

8. LAWS, POLICIES AND PRACTICES IMPACTING ON THE MANAGEMENT OF IRRIGATION WATER IN WESTERN AUSTRALIA

8.1 INTRODUCTION TO LAWS AND POLICIES FOR WATER MANAGEMENT

This section of the report presents:

- an overview of how the significant laws, policies and practices impact on the management and use of water for irrigation within Western Australia;
- an evaluation of their appropriateness or otherwise in supporting the objective of water reform in Western Australia; and
- a series of recommendations designed to improve those areas considered by the Steering Committee to be deficient.

In presenting this section of the report, the Steering Committee has drawn heavily upon and used abstracts from a report prepared for it by Freehills in association with Alex Gardner, Environmental Law Consultant. The report, entitled *Aspects of Laws Relating to Irrigated Agriculture in Western Australia* is available upon request.

At present, water management in Western Australia relies on the Department of Environment using its discretion to allocate water to competing users. The conditions under which a licence is granted, together with the duration of a particular licence, are also discretionary.

This approach may have been appropriate in an environment where there was little demand on water resources. However, at a time when water availability is declining and demand increasing, the current approach suffers from the major disadvantage of failing to provide users with sufficient incentive to save water. Indeed, in certain situations the Steering Committee believes that current policies act as a disincentive to effective and efficient use. In addition, the current system does not allow market forces to facilitate the movement of water to higher value usage.

The Steering Committee strongly recommends the use of an appropriately regulated market to promote a water-efficient sustainable irrigation industry. The recommended reforms need to be developed as a package, but it should be acknowledged that for them to work the management and regulatory regime would need significant strengthening across most functional areas.

8.2 ESSENTIAL FEATURES OF A WATER MANAGEMENT SYSTEM

In 1994, the CoAG Water Reform Framework Agreement committed the Commonwealth, states and territory governments to reform the Australian water industry. The main reforms required by CoAG were for legislation and policies related to irrigation which:

- more formally defined private rights to water use;
- promoted competition in order to increase the value placed on water;
- established tradeable entitlements;
- permitted effective trading by separating rights to water from land titles; and
- provided water for the environment.

More recently, CoAG announced its intention to refresh the 1994 reforms with the National Water Initiative (NWI) (CoAG 2003). The NWI emphasises the importance of fully functioning water markets as a mechanism for underpinning investment in water-efficient systems and initiating a transition by water to higher value uses.

Within this context the Steering Committee believes that the following principles should guide reforms to water resource management policies and practices in Western Australia:

- Creation of wealth and increased efficiency of water use is dependent on investment - the lower the level of risk the higher will be the level of investment for a given return on capital. Hence, secure and "bankable" water entitlements are critically important to a healthy irrigation industry. Ideally, entitlements to water should be granted in perpetuity. CoAG, through the NWI, promotes investment by increasing the confidence of potential investors in the water industry. It does this by providing secure access entitlements, better registry arrangements, improved monitoring, reporting and accounting and better access to information.
- Provided that an appropriate strategic water management framework exists, the market determines best where water is used and what it is used for. CoAG promotes water trading to set an economic value on water. It also recommends charging for water at a price which at least recovers the full cost of providing it.
- Water users should be accountable for impacts on the environment. The efficient use of water is usually consistent with the delivery of improved environmental outcomes. For example, moving from flood to trickle irrigation saves water which may have benefits for the environment. The investment required for this will be facilitated by secure water entitlements coupled with a robust system of water trading.
- All decisions relating to water resources and their management should be based on an adequate level of sound technical knowledge. As noted before, compromises will always need to be reached between what is considered "commercially adequate" as opposed to "scientifically adequate".
- Where adjustments to allocations are needed, any burden should be shared in an equitable manner among all parties. CoAG recommends that entitlements relate to a share of a resource rather than to an absolute volume of water. A key element of the NWI framework for water entitlements is *"the clear identification and assignment of risks between governments and water users over possible future reductions in water availability."* Under this framework, guidelines are needed on how the risks of resource availability are shared, including the risks of changes to water access entitlements created by changes in government policy. In this situation, the risk is borne by government and fair compensation should be paid in accordance with established guidelines.

8.3 CURRENT LEGISLATION, PROCEDURES AND CONSTRAINTS

Water resources are controlled in Western Australia under the *Rights in Water and Irrigation Act 1914*. Significant review of this Act was undertaken during 1999 to 2001, resulting in amendments to the Act in 2001. These amendments were intended to establish tradeable water entitlements, to improve the nature of water entitlements from CoAG 2003, and to enhance the protection of environmental water. Submissions to the Irrigation Review have identified constraints that still exist within the water legislation and policies in Western Australia and that prevent the full extent of the CoAG objectives for water from being achieved.

8.3.1 NATURE OF ENTITLEMENTS

- **Statutory Specification**

Under the *RWI Act 1914* the right to water, together with the right to use and control it are vested in the Crown. The Act also empowers the water resource manager to issue licences for the private use of water. The *RWI Act 1914* does not clearly specify the nature of the entitlement granted. Clear specification of entitlements is needed in order to facilitate trade in water and water-related products, and the unbundling of water rights is critical to this process (ACIL Tasman 2003).

In addition, the water resource manager has the power to specify such terms and restrictions as it thinks fit on a licence entitlement. This 'reserved power' contravenes an essential characteristic of an efficient market, i.e. that all parties to a particular transaction know what they are trading or investing in. Separating the water access entitlement from the licence to use will reduce the need for a 'reserved power'.

- **Current Practice**

The Department of Environment issues licences which specify a volumetric allocation together with the purpose for which the water may be used. Allocations are determined by applying a standard volume per hectare for the particular crop to the number of hectares to be irrigated. A number of instances have been drawn to the attention of the Steering Committee which suggest that this method gives rise to anomalies between the amount of water granted and the amount required.

Water is generally allocated on a first come first served basis (gifted), hence there is no requirement that the user achieves an effective outcome. Water trading is a mechanism for moving water towards a higher value use but this is not operating effectively in Western Australia.

Changes to cropping areas, crop types or crop locations and potentially rotational cropping (an essential prerequisite to growing vegetables successfully) may cause the irrigator to be in breach of licence conditions (Freehills – Gardner 2004). While irrigators can apply to change the purpose of their water use, this unnecessarily constrains those who have already proved they are legitimate water users. It is also administratively inefficient.

There has been no effective monitoring of water use against the area under irrigation by the Department of Environment, which means this mechanism is not working and could therefore easily be changed. A system under which a share of the available resource is auctioned and usage metered is preferable. Under such a system the user would bear the supply risks and be able to apply the water to any practical, efficient and legal use.

The current practice also ties water rights to land as well as to land use and by so doing contravenes a key element of the CoAG reforms - the separation of water entitlements from land titles. As a consequence the development of an effective water trading market is inhibited and licensees are constrained unnecessarily.

- **Eligibility for a Licence**

Although it is no longer necessary to own or occupy land in order to hold a licence, an applicant still needs to demonstrate the legal right to access the land from which water will be taken. The ability to trade is also linked to the land as licences can be traded only between people eligible to hold a licence. This deters brokers from entering the market and facilitating secondary market trades. It also restricts the rights of financiers in cases of default and accordingly diminishes a licence's "bankable" value

- **Irrigation Schemes**

In the case of irrigation cooperatives, the cooperative, rather than its members, is granted the entitlement to water. Water is then allocated to individual members by the cooperative under the conditions set out in its articles of association. Irrigators can also trade their entitlements in accordance with the cooperative's rules provided both parties are members of the scheme. Irrigators are prevented from trading water directly with parties outside the scheme. However, in the case of Harvey Water, the cooperative trades bulk water with the Water Corporation. This is permitted because the Water Corporation is a member of the cooperative.

8.3.2 SECURITY OF ENTITLEMENTS

The Freehills–Gardner (2004) report notes:

"Rights covering only a short time or which have significant risk of uncompensated reductions in the share of the available resource provided for the duration of the entitlement mean that water users, and financiers, are more uncertain about whether they will have access to the water in the future. Uncertainty about the individual right-holder's security of tenure can reduce the value of the water entitlement, impede investment and impact on the efficiency of trade."

- **Duration of Licences**

Under the *RIW Act 1914* licences may be granted either for a fixed or indefinite period. Normally licences are issued for the life of a project up to a maximum of 10 years.

The Steering Committee received numerous representations to the effect that this practice inhibits investment and detracts from the value of a water entitlement. Water entitlements should be treated as equivalent to a 'lease in perpetuity' balancing the desire of water users for a secure entitlement and the needs of the community to adaptively manage our natural resources. Under an efficient and fair system, the licence holder is entitled to continuing access to the entitlement; however, the reliabilities and other parameters of that entitlement may be amended.

- **Renewal of Licences**

Under current practice, licences are almost always renewed for a further term provided licence conditions are met. Where the volume of water under a licence has not been taken consistently, the licensed volume may be reduced.

It is the practice of the Department of Environment to permit licences to be renewed prior to their expiry date, thereby avoiding the situation where the value of a licence expires with the licence. This to some extent improves the value of a water entitlement as a security against borrowing. However, many projects require more than 10 years to justify the original investment, hence financiers downgrade the security rating of a water entitlement, even though it is capable of being renewed before its expiry date.

- **“Use it or lose it” Policy**

The Department of Environment is empowered to amend a licence when, in its opinion, the quantity of water granted under the licence has not been used consistently. The current policy relating to the exercise of this power is set out in the *Statewide Policy Number 11 – Management of Unused Water Entitlements*. The Steering Committee understands that the “use it or lose it” policy arose out of widespread irrigators' concerns over the possibility of speculation in water entitlements.

It is apparent that *Statewide Policy Number 11* embodies some protection for users and the intention is for it to be applied cautiously and with discretion by the DoE. This notwithstanding, it is the Steering Committee's view that the powers:

- act as disincentive to investment by users to save water;
- sometimes encourage irrigators to waste water to ensure the licensed volume of water is used;
- reduce the worth of a water licence as security; and
- provide too much discretion to the resource manager.

Furthermore, though 'speculation' is always a possibility, the Steering Committee was unable to identify any significant evidence of this within jurisdictions possessing an efficient water trading market. In fact, the case was put that the possession of a reasonable quantity of water by 'non users' facilitated trade and made sure that genuine users in need of water could always obtain it at a price determined by the market. Moreover, speculators bear downside as well as upside risk, which can be beneficial to genuine users wanting to expand their business.

- **Rights to Compensation**

Compensation is not payable where the right to water is removed under the “use it or lose it” policy. The DoE also has the right to amend a licence in the public interest (e.g. to provide water for domestic consumption or to promote recreational fishing etc.). Under these circumstances compensation is payable.

Licensed volumes can also be reduced for a number of other reasons which include:

- prevention of detrimental impacts on other users;
- protection of the environment; and
- protection of the resource where it is insufficient to meet the demand.

Under the current *RWI Act 1914*, compensation under these occurrences is payable only if the water use was “reasonable”, if the reduction is permanent, and if a particular licence holder suffers a greater impact than do other licence holders. Freehills – Gardner (2004) state that, in practical terms, payment of compensation is therefore limited to water reclaimed for 'public purposes'.

On balance, the Steering Committee believes that the conditions under which licences can be amended, together with the provisions under which compensation is payable, are detrimental because of the uncertainty they engender and the adverse consequences which result.

8.3.3 REGISTRATION SYSTEMS

The *RWI Act 1914* provides for the establishment of a Register of Instruments including licences granted under the Act.

It is widely held that a modified Torrens-based titling system is preferred for water titling (Freehills – Gardner 2004; ACIL Tasman – Freehills 2004). The features of such a system would include:

- a State guarantee of the accuracy and integrity of the register;
- indefeasible titles;
- the ability for transfers and encumbrances affecting the water right to be registered;
- the ability for lenders to register their interest independently of the licensee;
- notification to registered interest holders of any dealings in respect of the entitlement;
- public accessibility in every aspect.

The current system is not government guaranteed, can be of a form determined by the Department of Environment, and falls short to varying degrees of all the desirable attributes itemised above. The Steering Committee therefore considers the current registration system to be inadequate.

8.4 ALLOCATION, PLANNING, MONITORING AND ENFORCEMENT

Sustainable water management must be based on reliable water allocation processes which cater not only for the needs of irrigation and domestic consumers and other industries, but for environmental and social needs as well. Sound allocation processes require accurate knowledge of the current availability of water as well as knowledge of the status of the source from which it is drawn. The acquisition and dissemination of such knowledge is, in turn, dependent upon the existence of reliable planning, monitoring and reporting systems. These aspects are addressed subsequently in this section.

8.4.1 ALLOCATION LIMITS

The allocation limit is the maximum amount of water that the Department of Environment will make available for consumptive use. In keeping with the *RWI Act 1914*, the limit is set after meeting the needs of the environment.

Where insufficient technical data exists to permit a reliable estimate, the amount allocated may be set below the estimated sustainable yield.

The setting of reliable allocation limits and ability to adapt to changing conditions is being hampered by a lack of technical data and feedback from effective monitoring. The shortfall in management and the need for additional funding have been addressed above in Section 7.

8.4.2 WATER RESOURCE PLANNING

Water resource planning is the mechanism through which the Department of Environment provides secure water entitlements to users while meeting its social and environmental obligations.

The 2001 amendments to the *RWI Act 1914* introduced a requirement for statutory planning by the regulator. The Act provides for a hierarchy of planning (regional, sub-regional and local) and, among other things, specifies in considerable detail the content, processes for completion and amendment, and the form and nature of consultation.

Prior to 2001, all plans were non-statutory in the sense that the need for planning was not a requirement of the Act. Similarly, the content of any plan together with the manner and frequency with which plans were amended were also discretionary.

The *RWI Act 1914* is silent on the legal effect to be given to the implementation of an approved statutory plan. Accordingly, the resource manager only has to 'consider' the relevant plan when exercising its powers. Moreover, licences can be granted even though the granting of these would be in contravention of a plan. The Steering Committee believes that an approved statutory plan under the *RWI Act 1914* should be binding on the water resource manager.

The Act also appears deficient because it does not give the Department of Environment the power to defer the issuing of a licence pending further investigation. Under the Act, the water manager must consider licence applications even where a particular resource is fully allocated. These two shortcomings sometimes lead to licences being granted against the better judgement of the water resource manager, or to its decision being overturned on appeal.

The need for the DoE to raise the priority afforded to water resource planning is covered previously. It is noteworthy that as at the date of this report, no statutory plans have been completed (although two are under preparation).

8.4.3 METERING AND ENFORCEMENT

The Steering Committee is of the view that metering of all significant water use is necessary for a water resource to be managed properly and furthermore that metering should also be linked to water system monitoring. Metering is also an essential prerequisite for regulating water markets and water trading.

Almost no self-supply irrigation water is metered in Western Australia, although the water resource manager has the power under the Act to require meters to be installed by licensees. Also the Auditor General's report (OAG 2003) found that a relatively small proportion of the State's water licences had been checked for compliance.

The Steering Committee believes that the absence of compulsory metering is a serious shortcoming in the State's water resource management processes.

8.4.4 WATER RESOURCE MANAGEMENT CHARGES

Significant changes are needed to the water resource management structure, and in particular increased resources are required for the investigation and planning of water resources. While it is acknowledged that there may be some resistance from irrigators, the additional funding required for this work should come from those who benefit from access to water and participation in the proposed water market. The funding should include a public contribution to the management of the environmental water allocation.

It is not new that beneficiaries contribute to meeting water management. It happens in many places including most states of Australia (Freehills – Gardner 2004). Some water users contribute to water resource management costs by undertaking groundwater studies and monitoring. Any proposed fee structure should take account of this private contribution.

8.5 ADMINISTRATIVE IMPACT ON WATER TRADING

8.5.1 PERMISSIBLE TRADES UNDER THE RIWI ACT

Licences may be permanently transferred to another person who holds or is eligible to hold a licence of the same kind.

Temporary trades are affected by allowing a third party to operate under the terms of the licence for a period of one year. Where extenuating circumstances can be proven, periods of less than one year may also be allowed. No other form of temporary trade is permitted.

The water resource manager has absolute discretion to approve or disapprove all trades. If a trade is deemed environmentally adverse, it may either be refused or referred to the Environmental Protection Authority for assessment.

The process is not ideal because:

- Only a limited number of trade types are permitted.
- The approval process slows down the trade process and increases transaction costs.
- The discretionary powers or 'reserved power' currently residing with the regulator/manager creates a high level of uncertainty over whether a trade is likely to be permitted or not. These reserved powers would be unnecessary with clearer specification (unbundling) of entitlements, and separation of land title from water access entitlement.
- The role of the Department of Environment in removing unused individual entitlements (under Policy 11) and re-issuing these to other users at a later date is similar to the 'warehousing' of water by a participant in the market. There is no evidence that the regulator/manager increases market efficiency by acting in this way.

8.5.2 CONSTRAINTS IMPOSED ON WATER TRADING

Under the current trading policy, licensed entitlements which have never been used are not tradeable. The Steering Committee views this policy as tantamount to encouraging the wasting of water in a manner similar to the "use it or lose it" policy.

The Steering Committee supports the approach that water which is saved as a result of improved efficiency can be traded.

8.5.3 POLICY ON RELEASE OF NEW LICENCES

Under current policy, the Department of Environment releases new licences at zero cost, generally on the basis of "first come first served" until a particular source of water is fully allocated. The onset of water trading which improves efficiency by revealing the value of water is therefore delayed until the resource is fully allocated.

The Steering Committee is of the view that this practice promotes the attitude that water has zero value and is in abundant supply. As a result it runs contrary to the objectives of the State Water Strategy.

8.5.4 ACCESS TO INFORMATION

The current titling and registration systems are discussed in section 8.3.3.

Water trading is enhanced when information is readily available. Hence, the current titling and registration systems serve to inhibit trading because the systems do not present all the essential information needed. The situation is compounded by the Department of Environment's current practice that only permits a copy of a title to be released with the prior consent of the licensee.

8.5.5 BROKERING

Brokers play a valuable role in promoting market efficiency by:

- facilitating the interaction between buyers and sellers; and
- standing in the market, thereby ensuring water can always be traded.

Under the current policy, water trading is restricted to those who have the right to access land. This poses a restriction on brokering. The situation is compounded by the DoE's trading policy which prevents it from engaging in brokering.

8.6 RECOMMENDATIONS

8.6.1 NATURE OF ENTITLEMENTS

- Separate (unbundle) the entitlement to access water from the approval to use water on specific land.
- Discontinue the practice of specifying a water entitlement by reference to the purpose (i.e. the irrigated area of specific crops) for which the entitlement is allocated.
- Present conditions relating to the use of water at particular locations as a separate instrument.
- Specify water entitlements as a share (converted to a volumetric allocation annually or periodically as actual supply conditions require) of the water resource available to water users¹⁸.
- Discontinue the practice of requiring access to land in order to hold or trade a water licence.

8.6.2 SECURITY OF ENTITLEMENT

- Grant perpetual water licences, subject to them also being specified as a share of the available resource. In the event that government is unwilling to adopt perpetual entitlements, licences should be granted for at least 40 years and made renewable at any time during the term subject to meeting the conditions of the licence.
- Abandon the “use it or lose it”¹⁹ policy.
- Specify clearly the processes for making changes to the consumptive pool.
- Specify the various shares in comprehensive management plans, including those allocated to the environment, public interest and domestic consumption as well as irrigation.
- Adopt the risk allocation framework proposed in the National Water Initiative’s Intergovernmental agreement.²⁰
- Compensate users for changes to water management plans which are not contemplated in these plans and which result in reductions to allocations to users. An appropriate basis for compensation is contained within the NWI framework.
- Make long-term increases in the consumptive pool (which result from unanticipated changes to water management plans) available for use at the government’s discretion. Such discretion should include the option of allocating some or all of the water from the pool to new users.
- Adopt a “Torrens-based” register of titles which incorporates the key features proposed in the *Land and Water Australia Water Titling Report*.

8.6.3 ALLOCATION, PLANNING, MONITORING AND ENFORCEMENT

- Accelerate the formulation of statutory-based management plans.
- Make statutory plans legally binding on the water resource manager to ensure that these plans are implemented.
- Amend the *RWI Act 1914* to allow the water resource manager to place an embargo on issuing new licences to allow for the completion of management plans. The embargo should be permitted only for a limited time specified under the Act.
- Issue all licences on a competitive basis at a minimum reserve price.²¹ Consideration should be given to adopting the practice recommended by the Natural Resource Management Standing Committee²² of holding auctions over time with an appropriate proportion of the remaining resource being introduced on each occasion.
- Implement a policy whereby all consumptive use above a threshold of five megalitres per annum is metered. The threshold should be reviewed regularly and incrementally reduced if there is less water available.
- Implement enforcement procedures for non-compliance.
- Make the amount of water used by each licensee a matter of public record and highlight instances where licence conditions are breached.

¹⁸ Freehills – Gardner 2004 contains the qualification “at least in respect of where resources are considered to be 70 per cent allocated.” The Committee does not endorse this qualification.

¹⁹ Freehills – Gardner merely states that a policy decision is needed on whether or not to retain this practice. The Committee does not have this reservation.

²⁰ Freehills – Gardner recommends consideration only.

²¹ Freehills – Gardner only recommends consideration of this in situations of more than 70 per cent allocation and alludes to the possibility of it being done in all cases.

²² Freehills – Gardner quotes from Natural Resource Management Standing Committee, *A National Approach to Water Trading*, November 2001, s.7.3, [online] <http://www.affa.gov.au>

8.6.4 FACILITATION OF WATER TRADING

- Withdraw the water trading policy, Water and Rivers Commission 2001, *Statewide Policy No.6 - Transferable (Tradeable) Water Entitlements for Western Australia* and prepare a new policy for water trading which complies with the nationally-agreed best practice guidelines for water markets and water trading. This will include but not be limited to:
 - Minimising transaction costs, including the turnaround time for processing and approving trades by pre testing in advance and then specifying conditions under which trades will receive automatic approval. Unbundling water entitlements from use conditions will remove the necessity to consider the impact of water use in the assessment of an application to trade.
 - Requiring the water resource manager to facilitate the disclosure of information on water ownership and availability to the market.
 - Considering amending the legislative framework to allow individual irrigators to trade with water users outside their particular scheme. This assumes that a means of transporting water between both parties exists.

8.6.5 WATER MANAGEMENT CHARGES

- Reconsider the introduction of water resource management charges which recover that share of the cost attributable to users.²³ The basis of charging should be transparent and the money raised used for the agreed purposes. As a starting point, licence fees should be introduced immediately to cover licence and compliance administrative costs.
- Establish mechanisms by which water users monitor the efficiency of service delivery and have the opportunity to influence the services that are delivered.

²³ Freehills – Gardner suggests that this course be implemented for “certainty in respect of water service providers and most likely in respect of all licensees”.