rights, as well as continuing to record metered use for billing, and other administrative purposes.

Figure 2 Water Rights, Trading and Titling systems



Nature of transactions

The titling system can play a key role in ensuring transactions are finalised in a timely fashion by being administratively efficient. In addition, the registration system must be suited to the nature and type of transactions in the market.

In the case of water, trades to date have largely been for ‘temporary trades’ of seasonal allocations. Increasingly, ‘permanent trades’ of the underlying entitlement have occurred, and, in some jurisdictions, leasing of entitlements is now permitted.

As water markets develop, the number, scope and frequency of transactions are likely to continue to increase. This reflects the more divisible nature of water entitlements both in time and space, relative to land and some other natural resources. So-called ‘permanent’ trades in the underlying entitlements are likely to become increasingly important and require robust procedures to ensure security of title. At the same time, temporary trades of annual water allocations/assignments are also likely to continue to be a major part of market transactions, where the primary requirement is speed and efficiency, and where the underlying entitlement is not altered and does not change hands.

In addition, other types of transactions such as leases and derivative/options contracts need to be adequately provided for. The titling system also needs to be able to cater for any future developments in the nature of market transactions that may entail further unbundling (eg the timing of releases from dams at different times, or the development of various derivative products of value to water users as a risk management tool).

A key issue is how each of these types of transactions is handled by the titling/registration system. For example, those registers currently maintained by government departments tend to cover both permanent and temporary trades. In Queensland (and proposed in New South Wales) there has been institutional separation whereby the Queensland Resource Registry (QRR) deals only with permanent trades and other defined interests, while the Department of Natural Resources and Mines (NR&M) maintains its own register to track temporary trades.

Clearly, while a ‘Torrens title’ system as described above may provide the robustness and security necessary for permanent trades in underlying entitlements, the fundamental basis of the Torrens system, that is of title being effected by registration alone (rather than by execution of the associated contractual document), may be less well-suited to temporary trades where time is often of the essence.

In order to track accumulation, trade, and use of water volumes accrued under water entitlements, a separate water accounting system (distinct from the water entitlement register), is needed³. This would operate in a similar way to a bank account, whereby annual allocations are credited to the entitlement holder (as recorded in the register). Debits to the water account would be made as the water is taken (in conjunction with a use approval). Depending upon the rules applying in each region, carry-overs between seasons may or may not be permitted. Monitoring and enforcement would be required to ensure that a user did not use more water than was available in their water account.

Under this system, trades in annual water allocations would be recorded through the water accounting system, and would not involve the water entitlement register. There is therefore a clear separation between the titling function and the resource management function. As discussed above, this function may also be separated institutionally. This has in fact been the approach adopted in both New South Wales and Queensland.

³ See also Young and McColl (2002).

Protection of registered interests

In some parts of Australia, water entitlements now represent very valuable assets, and underpin often very large capital investments. This highlights the need for the titling system to provide appropriate 'quality of title' and for adequate protection of third party interests (eg mortgagees).

The title registration system impacts heavily on the ability to use water entitlements as collateral for loans. Previously, rural loans have been secured against the combined assets of land and the water rights tied to it. With separation of land from water, it will commonly be necessary to secure loans against both assets. The untying of these assets able to be traded separately may affect their market and hence bank values in several ways:

- The overall value of the assets together should, all else being equal, be higher, due to the new-found ability to trade water in the market; and
- The value of land by itself may be considerably lower than it was previously.

The ability to use water entitlements as collateral for loans depends on the ability of the lending institute to enforce the charge. Key issues for the lender here include:

- Ability to register the interest.
- Ability to obtain 'clear' title of security⁴.
- Assurances that the right of the registered interest can be enforced without interference.
- Risk that 'rights' can be altered without registered interest knowledge, consent or compensation.

The ability to register and enforce interests is fundamental to using an asset as security for a loan. At present, the extent to which existing registration/titling systems for water entitlements provide quality of title and protect registered interest varies considerably.

The existing Torrens land title systems provide a benchmark for a robust registration system. Key features of a registration system that would protect security interest holders include:

- The ability to register interests;
- The ability of lenders to register interests, with approval of entitlement holders;
- Notification and approval of transfers to all third parties with registered interests;
- Notice to all third parties of all events affecting the entitlement;
- Provisions to protect priority of interests;
- The ability of a mortgagee in possession to enforce its rights and deal with the entitlement with the same rights as its client;
- Guarantee of titles through 'indefeasibility';
- Arrangements to novate existing interests; and
- Transitional provisions to uphold the intent of wills.

⁴ Clear title means that the lending institution can be assured, given reasonable clarification through the registrable body, there is no 'hidden' interest or that the asset has been altered in any way which may either reduce the right of the bank under its mortgage or the value of the asset than what is stated on the details provided to the bank by the client or registration office.

While some States have moved some way to this benchmark, others have systems that provide relatively poor security to third party interests.

While the legislation in most States does require the relevant water entitlement registers to enable registration of interests, including mortgages, this is not yet the case in Victoria. In the case of irrigation schemes, charges can generally be registered over water entitlements held as shares in irrigation companies or co-operatives (but not for irrigation schemes formed as Trusts).

While most States require formal notice and approval of dealings in water entitlements by parties with registered interests in those entitlements, this is not always the case. Without this, there is a risk that water will be traded away by the entitlement holder without the knowledge of the security interest holder. In addition, unless notice is also given of other events affecting the water entitlement (e.g. material defaults, amendment, cancellation, surrender, renewal, imposition of additional conditions), the security held by a lender may be affected without the party's knowledge.

Another risk arises during the process of conversion of old forms of entitlement to new forms of water entitlement separate from land. Some process is required for protecting existing mortgage arrangements when land is separated from water so that mortgages previously taken over the combined asset are appropriately transferred to the separate assets. However, this process, whether by an automatic novation or a requirement to re-register interests, may have implications, for example for the priority of various registered interests and for the need for new security documentation.

Additional risks to financiers may arise if there is lack of clarity or inadequate arrangements in relation to matters such as rights to take possession, power of sale, appointment of a receiver and remedy default.

Indefeasibility

One issue on which there has been considerable but not necessarily well-informed debate is whether water titles should be “indefeasible”.

Essentially, indefeasibility means that the registered proprietor's title in that land is better than earlier but unregistered interests and is subject only to earlier interests noted in the Register (and certain statutory exceptions). In contrast, the titles recorded on existing water entitlement registers are not guaranteed by the government, so that verification of title requires searches of written records of previous dealings in relation to the entitlement. This has implications for the risk and cost of providing finance.

No register currently provides for the same ‘indefeasible’ title as that provided under the Torrens land title system. State governments have been reluctant to adopt indefeasibility into their water titling systems, even where many other features of Torrens title systems and protocols have been incorporated (NSW officials have, however, canvassed the possibility of adopting indefeasibility in the future). Often, these arguments have cited the nature of water access entitlements as statutory entitlements - that the concept of indefeasibility cannot apply to water entitlements, as governments wish, with good reason, to retain the power to cancel an entitlement where the holder does not comply with the conditions of the entitlement or the requirements of the relevant governing legislation. A further argument against the concept of indefeasibility is the

power of governments to regulate the resource by varying the allocation under an entitlement and other conditions of the entitlement.

Another concern is that a State guarantee has the potential to lead to additional costs to government through provision of an indemnity for loss suffered by reason of the functioning of the register.

In considering this issue, however, a clear distinction must be made between the titling/registration aspect of water entitlements and the management of the resource. If the entitlement is based around specified shares of a resource, the issue of indefeasibility is quite separate from the issue as to whether compensation should be paid for attenuation in entitlements. A clear title to a share of the available resource is not a guarantee to a defined volume of water in perpetuity.

The costs of claims to the government must be weighed up against the public and investor confidence that is instilled by a State guarantee of title. A State guarantee of title is a fundamental element of a Torrens based system and inextricably linked to the concept of indefeasibility. Ideally therefore, the accuracy and integrity of the register should be guaranteed by the State, as this will contribute to public and investor confidence in the register and ensure that appropriate resources are devoted to the maintenance of the register.

On balance, adopting a Torrens title system may prove to be a more efficient and effective means of managing the risks and transactions costs in dealing with them than alternatives such as relying on the advent of private title insurance as an economic instrument. Relevant considerations here include the existing familiarity and confidence in the Torrens system applying to land in Australia, the fledgling nature of the local private title insurance market, the fact that many transactions will involve both water and land together where having different underlying titling systems for each may increase costs, and the difficulty in accurately assessing and pricing risks given the current status of State water entitlement registers.

Public accessibility

Public accessibility will contribute to market efficiency by assisting buyers or lenders to verify title in a relatively fast and inexpensive manner. Under the land registration system, on-line searching is now available in all jurisdictions. This further increases the speed at which those dealing with the title can obtain title verification and has the advantage of allowing searches to be undertaken remotely. It is desirable that on-line searching of water entitlement registers be available, as is the case with land titles. On-line searching could be unrestricted and available to any member of the public via the internet. This is available on some systems already (eg the Water Allocation Register operated by the Queensland Resources Registry).

Alternatively, on-line searching could be provided on a subscriber-basis, which has the potential to provide the relevant government departments with additional revenue. Appropriate search parameters should be available, for example, persons searching the register should be able to search by name as well as the entitlement number/identifier and/or location.

Public accessibility of the register will also help to facilitate trade in water entitlements as it provides the market with essential information in relation to the water entitlements. This will particularly be the case where information with respect to price and volume are available. With

respect to land titling systems, generally a transfer of the title will not be registered unless the consideration (that is, the price paid for the land) is set out in the transfer. The transfer document is lodged at the titles office and registered on the title.

A search of the register in relation to the land will indicate the dealing number of the transfer document. Persons can then quickly obtain a search of the transfer document itself if they wish to ascertain the consideration paid under the transfer. It is preferable that a similar system be adopted in relation to water entitlements, to enable persons to obtain access to information with respect to price and volume. Even if not strictly required for registration of the transfer, inclusion of the price in the transfer document may, in some cases be unavoidable. For example where the transfer is subject to stamp duty, the consideration will need to be stated in order to allow the transfer to be assessed.

It is considered important for market efficiency for registers to be readily open to access by interested parties and the general public. This can assist buyers or financiers in verifying title, and can also facilitate trade through provision of market information (eg identity of entitlement holders who may be potential sellers, the price at which trades have taken place).

There is therefore a strong case for mandating that these registers be publicly accessible. While most State registers already are publicly accessible, this is currently not necessarily the case with respect to registers held by private irrigation companies.

Water for the environment

The titling system for water also needs to ensure there are no unnecessary impediments to water being allocated to the environment, or restrictions on environmentally sensitive usage patterns being regulated.

To a large degree, resolution of the balance between the needs of users for resource security and those of adaptive environmental management is in the definition of the underlying entitlements themselves (eg as a share of the water available for consumptive use), and the issue of compensation for attenuation of these entitlements, rather than in the technical details of the titling/registration system.

To date, environmental allocations have predominantly taken the form of ‘hard-wired’ management rules such as minimum environmental flow rules. Such rules are taken into account in the hydrological modelling that defines what is then “left over” for extractive users. Only these latter entitlements (i.e. those for extractive users) are recorded on the titling/registration system, because the entitlements they confer are net of water set aside for environmental purposes.

Alternatively, or in addition to the ‘prior right’ model, environmental water allocations could be, and in some cases have been, defined in similar volumetric terms as those of extractive entitlements. Under the ‘equivalent right’ model, such agencies could become traders in the market in their own right, buying and selling water in pursuit of environmental objectives. It would seem that formal title to such entitlements held, for example, by an environmental agency, could be incorporated into the water entitlement titling system relatively easily. Arguably, formal title to water entitlements (to be used for achieving environmental goals), provides a more secure allocation than does environmental flows specified in rules within subordinate legislation or other management instruments.

It would also be possible to ‘reserve’ part or all of the entitlements earmarked for environmental purposes in an analogous fashion to Crown land that is reserved for certain public purposes (eg national parks). Just as parcels of Crown land are able to be brought within the Torrens title land register and issued with a certificate of title, so too could environmental water entitlements.

Transition issues

Finally, it needs to be acknowledged that the detailed design and implementation of a titling system for water is, by its very nature, likely to be an ongoing exercise. In some areas, it may take considerable time to convert all existing water entitlements into clearly specified tradeable entitlements (eg catchment planning processes may take years).

In addition, there may be merit in a system that guarantees title in accordance with the register, conditional on the initial registered title being valid. Provisions could exist for registering these searches as they occur – essentially on a needs basis – and for governments then issuing a guarantee of absolute title. Adoption of robust water entitlement registration systems is likely to occur gradually, rather than being a one-off initiative.

Recent and future directions in reform

As noted above, while all jurisdictions have a legislative basis for a water entitlement register, these registers are in different forms and various stages of implementation.

The NSW and Queensland Governments have titling systems which are based on the Torrens System with registers are run by their land titling departments. The Queensland registry is computerised and uses identical forms and similar protocols to land transactions. There are some variances from the Torrens System used for the land registry, the most significant being that title does not provide for indefeasibility. As previously noted the titles office only deals with permanent trades, while temporary trades are recorded by the Department’s own register.

In Victoria, the White paper released by the Victorian Government has indicated significant changes to its register system, including the establishment of a single web-based register of registers and inclusion of the ability to register third party interest. Unlike a land titles register, the new system will need to keep track of links between unbundled rights, as well as continuing to be the basis for recording metered use, for billing, and other day-to-day administration.⁵ A similar system (WILMA) is being developed in South Australia.

The National Water initiative has however provided common principles for the future direction of reform of water registries. As part of the agreement, States have agreed to establish publicly-accessible water registers that foster public confidence and state unambiguously who owns the entitlement, and the nature of any encumbrances on it. The relevant guidelines require the registers to:

1. contain records of all water access entitlements in that jurisdiction, and trades of those entitlements, including their location;
2. be of sufficient standard to achieve the characteristics of secure water access entitlements contained in the Agreement;

⁵ Victorian Department of Sustainability and Environment (2004), chapter 4

3. contain protocols for the protection of third party interests.
4. be administered pursuant to certain procedures and protocols, based on land title office manuals and guidelines that exist in various States and Territories that seek to minimise transaction costs for market participants;
5. be publicly accessible, preferably over the internet, and include information such as the prices of trades and the identity of entitlement holders; and
6. enable resource managers to monitor and accumulate trade and water use volumes accrued under water entitlements in a separate water accounting system.

It is expected to take some time before all jurisdictions establish water entitlement registration systems that contain all these features. Their adoption would go a long way to providing a robust property rights and trading system that provides the necessary confidence and efficiency of transactions to underpin the further development of water markets in Australia.

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