



# final report

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## **Review of Australian Water Regulations and their impact on current and future Feedlot Water Security Phase One – Regulatory Report**

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## Executive summary

### Assessment of key risks by jurisdiction

There is considerable variation across and within jurisdictions in defining tradeable water entitlements, in underlying hydrology, and in levels of allocation of available water and types of uses.

Comparisons are further complicated by the use of different terminology in each jurisdiction. In some cases, the same word e.g. “allocation” has different meanings in different States. We have therefore adopted generic terminology for the purposes of the National Overview. The Report then reverts to the relevant State terminology under each State heading.

The risks associated with entitlements also vary by jurisdiction. Moreover, each individual water entitlement has its own characteristics and risks, so that a full risk assessment requires examination of various factors affecting the entitlement in question. It is also important to develop an awareness of political risk as this also varies significantly.

Key risks can be categorised as follows:

- Access to water under the entitlement;
- The tenure and security of the entitlement;
- The transferability and liquidity of the entitlement; and
- The quality of title of the entitlement.

A table showing key risk factors by jurisdiction is appended to this summary (reflecting the situation at the time of writing, but which may change rapidly). It should be noted that the water market is regional and there is no standardised method of easily comparing prices for equivalent water entitlements on a national basis.

### Access to water under a water access entitlement

The level of reliability of access to water varies across Australia, reflecting both different climatic and hydrological conditions as well as the storage management policies adopted by the storage operator.

A further risk arises in the context of the actual delivery of the water to the entitlement holder. For those water access entitlements dependent upon delivery infrastructure, the ongoing availability and pricing of access to infrastructure also affects the reliability of the water access entitlement. Two problems here include:

- The risk of ‘stranded assets’, where water is traded out of a district and the irrigation distribution infrastructure becomes uneconomic, or at least increasingly costly per unit of entitlement; and
- Risks associated with the state of (sometimes ageing) infrastructure and the ability of the supply authority to finance asset replacement and renewals.

### **Tenure and security of the water access entitlement**

All water access entitlements in Australia are ultimately subject to attenuation (compulsory reduction by the State) by virtue of the right to use and control water vesting in the Crown (State), the security of water rights depends on the likelihood of this attenuation being exercised, the processes whereby this may occur, and whether compensation is payable in such an event. This assessment also varies across jurisdictions.

Clearly, sovereign (government related) risk attenuation is more likely in regions where the resource is considered to be under stress and/or there are particular concerns about the sustainability of water use. However, in States where the National Water Initiative (as signed in 2004) has not been implemented such as WA and Tasmania risk may also arise where water entitlements issued to one user may be reduced at the end of a licence period so that the Government can be issue water entitlements or additional water entitlements to a different water user.

### **Transferability/liquidity**

The extent and ease with which water access entitlements can be traded varies widely between different entitlements and jurisdictions. Generally, only clearly defined water access entitlements may be traded. Some water access entitlements can be traded only on a temporary basis. In some cases the market is further restricted by requirements that only landholders able to use the water on identified parcels of land can hold a water access entitlement. This is more commonly the case with groundwater.

Governmental approval is often required to finalise a transaction, sometimes (e.g. NSW) with scope for considerable bureaucratic or Ministerial discretion. The processes and institutional arrangements for approvals vary across States.

Some local restrictions on trade have been imposed because of concerns relating to the social, economic and financial impacts of trade out of regions. This is a particular problem in Victoria.

For example, trading rules and policies set a cap on external permanent transfers and allocations in specified zones.

### **Quality of title**

While most jurisdictions have a legislative basis for a water entitlement register, these registers are in different forms and vary in accuracy and stages of implementation.

Some States (NSW Victoria and Queensland) have adopted systems similar to the Torrens land titles system without the government guarantee. Torrens Title provides a government guarantee of the title based on the information on the register and unlike old systems title it does not require the purchaser to trace the right to the title through all transfers of ownership back to the original title. Others have online departmental registers that are more in the nature of recording systems or 'old title' systems. 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). In addition, irrigation schemes also maintain their own registers.

Some of these registration systems provide better safeguards than others, but no register currently provides for the same 'indefeasible' (government guaranteed) title as that provided under Torrens land title. Feedlot owners should consider whether they should undertake a review of the chain of title (the history of transfer of water access entitlements) to confirm that the name on the title on the Water Register is correct and there are no unregistered mortgages or charges over the title.

## Table of contents

<b>1</b>	<b>CHAPTER 1 – NATIONAL OVERVIEW .....</b>	<b>8</b>
	<b>Glossary .....</b>	<b>8</b>
1.1	Underlying risks .....	12
<b>2</b>	<b>Chapter 2 – The Commonwealth .....</b>	<b>18</b>
2.1	Part 1 – Introduction – The inter-relationship between State and Commonwealth .....	18
2.2	Part 2 – Legislation and the NWI .....	18
2.2.1	Division 1 – NWI .....	18
2.2.2	Division 2 - Water Law .....	19
2.3	Part 3 – Status, risks, gaps, practical implications .....	27
<b>3</b>	<b>Chapter 3 – New South Wales .....</b>	<b>28</b>
3.1	Part 1 – Introduction – The inter-relationship between State and Local Councils .....	28
3.2	Part 2 – Legislation .....	28
3.2.1	Division 1 – Water Law and Water Sharing Plans .....	28
3.2.2	Division 2 – Environmental Law (recycled water) .....	31
3.2.3	Division 3 – Planning Law and SEPPs .....	31
3.3	Part 3 – Local Councils .....	31
3.3.1	Division 1 – LEPs and DCPs .....	31
3.3.2	Division 2 – Comparison of Council Areas with history of feed lots .....	32
3.4	Part 4 - Risks– status, risks, gaps, practical implications .....	36
<b>4</b>	<b>Chapter 4 – Queensland .....</b>	<b>37</b>
4.1	Part 1 – Introduction – The inter-relationship between State and Local Councils .....	37
4.2	Part 2 – Legislation .....	37
4.2.1	Division 1 – Water Law and Water Plans and Resource Operations Plans .....	37
4.2.2	Division 2 – Environmental Law (recycled water) .....	40
4.2.3	Division 3 – Planning Law .....	41
4.3	Part 3 – Local Councils .....	41
4.3.1	Division 1 – Local Plans .....	41
4.3.2	Division 2 – Comparison of Council Areas with history of feed lots .....	42
4.4	Part 4 - Risks– status, risks, gaps, practical implications .....	43
<b>5</b>	<b>Chapter 5 – Western Australia .....</b>	<b>45</b>

5.1	Part 1 – Introduction – The inter-relationship between State and Local Councils .....	45
5.2	Part 2 – Legislation.....	45
5.2.1	Division 1 – Water Law and Water Management Plans .....	45
5.2.2	Division 2 – Environmental Law (recycled Water) .....	48
5.2.3	Division 3 – Planning Law .....	48
5.3	Part 3 – Local Councils.....	48
5.3.1	Division 1 – Regional and Local planning schemes .....	48
5.3.2	Division 2 – Comparison of Council Areas with history of feed lots .....	49
5.4	Part 4 - Risks– status, risks, gaps, practical implications.....	50
<b>6</b>	<b>Chapter 6 Northern Territory.....</b>	<b>52</b>
6.1	Part 1 – Introduction – The inter-relationship between State and Local Councils.....	52
6.2	Part 2 – Legislation.....	52
6.2.1	Division 1 – Water Law and Water Management Plans .....	52
6.2.2	Division 2 – Environmental Law (recycled water) .....	53
6.2.3	Division 3 – Planning Law .....	54
6.3	Part 4 - Risks– status, risks, gaps, practical implications.....	54
<b>7</b>	<b>Chapter 7 – South Australia .....</b>	<b>55</b>
7.1	Part 1 – Introduction – The inter-relationship between State and Local Councils.....	55
7.2	Part 2 – Legislation.....	55
7.2.1	Division 1 – Water Law and Water Management Plans .....	55
7.2.2	Division 2 – Environmental Law (recycled water) .....	56
7.2.3	Division 3 – Planning Law .....	56
7.3	Part 3 – Local Councils.....	58
7.3.1	Division 1 – Council Development plans .....	58
7.3.2	Division 2 –Council Areas with history of feed lots.....	58
7.4	Part 4 - Risks– status, risks, gaps, practical implications.....	58
<b>8</b>	<b>Chapter 8 – Victoria .....</b>	<b>59</b>
8.1	Part 1 – Introduction – The inter-relationship between State and Local Councils.....	59
8.2	Part 2 – Legislation.....	59
8.2.1	Division 1 – Water Law Sustainable Water Strategies and Water Resource Assessments 59	
8.2.2	Division 2 – Recycled Water .....	62
8.2.3	Division 3 – Planning Law .....	62

8.3	Part 3 – Local Councils.....	63
8.3.1	Division 1 – By-laws.....	63
8.3.2	Division 2 –Council Areas with history of feed lots.....	63
8.4	Part 4 - Risks– status, risks, gaps, practical implications.....	63
<b>9</b>	<b>Chapter 9 – Tasmania .....</b>	<b>65</b>
9.1	Part 1 – Introduction – The inter-relationship between State and Local Councils.....	65
9.2	Part 2 – Legislation.....	65
9.2.1	Division 1 – Water Law and Water Management Plans .....	65
9.2.2	Division 2 – Environmental Law (recycled water) .....	68
9.2.3	Division 3 – Planning Law .....	68
9.3	Part 3 – Local Councils.....	68
9.3.1	Division 1 – By-laws.....	68
9.3.2	Division 2 – Council Areas with history of feed lots .....	68
9.4	Part 4 - Risks– status, risks, gaps, practical implications.....	69
<b>10</b>	<b>Chapter 10 – Australian Capital Territory .....</b>	<b>70</b>
10.1	Part 1 – Introduction – The inter-relationship between Territory and Local Councils .....	70
10.2	Part 2 – Legislation.....	70
10.2.1	Division 1 – Water Law .....	70
10.2.2	Division 2 – Environmental Law (recycled water) .....	71
10.2.3	Division 3 – Planning Law .....	71
10.3	Part 3 – Local Councils.....	71
10.4	Part 4 - Risks– status, risks, gaps, practical implications.....	71

# 1 CHAPTER 1 – NATIONAL OVERVIEW

## Glossary <sup>1</sup>

This glossary is based on generic terminology used by the ACCC in relation to the National water industry and assists in allowing a coherent discussion of the issues without reverting to individual State specific terminology.

**groundwater** (a) water occurring naturally below ground level (whether in an aquifer or otherwise), or (b) water occurring at a place below ground that has been pumped, diverted or released to that place for the purpose of being stored there, but does not include water held in underground tanks, pipes or other works.

**irrigation right** a right that a person has against an irrigation infrastructure operator to receive water that is not a water access right or a water delivery right.

**irrigation infrastructure operator** an infrastructure operator that operates water service infrastructure for the purposes of delivering water for the primary purpose of being used for irrigation.

**infrastructure operator** a person who owns or operates infrastructure for the storage; delivery; or drainage of water (water service infrastructure) for the purpose of providing a service to someone who does not own or operate the infrastructure.

**National Water Initiative** the inter-governmental agreement on a national water initiative between the Australian Government and the governments of New South Wales, Victoria, Queensland, Western Australia, Tasmania, the Australian Capital Territory and the Northern Territory.

**regulated system** means a surface water system in which water in a watercourse can be stored or flow levels can be controlled, through the use of structures such as large dams or large weirs. **surface water** includes water in a watercourse, lake or wetland, and any water flowing over or lying on land after having precipitated naturally or having risen to the surface naturally from underground.

**transmission loss** water lost to evaporation, seepage, over bank flow etc. along the length of natural water courses. Losses vary with in-stream flow volumes and individual water course characteristics.

**unregulated system** means a surface water system that is not a regulated system.

**water access entitlement** a perpetual or ongoing entitlement, by or under a law of a state, to exclusive access to a share of the water resources of a water resource plan area.

**water access right** any right conferred by or under the law of a state or territory to hold water from a water resource and/or take water from a water resource.

**water allocation** the specific volume of water allocated to water access entitlements in a given water accounting period.

**water delivery right** a right to have water delivered by an infrastructure operator.

<sup>1</sup> Adapted from Water Trading Rules Advice on Amendments ACCC October 2016



## Introduction

Chapter 1 National Overview is intended explain general principles, concepts and terms and briefly explain how the Australian water industry “works”. Without a conceptual overview much of the subsequent information would be difficult for a layperson to understand.

## The nature of water access entitlements and underlying risks

### What is a water access entitlement?

#### The nature of water access entitlements

In Australia, rights to control and use water are, under the water legislation enacted throughout Australia around the end of the 19th century, primarily vested in the Crown (State). Rights to access and use water for certain periods and under certain conditions are then administratively allocated to users through various licensing and approvals systems in each State or Territory. These water access entitlements are therefore in the most part ‘statutory entitlements’ rather than property or proprietary rights in the legal sense.

The key point here is that a water access entitlement does provide defined rights, but these fall well short of those associated with the ownership of Torrens title land with a government guarantee of title.

### What does a water access entitlement confer?

There is a wide array of different types of water access entitlements between and within Australian jurisdictions. Fundamentally, however, a water access entitlement provides its holder with a number of rights and obligations. The rights conferred by these “water access entitlements” typically encompass conditional rights to access or withdraw water, rather than ownership of the resource itself.

Water access entitlements can be conceived of as comprising several key components (see Box 1)

- **Entitlement** – the long-term interest (share) in a varying stream of periodic allocations.
- **Allocations** – a unit of opportunity (usually a volume of water) as announced and distributed as a percentage of entitlement
- **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 pre-specified use conditions and obligations to third parties.
- **Transfer** – the right to be able to transfer all or part of the water access entitlement or allocation
- **Obligations** – the responsibilities associated with holding of a water access entitlement

In the past, many of these components tended to be “bundled” together within the one licence. As discussed further below, however, there is now a trend towards “unbundling” these components into separate instruments and allowing some to be traded separately. Indeed, the extent to which it is tradeable in whole or in part to another party is a key feature of a water access entitlement.

A key implication is that full rights and obligations of a water access entitlement cannot be fully gauged simply by inspecting the water access entitlement instrument itself. Rather, the rights and obligations specified in a water access entitlement need to be read in conjunction with related instruments – such as water resource plans and rules for the relevant region, and site use approvals - that may qualify or enhance these rights and obligations. Another example is water delivery rights that limit the amount of

allocation that can be delivered through specified infrastructure that has limited capacity.

**Box 1 Rights and Obligations of a Water Access Entitlement*****Access to water allocations***

Water access entitlements held by end users are typically defined in the form of a unit share of the sustainable yield in a specified water resource, with a specified reliability or probability of delivery. The actual volume of water available to water access entitlement holders in a season will depend on allocation decisions made by the supply authority given the water supply situation at the time. In several States, both the long-term entitlement and the annual allocations made available under them are determined in the context of formal water resource plans developed for specific catchments/basins.

***Water Delivery Rights***

Water delivery rights have in parts of NSW Victoria and Queensland been unbundled from water access entitlements. Water delivery rights in some cases are now required to have water delivered from its source to the point of delivery (and for which separate charges are payable to the supply authority). In Queensland explicit delivery contracts exist with SunWater. In some parts of NSW and Victoria the water delivery rights are managed by local supply authorities.

***Use***

Some licences also provide the right to actually use the water under a water access entitlement for defined purposes on specific parcels of land. In other cases, separate site use approvals are required. Site use approvals are designed to ensure that the proposed location and use of water is environmentally sustainable.

***Right to transfer***

The extent to which the holder of a water access entitlement is able to transfer the entitlement to another party in whole or in part varies across different entitlements and between States. These trading rules are typically specified in other instruments such as primary and subsidiary legislation, water resource plans, and irrigation scheme constitutions.

***Obligations***

A range of conditions and obligations generally attach to water access entitlements. Typically these include various conditions pertaining to the way in which water can be taken and used, and also financial obligations associated with holding of an entitlement and delivery of water.

## **What types of water access entitlements are there?**

Although there is a progressive move towards conversion to more clearly specified entitlements, there are many different types of water access entitlements in existence.

The existing array of water access entitlements can be usefully seen as having various (not mutually exclusive) dimensions or characteristics, including:

- The use or purpose of the entitlement;
- The source of the water;
- The legal form of the entitlement; and
- The level of devolution in the supply chain.

### **The use or purpose of the entitlement**

Existing water access entitlements for consumptive purposes generally distinguish – explicitly or implicitly – between uses such as irrigation, stock and domestic, urban supply, mining and industrial use. In addition, specific entitlements apply for other non-consumptive uses (principally hydro-electric power generation). At the highest level, a distinction can be made between consumptive and non-consumptive uses of water. In most Australian jurisdictions, allocation of water for the environment has prior right to be satisfied before allocation to consumptive use and is generally defined as environmental flow obligations imposed on supply authorities. These environmental allocations are not tradeable with other uses. However, in addition to this environmental allocation, the various environmental water holders have also purchased other water access entitlements from consumptive users for example NSW general security in a specific Water Sharing Plan. In certain circumstances these water access entitlements and associated allocation owned for the benefit of the environment may be traded by the Commonwealth Environmental Water Holder (CEWH) in accordance with the Water Act 2007 (Cth) and in some cases by State owned environmental water holders.

### **The source of the water**

Existing water access entitlements can be distinguished according to the source of water to which they relate. At a generic level this includes regulated rivers and supply systems (i.e. where the flow of the river is regulated by large structures such as dams or weirs), diversions from unregulated rivers and streams (i.e. where the flow of rivers or streams is not regulated by large structures such as dams or weirs), groundwater systems (subartesian and artesian), and overland flows. At a local level, water access entitlements relate to specific water sources.

### **The legal form of the entitlement**

Entitlements to access water may be specified in a variety of legal forms including primary and subordinate legislation, licences, leases, contracts or agreements, and tradeable instruments. As noted above, the ability to take water or interfere with waterways is generally governed by various forms of licences that are issued, monitored and enforced by government agencies responsible for water resource management.

The way in which these water access entitlements are recorded or registered varies between jurisdictions, with some having established titling systems similar to land titles and others with less formal departmental registers. In addition, irrigation companies maintain their own registers of water entitlements and shares in their schemes.

## The level of devolution in the supply chain

Different types of water access entitlements are held by bulk users, such as urban and irrigation infrastructure operators and individual users. Desalinated, recycled and storm water may also be available under contract, but this water is not a form of water access entitlements.

In urban settings, the level of devolution is generally at the bulk supply level, that is a single high volume urban or town water, water access entitlement, these bulk water access entitlements cannot be transferred to third parties. Urban infrastructure operators hold entitlements to bulk water and are obliged to supply individual domestic and non-domestic customers who themselves have no separate entitlements. Customers only have a contractual right to connection and supply. Recycled water may also be available for sale under contract.

In rural settings, irrigation infrastructure operators also typically hold some form of entitlement to bulk water, but individual irrigators often have more clearly defined beneficial entitlements – for example individual water access entitlements and ‘shares’ in the irrigation company entitlements, and, in some cases, contractual rights to delivery.

## 1.1 Underlying risks

### Introduction

The following discussion identifies the key generic risks associated with water access entitlements. A more detailed examination of these risks are dealt with by jurisdiction.

### Sources of risk

The sources of risk can be broadly categorised into four groups:

- Sovereign risk: The risk that government intervention may attenuate or even annul a water entitlement, either by way of the exercise of ministerial discretion or future legislative change.
- Regulatory risk.
- Market risk: The risk associated with variability of the value of water entitlement due to market conditions.
- Hydrological or resource risk: Risks associated with, for example, changes in rainfall or the recharge rate of aquifers.

These risks manifest themselves through their potential impacts on:

- Access to water under the entitlement;
- The tenure and security of the entitlement;
- The transferability and liquidity of the entitlement; and
- The quality of title of the entitlement
- Water Allocation Announcements.

### Access to water under the entitlement

Australia’s climatic variability means that the volume of water under any entitlement may not actually be available in any given season. Any resulting differences in reliability are reflected in the value of the entitlement.

The level of reliability of a delivery entitlement reflects both:

- the inherent uncertainty associated with the availability of water at the particular source, for example because of rainfall variability; and
- the storage management policies adopted by the storage operator.

An assessment of the risks of access to water and hence value of an entitlement requires a sound understanding of two factors:

- The specific resource on which the water entitlement is drawn: For example, in a catchment where the level of water utilisation is low relative to the sustainable yield, the risk of access to water is likely to be less than in areas that are fully allocated. More generally, higher dam capacity relative to nominal allocation, and less volatile rainfall patterns will also result in lower risks.
- The associated resource management policies: For example, water rights held by South Australian and Victorian irrigators hold a greater proportion of high security entitlements than do most of their NSW counterparts. Water access entitlements holders in NSW and Queensland in comparison have a higher proportion of general (or low) security entitlements. In general, the closer to the Murray mouth the greater the proportion of high security entitlements the further away the greater proportion of general or low security entitlements.

Within jurisdictions, there are different entitlements with different levels of reliability (i.e. high versus low security entitlements). In theory and in broad general terms putting aside water for the environment, the highest level of security is for urban water use, then stock and domestic (excluding feedlots) then commercial and industrial use (including feedlots), then high security water for permanent plantings and finally general or low security entitlements for annual crops.

While State legislation typically enables Ministers to reduce the amount of water available to consumptive users in some circumstances, for example during droughts, the precise rules and priorities for doing so are more formally specified (e.g. rules in water resource or water sharing plans).

It should be noted that, to some extent, market mechanisms can work around these reliability differences. In general, higher reliability water will have a higher value; however, the reliability with which a given volume of water can be obtained by a property can also be increased by purchasing a greater volume of lower reliability water. Such a product is different from formal high reliability water – it will typically entitle users to greater volumes in wetter years– but even these differences could be narrowed through temporary trading.

Particular risks of note include:

- The risk that climate change may result in more volatile rainfall patterns or lower regional averages, and hence reduce the amount of water available: The time periods over which this might result in a significant reduction in reliability are probably long in relation to the term of most loans, but weather cycles of moderate length coupled with shorter term memories could result in reliability levels below expectations.
- The risk that water may not actually be able to be delivered to the entitlement holder: The ‘unbundling’ of water entitlements means that an entitlement to water may or may not also entitle the holder to have the water physically delivered unless they hold sufficient associated water delivery rights.
- Stranded asset risk: the risk of irrigation distribution infrastructure becoming uneconomic as water is traded out of a channel, pipeline or district, leaving increasingly fewer entitlement holders to pay for its ongoing operation and maintenance.
- Risks associated with the ability of the relevant supply authority to finance asset

replacement and renewals of the (sometimes ageing) infrastructure: This entails both financial risk of entitlement holders being asked to contribute more and, ultimately, the risk of catastrophic asset failure. This risk is particularly acute with government owned infrastructure operators that pay dividends to Government. Government owned infrastructure operators do not, in general, hold long term financial reserves based on the theory that State Treasury will provide the necessary funds for renewals when necessary. In reality government water infrastructure is more likely to fail due to the inability and uncertainty of undertaking required maintenance and renewals as and when they fall due regardless of whether the charges are based on full cost recovery. This is a particular risk with the infrastructure upgrades undertaken as part of the Victorian Foodbowl Project where there are currently no adequate maintenance and renewals requirements in place to ensure the financial viability of the scheme in the future.

### **Tenure and security of the water access entitlement**

While all water access entitlements in Australia are ultimately subject to attenuation (compulsory government reduction) by virtue of the right to use and control water vesting in the Crown (State), the security of water rights will depend on the likelihood of this attenuation being exercised, the processes whereby this may occur, and whether compensation is payable in such an event.

The nominal tenure of a water access entitlement, however, is not necessarily the best measure of its security – more important is the likelihood of renewal and/or attenuation in the future. The *primary* issues here lie less with the legal changes that have occurred (though they are clearly of relevance) but instead with an explicit shift in government policy in a way that has already led to, and is likely to continue to involve, some attenuation of user rights in respect of water access and usage. The *legal* powers to attenuate or not renew water rights have, in most cases, not been increased. The likelihood of governments using those powers has, however, shifted substantially.

In several jurisdictions there are now clearly defined processes for renewal or modification of entitlements via formal ten-year water plans. These plans determine the total resource available for consumptive use after first assessing the needs of the environment. Typically, it is at the government's discretion whether compensation is paid to entitlement holders for any attenuation of entitlements within the period of the plan. Compensation is not payable for any changes when a new plan is developed.

To some extent, an entitlement that has been 're-validated' through such a planning process might be seen as more secure than an entitlement in a region where no such process has occurred. On the other hand, the comfort this provides will rapidly diminish as the end of the ten-year period approaches.

The nature of the processes and extent of advance notice of any likely changes in water availability in the next plan then become critical to assessing the level of risk associated with an entitlement.

Another key issue here is whether the risk of non-renewal or attenuation of water access entitlements rests with users – or with government. In particular, the incidence of potential costs of future government decisions that involve an attenuation of an existing water access entitlement will depend heavily on any provisions for compensation or financial assistance. Except in limited circumstances in certain jurisdictions, currently compensation is not payable to entitlement holders if governments subsequently do not renew, or otherwise attenuate, their water access entitlements.

Inevitably, this could be expected to be reflected in higher risk premiums relative to land, where 'just compensation' is generally payable if governments forcibly resume land. On the other hand, patterns of land use deemed to entail 'unacceptable' environmental consequences – such as some

forms of land clearing or the use of some chemicals – might be regulated in a way that effectively attenuates usage rights for the land in a manner analogous (financially if not legally) to attenuation of water rights, and for which compensation is generally not paid.

The National Water Initiative provides “government will have to compensate users for changes in their entitlements resulting from changes in government policy”. Clearly, a literal interpretation of this statement would imply a major reduction in risk and increase in security of a water right as collateral. However, the reality is this has not been adopted in State based legislation and whether or not “just compensation” is paid is at the discretion of the Minister.

### **Transferability/liquidity**

The extent and ease with which an entitlement can be traded varies widely between different entitlements and jurisdictions (see Box 2). Generally, only allocation that is clearly defined in terms of volume may be traded. Some products are permitted to be traded on a temporary (allocation) but not a permanent (entitlement) basis. In some cases, the market is further restricted by requirements that only landholders with an ability to use the water on identified parcels of land are able to own an entitlement.

Governmental approval is also often required to finalise a transaction, in some cases with scope for considerable bureaucratic or Ministerial discretion. The approvals process is more onerous for permanent as opposed to temporary trades. The implicit rationale for these approvals and potential to disallow trades is the desire to protect the interests of third parties or the environment. The resultant rules may specify, for example that trade may only be downstream, or that trade into or between certain zones (e.g. salinity impact zones) may not be permitted. A cautious approach to approving trading in entitlements to groundwater access entitlements has generally been adopted, reflecting the relatively poor state of scientific knowledge on these systems.

### **Water Allocation Announcements**

As previously stated, there are different entitlements with different levels of reliability (i.e. high versus low security entitlements). Feedlot owners should be mindful that the higher the level of reliability the greater the cost associated with access and allocation. Volumetric costs of urban and town water is many times higher per megalitre than for example allocation associated with high security water access entitlements.

The following broad categories are options for feedlots based on the level of security:

**High Security:** urban or town water from government owned urban water authorities or councils, water for commercial and industrial use (including feedlots), then high security irrigation (usually owned for watering permanent plantings).

**Low Security:** general or low security irrigation entitlements (usually owned for watering annual crops).

**Urban or town water** is only available to government water authorities and local councils. Water access entitlements to urban or town water can only be held by a water authority and cannot be sold – it is usually only possible for feedlots to purchase volumetric water supplied through a connection to the mains. Occasionally local councils will allow commercial or industrial users to construct their own pipelines to access water under contract. Under normal circumstances there is 100% reliability for the water delivered from urban water authorities or councils as this is for domestic drinking water purposes. At the height of the Millennium Drought the town water

supply was cut off at Bothwell in Tasmania and in some towns in Victoria. In September 2008 the Queensland Government came within weeks of having to turn off mains water to Brisbane. A number of coastal capital cities augment their water supply with desalinated water during water shortages. Desalinated water is highly energy intensive and as a result is extremely costly.

**Commercial and Industrial** is available through government and private water authorities. Except in extreme drought events such as the Millennium Drought commercial and industrial water access entitlements have 100% reliability.

**High Security Irrigation Water Access Entitlements** - Water allocation announcements for high security water access entitlements in the individual water plan areas and zones in the Murray Darling Basin are announced at the start of the Season (1 July). In Queensland, NSW and Victoria there is a transparent methodology for determining allocation based in most part on dam levels. In most instances the full allocation announcement of 100% is made at that time (less environmental water deductions of 5% in some water sharing plans). If the announcement is less than 100% the allocation is then reviewed on a monthly basis and may be increased. In theory the allocation cannot be reduced after it has been announced. However, water allocation in the NSW Murray system and in South Australia was reduced in November 2006 after a higher allocation had been announced in July 2006<sup>2</sup>. During the Millennium drought high security water allocation announcements dropped to an annual average of between 60-85%.

We note that South Australian high security entitlements have had a series of allocation announcements in recent years below 100% and that the methodology for determining allocation in SA unlike other MDB States is not transparent.

**General or Low Security Water Access Entitlements** Water allocation announcements for general or low security water access entitlements in the individual water plan areas and zones in the Murray Darling Basin are announced at the start of the Season (1 July). In Queensland, NSW and Victoria there is a transparent methodology for determining allocation based in most part on dam levels. General or low security allocation announcements are highly volatile with allocation announcements in NSW Murray dropping to 0-3% during the Millennium drought.

**Purchase of allocation** Allocation can be purchased on market and usually requires a works licence (private delivery infrastructure such as a pump). In particular in NSW allocation accounts are linked to the works licence not the water access licence. The purchase price of allocation varies wildly in the Murrumbidgee for example the price varies from less than \$100 per megalitre in a full allocation season, to at the peak of the Millennium drought, the price of allocation was over \$1000 per megalitre. At one stage the price of a megalitre of allocation exceeded the price per megalitre of high security water entitlement. Due to the fluctuations in the price of allocation it is preferable for feedlot owners to purchase high security water access entitlements.

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<sup>2</sup> Australian Bureau of Statistics 1345.4 - SA Stats, Apr 2007



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## Box 2 Regulation of Water Trading

Types of transactions that require permission from the relevant authority include:

**Temporary transfers of seasonal water allocation** (the transfer to another person of some or all of the water that may be taken under a water entitlement in a given year – usually for the remainder of the season). Because this transaction involves only the transfer of water for a short time period, the approvals processes required are generally relatively straightforward.

**Permanent trades** or transfer involving the transfer of all or part of a water access entitlement (encompassing entitlements to all future water allocations) to another party are generally subject to stringent approval processes to ensure no adverse impacts on third parties or on the environment.

**Leasing** (the transfer to another person of some or all of the water that may be taken under a water access entitlement for a defined period) is currently permitted under legislation in some States (e.g. South Australia, Victoria, Tasmania), but not in others (e.g. Victoria). The approval processes for leases are akin to those required for permanent trades. In NSW the legislation provides for the lease of the water access entitlement to the lessee of the associated land. NSW leases require the transfer of allocation after each announcement together with transfer of allocation in accordance with the legislation.

**Changes to the specification of the water access entitlement** (e.g. subdivision or amalgamation) either with or without also effecting a transfer in its ownership are generally permitted subject to approval processes if there may be an impact on third parties or the environment.

**Other trades.** While the focus of the transactions is typically on end-user to end-user trades, it is important to note that States' policies and legislation also countenance or allow transactions involving a range of other parties. These include trades of bulk water access entitlements between water supply authorities; and trades between authorities and individuals. Some types of transactions between hydro-power generators and other users are possible – if not facilitated – under current arrangements.

## 2 Chapter 2 – The Commonwealth

### 2.1 Part 1 – Introduction – The inter-relationship between State and Commonwealth

The Commonwealth was created by the British Parliament under the Commonwealth of Australia Act 1900 by a transfer of powers from the six British colonies in existence in 1901:

- New South Wales
- Tasmania
- Queensland
- Victoria
- South Australia

The Commonwealth of Australia Act 1900 (the Constitution) made provision for Western Australia to join the Commonwealth at a later date. Until the formation of the Commonwealth the powers of the six colonies to pass legislation was only limited by the Crown.

Section 51 of the Constitution sets out the power of the Commonwealth to make laws. Commonwealth powers are limited to powers under section 51 and other powers referred since 1901 by agreement of the States to the Commonwealth under section 51 (xxxvii). An example of a State power referred to the Commonwealth after 1901 is the income tax power which was referred to the Commonwealth to raise funds during World War II.

### 2.2 Part 2 – Legislation and the NWI

#### 2.2.1 Division 1 – NWI

All States and Territories signed the Commonwealth sponsored National Water Initiative Inter-Government Agreement (NWI). The NWI is not a referral of powers but an agreement by the States and Territories to amend and administer their water legislation to comply with the NWI. To date even though all States and Territories have signed the NWI not all States have amended their water legislation to comply with the NWI.

The key provisions for the purposes of this Report are NWI clauses 28 and 32:

***“28. The consumptive use of water will require a water access entitlement, separate from land, to be described as a perpetual or open-ended share of the consumptive pool of a specified water resource, as determined by the relevant water plan subject to clause 33”***

NWI clause 32 provides:

***32. Water access entitlements will also:***

- i) clearly indicate the responsibilities and obligations of the entitlement holder consistent with the water plan relevant to the source of the water;***
- ii) only be able to be cancelled at Ministerial and agency discretion where the responsibilities and obligations of the entitlement holder have clearly been breached;***

*iii) be able to be varied, for example to change extraction conditions, where mutually agreed between the government and the entitlement holder; and*

*iv) be subject to any provisions relating to access of water during emergencies, as specified by legislation in each jurisdiction.*

Western Australia and Tasmania have not amended their water legislation

## **2.2.2 Division 2 - Water Law**

### **Commonwealth Water Act 2007**

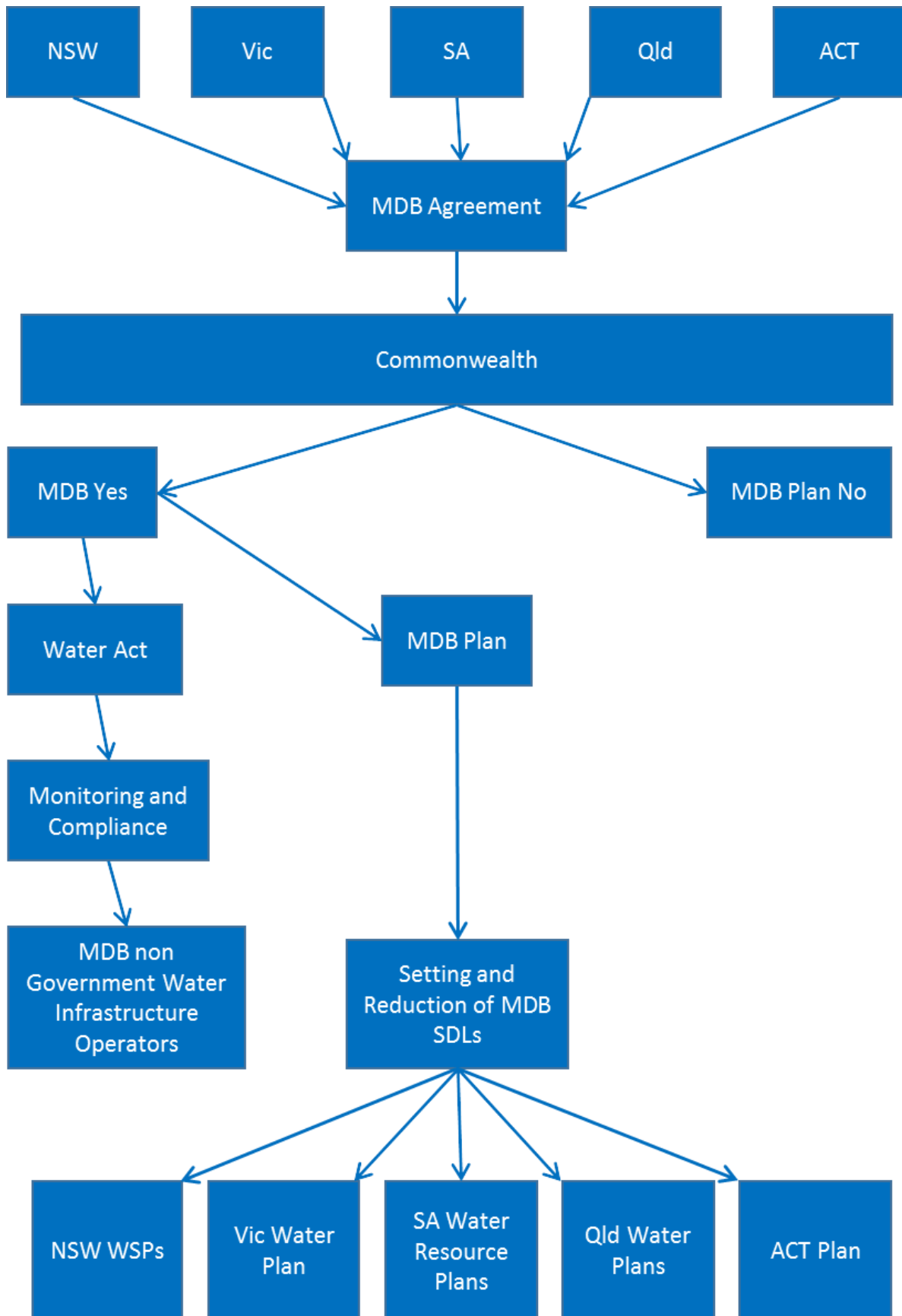
The Commonwealth does not have a specific power in relation to regulating water in Australia or the Murray Darling Basin. The Commonwealth Water Act 2007 relies upon:

- The external affairs power (section 51 (xxix)) in particular the Convention on Biodiversity, the RAMSAR Convention on wetlands and a number of other international treaties set out in section 4 of the Water Act;
- The corporations power (section 51 (xx) in relation to trading or financial corporations;
- Interstate trade and commerce power (section 51(i));
- Meteorological observations (section 51 (viii)); and
- Census and statistics (section 51(xi))

The Water Act is administered by the Commonwealth Department of Agriculture and Water and the ACCC. The Water Act establishes the MDB Authority (MDBA) and the Commonwealth Environmental Water Holder (CEWH) and provides for the Murray Darling Basin Plan (Basin Plan).

The ACCC administers Water Act regulations to:

- enforce water market rules and water charge rules under the Water Act
- enforce the CCA with water brokers, exchanges and irrigation infrastructure operators
- monitor and report on regulated charges and compliance with water market and water charge rules
- determine regulated charges
- provide advice to the Commonwealth minister responsible for water on development of water market rules and water charge rules
- advise the Murray-Darling Basin Authority (MDBA) on the development of water trading rules.



## **Murray Darling Basin Authority (MDBA) and the Murray Darling Basin Plan (Basin Plan)**

There has previously been a series of Commonwealth interstate agreements in relation to the Murray Darling Basin (MDB) prior to the MDB Plan. The MDB Plan is based on a referral of powers by legislation from the MDB States to the Commonwealth. The Commonwealth and the MDB States agreement is set out in the Murray Darling Basin Reform – Referral inter-government agreement.

### **Murray Darling Basin Ministerial Council**

The MDB Ministerial Council is established by clause 7 of the Murray-Darling Basin Agreement. The MDB Ministerial Council consists of one Minister from the Commonwealth and one from each MDB State and the ACT. The main functions of the MDB Ministerial Council are to:

- decide whether to approve any proposed construction, improvement, replacement or remedy of works on the River Murray, and implement any proposed measures;
- make certain high-level decisions in relation to the sharing of water between New South Wales, Victoria and South Australia;
- approve the annual corporate plan, budget and asset management plan prepared by the MDBA;
- consider and determine outcomes and objectives on major policy issues of common interest to the Contracting Governments in relation to the management of the water and other natural resources in the Murray-Darling Basin.

The MDB Ministerial Council may also agree on amendments to the Murray-Darling Basin Agreement and its Schedules from time to time (clause 9(d)).

### **The Basin Officials Committee**

The Basin Officials Committee consists of one official from each Basin State and the ACT. The Chair and CEO are able to attend and speak at meeting but cannot vote. The Basin Committee's functions include:

- advising the Ministerial Council in relation to outcomes and objectives on major policy issues relating to the management of the water and other natural resources in the Murray-Darling Basin;
- giving effect to policies and decisions of the Ministerial Council when requested by the Council to do so;
- exercising responsibility for high-level decision making in relation to river operations;
- exercising the powers and discharging the duties conferred on it by the Agreement or the Water Act.

Under s 201 of the Water Act, the Basin Official's Committee can provide advice to the MDBA about the performance of the MDBA's functions and to facilitate cooperation between the Commonwealth, the MDBA and the Basin States in managing the Basin water resources.

Basin officials are senior policy officials from the relevant State and ACT Departments but not necessarily Departmental Heads.

## The Role of the MDBA

The MDBA has two main sets of functions. The first set of functions are largely those that were originally conferred on the MDBA under the Water Act. These functions include:

- preparing a Basin Plan and amendments to the Basin Plan;
- advising the Minister on accrediting Basin State water resource plans;
- enforcing the Basin Plan;
- monitoring the quality and quantity of Basin water resources and associated ecosystems.

The MDBA's second set of functions are the former a number of the functions of its predecessor the Murray-Darling Basin Commission under the former Murray-Darling Basin Agreement. These functions are conferred on the MDBA by section 18E(1) of the Water Act, which provides that the MDBA has, in a referring State or the ACT, the functions, powers and duties conferred on it by or under the Murray-Darling Basin Agreement, as they relate to the water and other natural resources of the Murray-Darling Basin.

The MDBA's second set of functions include:

- managing the River Murray and the Menindee Lakes system of the lower Darling River;
- advising the Ministerial Council on matters related to the management of the water and other environmental resources of the Murray-Darling Basin.

## The Basin Plan

The Basin Plan is a statutory instrument under the Water Act and like statutory regulations it is required to be tabled in both Houses of Parliament and is subject to a motion for disallowance.

The Basin Plan determines the long-term average sustainable diversion limit (SDLs) in volumetric terms that can be extracted or taken annually from the Basin for consumptive use (urban, industrial and agricultural). The diversion limit is determined to be a volume of extraction that will not have a negative impact on the natural environments and the functions of the rivers, waterways, groundwater and wetlands of the Basin. The SDLs are done for each Basin State and the ACT on a water plan by water plan and in some cases zones within water plans for both surface water and groundwater plans. See Map 1 of the MDBA surface water plans and Map2 groundwater plans below.

The MDBA determined that the long-term average environmentally sustainable level of take for surface water in the Basin is 10,873 gigalitres per year. To achieve this level of take, the Basin Plan determined that 2,750 gigalitres surface water per year would need to be recovered from the 2009 baseline diversion level (BDL). In April 2015 the Commonwealth Government legislated that water buy backs would be limited to 1500 gigalitres and the balance of the surface water reduction would need to be achieved through infrastructure efficiencies. If the MDBA Northern Basin Review was approved by Parliament the recovery figure would have been reduced from 2750 gigalitres per year to 2680 gigalitres per year.

For groundwater, the MDBA determined that the environmentally sustainable level of take was to be 3,324 gigalitres per year. The 2009 BDL of groundwater was 2,385 gigalitres per year, therefore diversion levels can sustainably be maintained or increase in all but one of the 66 groundwater units in the Basin.

The Basin Plan came into effect in November 2012. A 7 year period (2012–19) was set for water users and managers to reduce extraction levels, in regions where a reduction was required. Some reduction was achieved prior to the Basin Plan coming into effect in 2012 through water recovery buy back programs operating through 2009–11. The Basin Plan is proposed to be fully operational by 2024.

Since the Basin Plan was foreshadowed, water has been recovered through water entitlement buy backs by the Australian Government. The level of buy backs has caused significant issues within a number of water plans and created stranded asset problems as water entitlements were transferred to the environment from high value water infrastructure. Additional problems were created because the buy back was targeted at lower value general or low security water entitlements with low levels of allocation (volumetric) reliability. This buy back policy was problematic because it focused on the acquisition of water entitlements whilst the reduction was volumetric (allocation). The buy back has created an ongoing shortage of general or low security water for annual crops. The Murrumbidgee has been and continues to be severely affected by the Basin Plan.

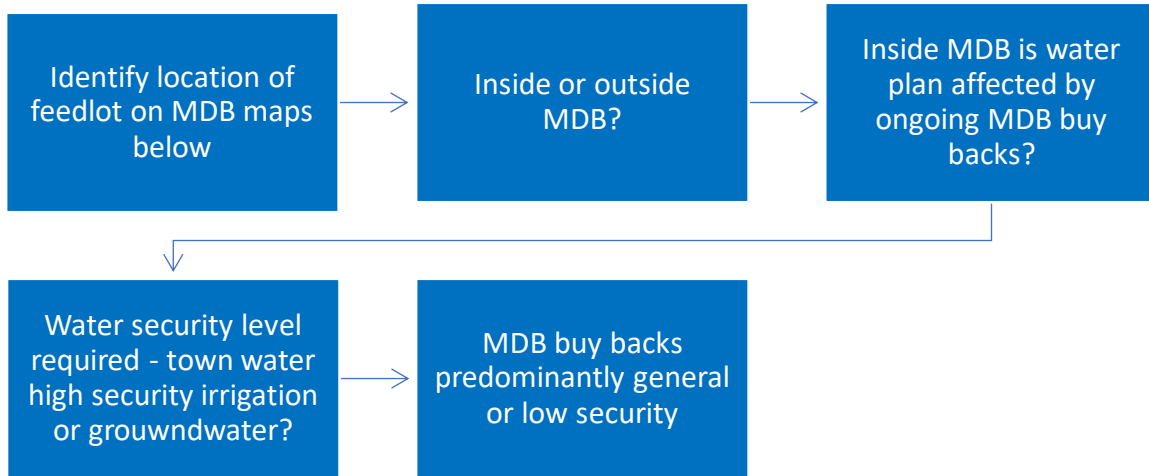
The SDLs will commence in 2019 through state government water resource plans. However, the limits for each river valley and groundwater unit may be increased or decreased during the implementation phase of the Plan (2012–19) on the recommendation of the MDBA, depending on the outcomes of infrastructure efficiency programs and new environmental watering regimes.

The MDBA completed the review of the water plans and water recovery in the Southern Basin in October 2016. Total surface water recovery for the 41 affected communities was 1033.9 gigalitres with the net reduction available for consumptive use being estimated at 810 gigalitres.

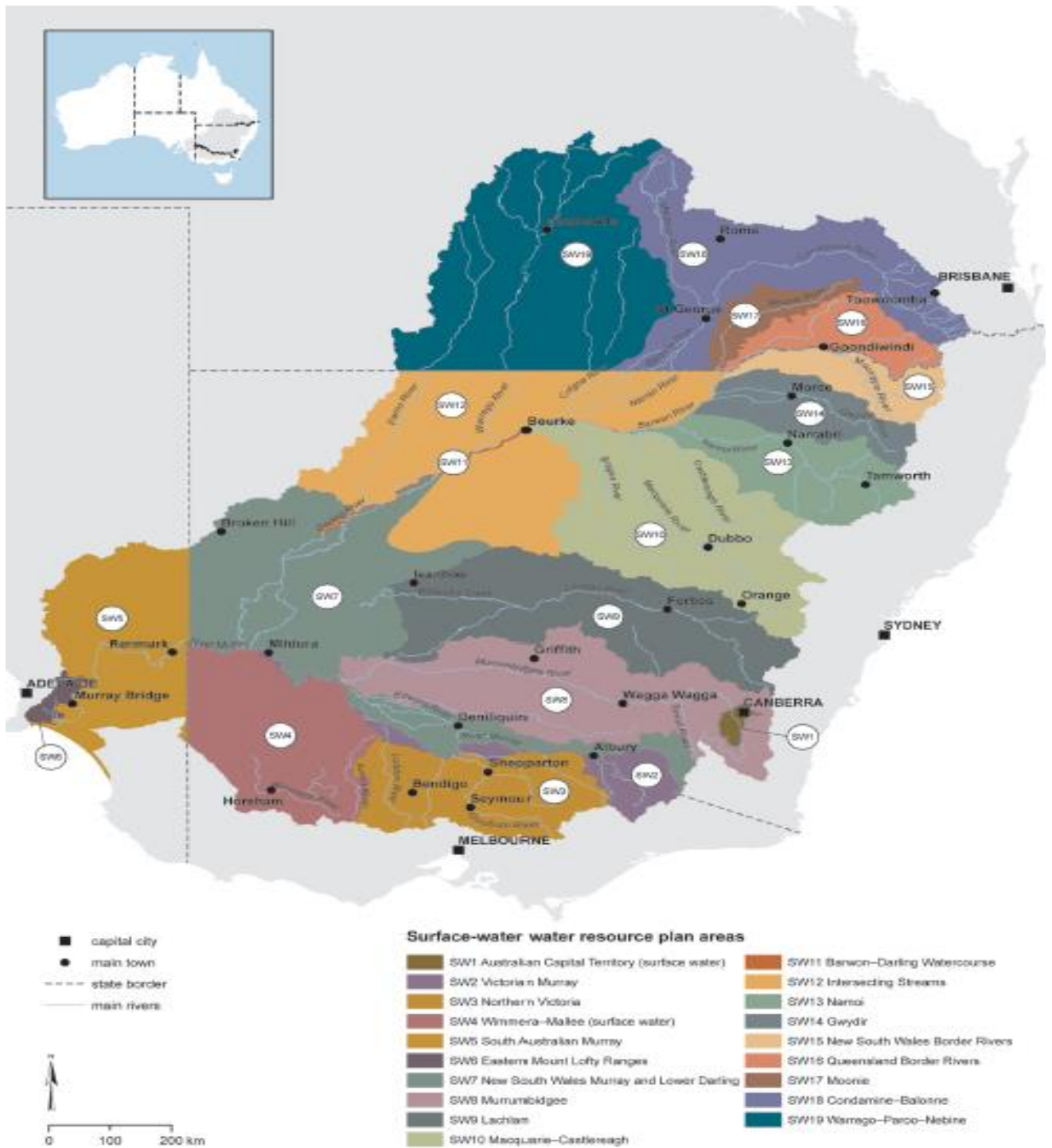
The MDBA for example proposed the surface water recovery target in the Northern Basin water plans (reduction in water available under the existing State water plans) be reduced by 70 gigalitres from 390 gigalitres to 320 gigalitres. The Senate has moved a motion to disallow the change to the Basin Plan and as at February 2018 as a result NSW and Victoria have threatened to withdraw their support for the MDB Plan.

The Basin Plan also addresses:

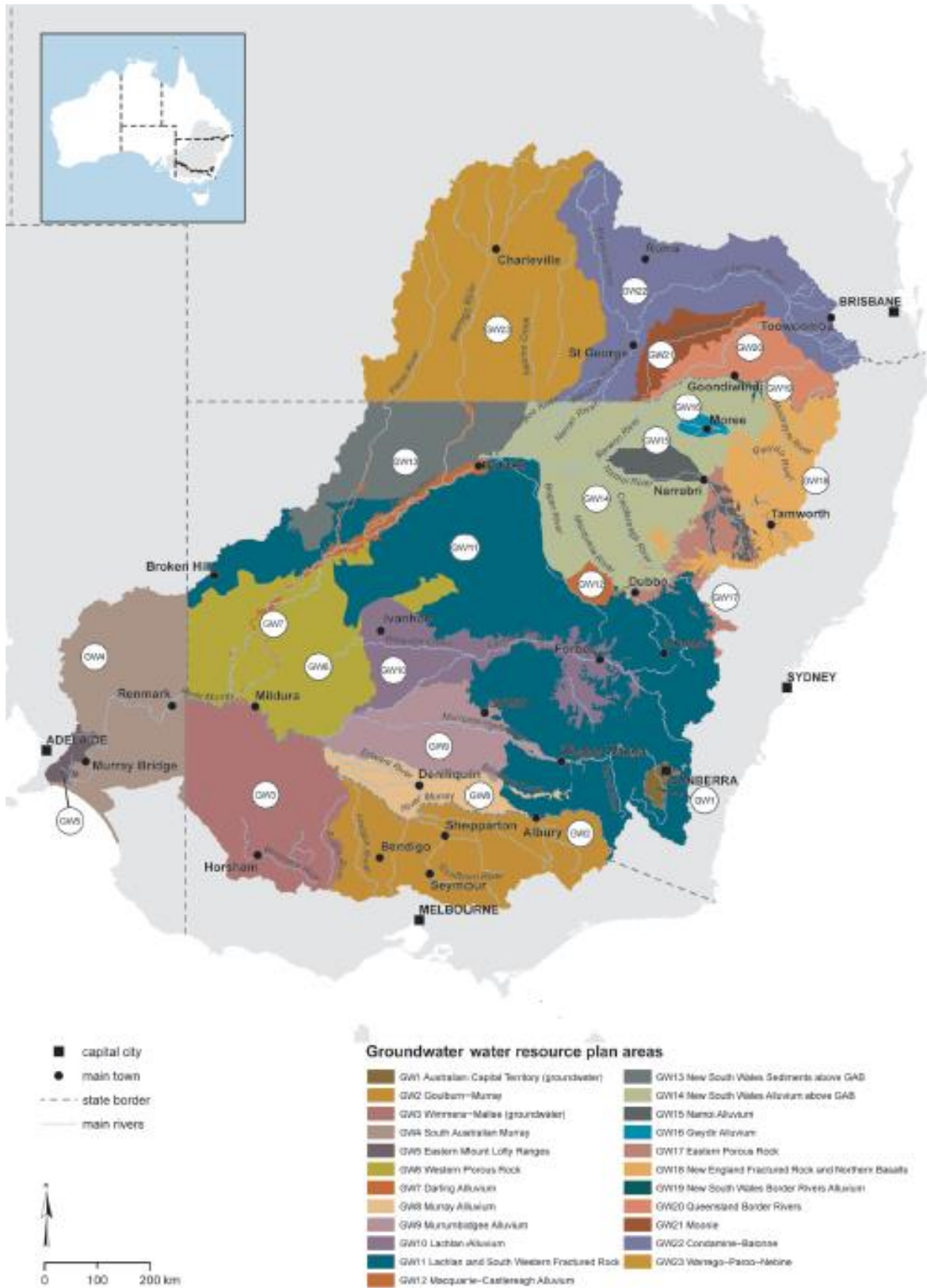
- water quality issues in the Basin;
- environmental watering by the CEWH;
- the assessment of State and ACT water resource plans;
- water for critical human needs (availability of drinking water);
- water markets and water trading;
- on going review and implementation.







MAP 1 Surface Water map from the MDB Plan



Map 2 Groundwater Map from the MDB Plan

## **2.3 Part 3 – Status, risks, gaps, practical implications**

The status of the MDB Plan as at February 2018 is currently uncertain due to the threat by NSW and Victoria to withdraw from the MDBA Agreement in relation to the MDB Plan.

Feedlots within the MDB require reliable water supply and would sensibly obtain:

- a water connection to the town mains;
- Groundwater licence and water entitlements;
- High security surface water irrigation water entitlements and delivery rights.

Buy backs of general security water entitlements in the Northern and Southern Basin have placed the production of annual crops and in particular fodder under significant pressure. It is anticipated that the on-market price of allocation water will rise particularly in times where allocation announcements are reduced.

The NWI with the Commonwealth has been signed by all States and Territories. Western Australia and Tasmania have not passed legislation introducing permanent water entitlements and still operate on a temporary renewable licence basis. This creates a significant commercial risk to feedlot owners as the current legislation does not require these licences to be renewed.

## **3 Chapter 3 – New South Wales**

### **3.1 Part 1 – Introduction – The inter-relationship between State and Local Councils**

Local councils are an arm of the NSW State Government and are incorporated as statutory bodies under the Local Government Act 1993.

The role of local government includes, for the purpose of feedlots:

- Development and building approvals excluding certain approvals such as State Significant Projects.
- Wastewater recycling and in some council areas sewerage treatment plants
- Town water supply in some local council areas;
- Public health responsibilities.

### **3.2 Part 2 – Legislation**

#### **3.2.1 Division 1 – Water Law and Water Sharing Plans**

The Water Management Act 2000 (WMA) establishes a framework for the integrated and sustainable management in the State and a water regime that links licences to 10-year water sharing plans. The WMA is administered by Water NSW and a new Natural Resource Access Regulator body is currently being established to improve and enforce water industry regulatory compliance.

The WMA needs to be understood in conjunction with the associated Water Sharing Plans (WSPs). Water sharing plans are roughly on a surface catchment basis or on a geographic basis for groundwater plans as there is often multiple aquifers in a subsurface stratum. WSPs may be surface water or groundwater WSPs although some WSPs cover both groundwater and surface water. Surface water WSPs are further differentiated between regulated rivers (regulated by infrastructure such as dams and weirs) or rivers unregulated by infrastructure.

All unregulated rivers and groundwater water entitlements are subject to “cease to pump” orders that may be imposed at any time under the WMA.

Water is delivered by water infrastructure service providers such as:

- (a) major utilities e.g. Sydney Water and WaterNSW;
- (b) water supply authorities e.g. Central Coast Water;
- (c) local water utilities e.g. Bathurst City Council;
- (d) Irrigation Corporations e.g. Murray Irrigation Ltd;
- (e) Private Water Trusts e.g. Pomona Irrigation Trust;
- (f) Private Irrigation Districts e.g. Narromine Irrigation Board of Management

All water service providers operate on a bipartite or tripartite billing system to cover fixed costs (infrastructure); variable costs (volumetric water charges) and administration costs.

## Access

Feedlot owners can apply to the relevant utility or water supply authority to be connected to the urban or town water supply and be provided water on a volumetric basis. Connection to the town or urban water supply does not require the customer to hold a water access licence (WAL). Urban or town water has the highest level of security however the cost of volumetric water is significantly higher than high security water entitlements and groundwater.

WALs separate the rights to access water from land title, and also separates the right to water from the approval to construct or operate works and to use the water on a specified parcel of land. Water entitlements in NSW are unitised as a share in the available water resource with each entitlement roughly equivalent to 1 megalitre of entitlement per year.

There are a number of different categories of WALs. The relevant categories for our purposes are:

- (a) regulated river (high security) access licences,
- (b) regulated river (general security) access licences,
- (d) unregulated river access licences,
- (e) aquifer access licences,
- (i) major utility access licences,
- (j) local water utility access licences,

Domestic and Stock access licences specifically exclude water for feedlots in the definition:

***"stock watering"** in relation to land, means the watering of stock animals being raised on the land, but does not include the use of water in connection with the raising of stock animals on an intensive commercial basis that are housed or kept in feedlots or buildings for all (or a substantial part) of the period during which the stock animals are being raised.*

## Allocation

NSW has highly variable rainfall patterns with highest rainfall averages in coastal areas east of the Great Dividing Range and lower average rainfalls in inland areas. Groundwater recharge in some areas is dependent on rainfall or recharge from local rivers. Groundwater in other areas is ancient (groundwater in some parts of the western Great Artesian Basin is more the oldest in the world) and there is no recharge other than limited underground flows.

Around 10% of annual water use is supplied from groundwater sources, some of which (e.g. lower north coast) are also considered to be under stress from over-utilisation.

Allocation announcements as a percentage of water entitlements are published on the NSW Water website and the methodology for calculation is also published.

Allocation announcements are made for each surface water plan, zone and security level at the start of each season on 1 July and if they are less than a full allocation of 100% in most WSPs they allocation announcement is revised on a monthly basis. High security allocation announcements in the Murrumbidgee Regulated River WSP is a maximum of 95% as 5% is allocated to the environment. Allocations vary considerably between WSP for example in February 2018 the

allocation for the Lower Darling high security was 100% and general security was 100%. In contrast at the same time the Lachlan high security was 100% and general security was 2%.

Carryover allocation water is available in some WSPs for general security allocation where the water users has not used all allocation in the previous season. Where carryover is available carryover is a percentage of the remaining total on the allocation bank account. Carryover is restricted to 30% in some WSPs – it is always significantly less than 100%, carryover may or may not be approved depending on climatic conditions. Carryover was not available during the Millennium Drought.

Private irrigation schemes within WSPs are required to issue the same allocations as the relevant WSP.

#### *Trading – Water Entitlements and Allocation*

WALs are separate from land and be able to be traded or used as collateral for a mortgage.

The NSW Water Register has many of the features of a Torrens Title and is currently run by Land and Property Information NSW. Like Torrens title it is one of the more secure title systems in terms of the clarity of the chain of ownership of the title reducing the potential for fraudulent or mistake in terms of transfers of title. Unlike Torrens Title the NSW Water Register does not have a Government guarantee of title to ownership – it is not “indefeasible” the name on the title is not indisputable proof of ownership.

The WMA provides for a range of dealings in access licences. However, the Minister does however have a final decision-making power over trades of permanent water entitlements on the State Water Register and in some circumstances over volumetric water allocation.

WSPs are specific to particular catchments and groundwater systems. Water entitlements can only be traded within a WSP and sometimes trading is further limited to trading within a specified zone within the WSP. This is because the WSPs specifies the number of water entitlements at each level of security within the WSP for that WSP and in some cases within specified zones.

Trading of permanent entitlements in groundwater WSPs is limited to trading within the same zone. Allocation associated with the groundwater access licence can only be delivered to works within the WSP or specified zone.

Approximately 30% of water entitlements in NSW are held as bulk entitlements within private irrigation schemes. Murray Irrigation and Murrumbidgee Irrigation for example both have over 2,000 members. The water access licences for private irrigation schemes are held in bulk and a separate water entitlement and allocation register is operated by the irrigation scheme separately to the State Water Register. Individual water entitlement holders can trade both entitlements and allocation within private irrigation schemes with the approval of the private irrigation scheme board.

Permanent trade into or out of the private irrigation scheme is subject to ACCC Water Trading Rules and the relevant Rules or Constitution and related Contracts of the private irrigation scheme.

Units of water entitlement are individually tradeable subject to the trading conditions on the WSP and Ministerial approval between licences. It is not necessary to subdivide licences to transfer part of the water entitlement. Water entitlements within private irrigation schemes are also unitised.

Allocation is held on the State and private irrigations scheme's allocation registers as a volumetric amount. Allocation is shown as a running balance on the Allocation Bank Account. It should be noted that not all supply points are metered or if they are they may not be linked by telemetry and may need to be read manually.

Allocation is treated differently to water entitlements and can be traded within areas where it can be physically delivered for example water allocation held within the Murrumbidgee Regulated River WSP may be traded to South Australia.

Trading is facilitated by a number of water exchange platforms such as Waterfind, H2Ox, Ruralco and Water Exchange as well as local water brokers.

### **3.2.2 Division 2 – Environmental Law (recycled water)**

Recycled water is available in a number of areas as treated effluent or wastewater. Recycled water may be available from the owners of sewerage treatment works that may be owned by water urban water utilities, local government or private operators.

If a feedlot owner is considering entering an agreement with an operator for proposed new recycled water project it is strongly recommended that the operator contact the Independent Pricing and Regulatory Tribunal (IPART) in the first instance. IPART administers the Water Industry Competition Act 2006 (WICA). WICA provides centralised assistance to guide proposals for recycled water projects through the NSW regulatory approval process including interactions with local councils and urban water authorities, the Environment Protection Authority and the NSW Health Department. IPART's assistance significantly reduces the time and cost of the approval process and also provides longer term supervision to ensure regulatory standards are maintained.

### **3.2.3 Division 3 – Planning Law and SEPPs**

Planning in NSW is administered under the Environment and Planning Act 1979. The State Environmental Planning Policies and Deemed State Environmental Planning Policies (SEPPs) are enforceable statutory instruments and provide the overarching policy framework. Cattle feedlots are covered by SEPP no. 30 Intensive Agriculture. The consent authority for a feedlot with a capacity of more than 50 cattle is either the local council or if the land is not in a local council area and is part of the Western Division the Western Lands Commissioner. The consent authority if there is an environmental planning instrument is the person specified in that instrument. Feedlots approvals under SEPP no 30 are treated in the same manner as Designated Development and will require either a statement of environmental effects or an environmental impact statement.

## **3.3 Part 3 – Local Councils**

### **3.3.1 Division 1 – LEPs and DCPs**

Each local government area has a Local Environmental Plan (LEP) covering development and planning decisions and natural resources. Natural resources may include the protection of waterways and zoning and development controls relating to flooding amongst other things. LEPs are

prepared by local councils approved by the Minister for Planning and are enforceable as a statutory instrument.

In most circumstances local councils are the consent authority for the approval of new feedlots with capacity for over 50 cattle.

Development Control Plans (DCPs) are more detailed than the LEP and provides additional development and control requirements at a local level. Feedlots are covered by DCPs.

### **3.3.2 Division 2 – Comparison of Council Areas with history of feed lots**

#### **1. Leeton Shire Council**

Leeton Shire Council provides town water and wastewater and sewerage treatment services. Irrigation water is delivered by Murrumbidgee Irrigation. Proposed feedlot owners should contact Murrumbidgee Irrigation as well as the Leeton Council when considering access water.

The main surface water WSP for the area is the WSP for the Murrumbidgee Regulated River Water Source. The main groundwater WSP is the Lower Murrumbidgee Groundwater Source WSP which is due for replacement in 2019. No water entitlements are available from the NSW Government for feedlot projects and therefore all water entitlements must be purchased on market. Allocation from other groundwater WSPs cannot be traded into the area. The Lower Murrumbidgee Groundwater Source has a series of “hotspots” due to rising groundwater levels that cause salt to rise to the surface. Hotspots are subject to local impact management based on water level monitoring. Groundwater allocation and entitlements may be traded within the WSP subject to individual assessment. Lower Murrumbidgee Groundwater Water Source was impacted by cease to pump order across the entire WSP during the Millennium Drought, cease to pump also included environmental pumps that reduced rising groundwater levels. Surface water allocation may be traded in and water entitlements may be traded within the surface WSP subject to the WSP and Ministerial approval.

Surface water allocation for high security level as at February 2018 95% (the maximum). Surface water allocation for general security s at 15 February 2018 is 34%. Carryover may be available for general security.

Leeton Shire Council strategic plan is set out in “Envisage 2024 – Going for Growth”. The strategy acknowledges that the shire is severely impacted by the MDB Plan and is looking for “non-water based industries”. Council is looking at raw water reticulated service. Proposed feedlot developments could usefully discuss with Council a raw water (untreated) supply of water at a town water level of security, but at a lower volumetric price.

Intensive livestock agriculture (feedlots) are permitted under SEPP no.30 and the Leeton Local Environment Plan 2014 Land Use Zone RU1 Primary Production permitted with development consent. The objectives of Zone RU1 Primary production focus on the environmental capability of the land and access to irrigation water.

#### **2. Carrathool Shire Council**

Carrathool Shire Council provides town water and wastewater and sewerage treatment services. Irrigation water is delivered by Murrumbidgee Irrigation. Proposed feedlot owners should contact Murrumbidgee Irrigation as well as the Leeton Council when considering access water.



The main surface water WSP for the area is the WSP for the Murrumbidgee Regulated River Water Source. The main groundwater WSP is the Lower Murrumbidgee Groundwater Source WSP which is due for replacement in 2019. No water entitlements are available from the NSW Government for feedlot projects and therefore all water entitlements must be purchased on market. Allocation from other groundwater WSPs cannot be traded into the area. The Lower Murrumbidgee Groundwater Source has a series of “hotspots” due to rising groundwater levels that cause salt to rise to the surface. Hotspots are subject to local impact management based on water level monitoring. Groundwater allocation and entitlements may be traded within the WSP subject to individual assessment. Lower Murrumbidgee Groundwater Water Source was impacted by cease to pump order across the entire WSP during the Millennium Drought, cease to pump also included environmental pumps that reduced rising groundwater levels. Surface water allocation may be traded in and water entitlements may be traded within the surface WSP subject to the WSP and Ministerial approval.

Surface water allocation for high security level as at February 2018 95% (the maximum). Surface water allocation for general security s at 15 February 2018 is 34%. Carryover may be available for general security.

The Carrathool Sustainable Settlement Strategy 2007 is a policy document supporting the Carrathool LEP. It discusses the need to support intensive agriculture (feedlots) and in particular discusses the Tabbita Feedlot.

Intensive livestock agriculture (feedlots) are permitted under SEPP no.30 and the Carrathool Local Environment Plan 2012 Land Use Zone RU1 Primary Production permitted with development consent. The objectives of RU1 primary production focus on “facilities” not significantly reducing agricultural and horticultural land in the vicinity. Possible impacts on groundwater would be a major consideration as well as the impact of floodwaters.

### **3. Glen Innes Severn Council**

Glen Innes Severn Council provides water and wastewater and sewerage treatment services. The main WSP for the area is the WSP for the NSW Border Rivers Unregulated and Alluvial Water Sources and covers surface water and groundwater. No water entitlements are available from the NSW Government for feedlot projects and therefore all water entitlements must be purchased on market. Allocation from other groundwater WSPs cannot be traded into the area. Groundwater allocation and entitlements may be traded within the WSP subject to individual assessment. Surface water allocation may be traded in and water entitlements may be traded within the surface WSP subject to the WSP and Ministerial approval. Allocation for each security level as at February 2018 100%.

Glen Innes Severn Council is one of the councils included in the New England North West Regional Plan 2036 (NENW Regional Plan) commissioned by the Department of Planning and Environment and released in August 2017. The NENW Regional Plan recognised lack of water security as an impediment to developing agribusiness and the importance of identifying and protecting intensive agriculture clusters in LEPs from the encroachment of residential and rural residential expansion. One of the recommendations of the NENW Regional Plan was the development of a Regional Intensive Agribusiness Strategy which would cover amongst other issues the development of feedlots.

Intensive livestock agriculture (feedlots) are permitted under SEPP no.30 and the Glen Innes Severn Local Environment Plan 2012 Land Use Zone RU1 Primary Production permitted with development

consent. Feedlots are intensive agriculture and feedlots with a capacity of over 50 cattle are designated development. Depending on the capacity of the feedlot characterised as designated development new feedlot projects will require either a statement of environmental effects or an environmental impact statement as one of the conditions of approval.

#### **4. Moree Plains Shire Council**

Moree Shire Council provides water and wastewater and sewerage treatment services. The main WSP for the area is the WSP for the Gwydir Unregulated and Alluvial Water Sources and covers surface water and groundwater. No water entitlements are available from the NSW Government for feedlot projects and therefore all water entitlements must be purchased on market. Allocation from other groundwater WSPs cannot be traded into the area. Groundwater allocation and entitlements may be traded within the WSP subject to individual assessment. Surface water allocation may be traded in and water entitlements may be traded within the surface WSP subject to the WSP and Ministerial approval. Allocation for each security level as at February 2018 100%. Moree Plains Shire Council is one of the councils included in the New England North West Regional Plan 2036 commissioned by the Department of Planning and Environment and released in August 2017. The NENW Regional Plan recognised lack of water security as an impediment to developing agribusiness and the importance of identifying and protecting intensive agriculture clusters in LEPs from the encroachment of residential and rural residential expansion. One of the recommendations of the NENW Regional Plan was the development of a Regional Intensive Agribusiness Strategy which would cover amongst other issues the development of feedlots.

Feedlots are permitted under SEPP no.30 and the Leeton Local Environment Plan 2014 Land Use Zone RU1 Primary Production permitted with development consent. Feedlots are intensive agriculture and feedlots with a capacity of over 50 cattle are designated development. Depending on the capacity of the feedlot characterised as designated development new feedlot projects will require either a statement of environmental effects or an environmental impact statement as one of the conditions of approval.

#### **5. Liverpool Plains Shire Council**

Liverpool Plains Shire Council provides town water and wastewater and sewerage treatment services.

The main WSP for the area is the WSP for the Namoi Unregulated and Alluvial Water Sources and covers surface water and groundwater. No water entitlements are available from the NSW Government for feedlot projects and therefore all water entitlements must be purchased on market. Allocation from other groundwater WSPs cannot be traded into the area. Groundwater allocation and entitlements may be traded within the WSP subject to individual assessment. Surface water allocation may be traded in and water entitlements may be traded within the surface WSP subject to the WSP and Ministerial approval. Allocation for each security level as at February 2018 100%.

Liverpool Plains Shire Council is one of three councils included in the Lower North West Regions Economic Development Strategy (LNW REDS) commissioned by the Department of Planning and Environment. The LNW REDS is still in the consultation phase.

Concerns have been raised in the past about the risk to the Liverpool Plains from the potential for the development of coal seam gas and the impact that fracking may have on groundwater systems. This appears to have been addressed at least at the present time by the moratorium on coal seam gas development in the area.

Intensive livestock agriculture (feedlots) are permitted under SEPP no.30 and the Liverpool Plains Local Environment Plan 2011 Land Use Zone RU1 Primary Production permitted with development consent.

#### **6. Glen Innes Severn Council**

Glen Innes Severn Council provides water and wastewater and sewerage treatment services.

The main WSP for the area is the WSP for the NSW Border Rivers Unregulated and Alluvial Water Sources and covers surface water and groundwater. No water entitlements are available from the NSW Government for feedlot projects and therefore all water entitlements must be purchased on market. Allocation from other groundwater WSPs cannot be traded into the area. Groundwater allocation and entitlements may be traded within the WSP subject to individual assessment. Surface water allocation may be traded in and water entitlements may be traded within the surface WSP subject to the WSP and Ministerial approval. Allocation for each security level as at February 2018 100%.

Glen Innes Severn Council is one of the councils included in the New England North West Regional Plan 2036 (NENW Regional Plan) commissioned by the Department of Planning and Environment and released in August 2017. The NENW Regional Plan recognised lack of water security as an impediment to developing agribusiness and the importance of identifying and protecting intensive agriculture clusters in LEPs from the encroachment of residential and rural residential expansion. One of the recommendations of the NENW Regional Plan was the development of a Regional Intensive Agribusiness Strategy which would cover amongst other issues the development of feedlots.

Intensive livestock agriculture (feedlots) are permitted under SEPP no.30 and the Glen Innes Severn Local Environment Plan 2012 Land Use Zone RU1 Primary Production permitted with development consent. Feedlots are intensive agriculture and feedlots with a capacity of over 50 cattle are designated development. Depending on the capacity of the feedlot characterised as designated development new feedlot projects will require either a statement of environmental effects or an environmental impact statement as one of the conditions of approval.

#### **7. Moree Plains Shire Council**

Moree Shire Council provides water and wastewater and sewerage treatment services.

The main WSP for the area is the WSP for the Gwydir Unregulated and Alluvial Water Sources and covers surface water and groundwater. No water entitlements are available from the NSW Government for feedlot projects and therefore all water entitlements must be purchased on market. Allocation from other groundwater WSPs cannot be traded into the area. Groundwater allocation and entitlements may be traded within the WSP subject to individual assessment. Surface water allocation may be traded in and water entitlements may be traded within the surface WSP subject to the WSP and Ministerial approval. Allocation for each security level as at February 2018 100%.

Moree Plains Shire Council is one of the councils included in the New England North West Regional Plan 2036 commissioned by the Department of Planning and Environment and released in August 2017. The NENW Regional Plan recognised lack of water security as an impediment to developing agribusiness and the importance of identifying and protecting intensive agriculture clusters in LEPs from the encroachment of residential and rural residential expansion. One of the recommendations of the NENW Regional Plan was the development of a Regional Intensive Agribusiness Strategy which would cover amongst other issues the development of feedlots.

Feedlots are permitted under SEPP no.30 and the Moree Plains Local Environment Plan 2011 Land Use Zone RU1 Primary Production permitted with development consent. Feedlots are intensive agriculture and feedlots with a capacity of over 50 cattle are designated development. Depending on the capacity of the feedlot characterised as designated development new feedlot projects will require either a statement of environmental effects or an environmental impact statement as one of the conditions of approval.

### **3.4 Part 4 - Risks– status, risks, gaps, practical implications**

Significant investment has been made by the Commonwealth in State owned infrastructure. Commonwealth funding does not include future maintenance and renewals. State Government owned water infrastructure is therefore vulnerable in the future to the low priority given by NSW Treasury for the funding of maintenance and renewals from Consolidated Revenue.

Feedlots require reliable water supply and would sensibly obtain:

- a water connection to the town mains;
- Groundwater licence and water entitlements;
- High security surface water irrigation water entitlements and delivery rights

There is a shortage of groundwater entitlements created by the compulsory reductions through out NSW in 2003-2006. This reduction was preceded by and was unrelated to the MDB Agreement. The NWI arose as a direct consequence of the commercial uncertainty caused by this groundwater reduction in NSW. The reduction in the groundwater WSPs when first gazetted was a 49% cut across the board cut in all NSW groundwater areas without compensation. In most cases the reduction in the groundwater licences triggered the mortgage default provisions on irrigation farms. The then Commonwealth Government intervened and negotiated a compensation package paid through NSW Treasury and a change of policy to take into account history of use.

This problem of reduction in groundwater water entitlements was aggravated in September 2012 when the Aquifer Interference Policy for mining was introduced requiring water access licences to be held when undertaking mining activities – mine water was not previously included in the WSPs and this aggravated the shortage of water entitlements as mines struggled to acquire enough water entitlements.

Looking forward, the key issue in relation to WSPs is the tenure/security of entitlements when WSP are renewed in the future and the likelihood of further attenuation (compulsory acquisition of entitlements) due to changes in the science underlying the WSPs. The difficulty with the WSPs is that a number of the groundwater plans were done on a very limited scientific or environmental basis.

The WMA provides that compensation may be payable if changes are made during the term of a ten-year plan that results in reduction in water entitlements and water allocations. However, no compensation is payable for changes made when a new plan is introduced, nor under certain other circumstances. Moreover, the payment of compensation is subject to ministerial discretion.

Similarly, while appeals may be made to the Land and Environment Court on decisions to refuse to grant an access licence or approval, grant a licence where there were objections, or impose a condition on the licence or approval, these appeals are costly and, in a State where legislation is under constant review, provide significant difficulties for litigants involved.

## **4 Chapter 4 – Queensland**

### **4.1 Part 1 – Introduction – The inter-relationship between State and Local Councils**

Local councils are an arm of the Queensland State Government and are incorporated as statutory bodies under the Local Government Act 2009.

The role of local government includes, for the purpose of feedlots:

- Development and building approvals
- Wastewater recycling and in some council areas sewerage treatment plants
- Town water supply in some local council areas;
- Public health responsibilities.

### **4.2 Part 2 – Legislation**

#### **4.2.1 Division 1 – Water Law and Water Plans and Resource Operations Plans**

Feed lot operators can request to be connected to the mains for town water. The State is divided into water supply areas serviced by South East Queensland Water (SEQ) with water delivered mainly through local councils. Outside the SEQ area the DNRME website provides a list of local water service providers again the main town water supply is through councils. Connection to the mains does not require a water allocation licence or a water supply contract. Costs are a fixed access charges, a water allocation charge for a fixed maximum amount of water once this amount is exceeded there is an additional metered consumption charge. Town water has a higher level of reliability and a significantly higher per megalitre cost.

The Water Act 2000 (the Act) establishes the regime for water allocation (referred to as water entitlements in the National Overview) and management in Queensland and provides for a tradeable form of entitlement.

Water Plans are statutory instruments made under the Water Act and apply for 10 years at which stage they must be reviewed. After the Water Plan has been reviewed it may be replaced or it may be extended for a maximum period of 10 years. Water Plans made on a catchment basis for rivers, dams overland flow and springs and groundwater within that catchment. There are also a number of separate groundwater water plans. Technical assessments are done to determine sustainable yields and long-term extraction limits within the Water Plan area. Amongst other changes Water Plans now include trading rules and criteria for the approval of new water allocation applications which were previously included in the resource operation plans. Water Plans were previously called Water Resource Plans.

Resource Operations Licences (ROL) within a Water Plan establish the roles and responsibilities of water supply operators and mainly relate to water infrastructure in particular the operation and

maintenance and release of water from dams and weirs. For example, SunWater holds the ROL for the Burdekin Falls Dam.

Distribution Operations Licences DOLs are specific to a Water Plan where a plan is in operation. DOLs are required for water supply operators who manage water infrastructure for distribution to water allocation licence holders. Distribution Operations Licences do not cover dams and weirs. For example Lower Burdekin Water Board (covering the North and South Burdekin) holds the relevant DOLs.

Queensland Water Allocations (equivalent of permanent water entitlements) are subject to the relevant Water Plan and are held on the centralised Water Allocation Register. Seasonal assignment registers (volumetric water accounts known in other states as allocation) are held locally.

Local irrigation schemes (other than St George and McIntyre Brook) do not hold bulk water allocation licences. Lower Burdekin Water Board (LBWB) holds the water allocation in its own right and holds the supply agreement from SunWater for the seasonal assignments. LBWB then delivers the seasonal assignments to its local irrigators based on the rights they hold with LBWB.

Queensland water infrastructure operators are predominantly Queensland Government owned, the main exception being Pioneer Valley Water which was transferred to local irrigator ownership. Pioneer Valley Water operates under its own rules similar to other grower owned schemes around Australia.

### *Access*

Water allocations are defined and managed within broadly-based planning processes designed to ensure the long-term sustainability of the resource. This involves the progressive development of Water Plans (previously called Water Resource Plans) for catchments across the State that define environmental flow and water allocation security objectives, followed by Resource Operations Plans (ROPs) that seek to give effect to these objectives through establishing detailed allocations and operating and trading rules.

Individual irrigation licences are in the process of being converted to Water Allocations when the relevant ROP for the area is completed. Most have already been completed. Water Allocations are of indefinite tenure, tradeable, volumetric, fully separated from land and from use permits, and liable for compensation if they are changed during the life of a plan.

In assessing the risks of allocations (water entitlements) in Queensland, a clear distinction needs to be made between those irrigation licences that have yet to be converted via the Water Plan and ROP process that have a higher risk compared to the rights that have already been converted. The main area that does not yet have a water plan is Cape York. The original irrigation licences are riskier as the underlying nature and protections associated with each vary considerably. If there is an amendment to an approved Water Plan that results in a reduction in the value of a water allocation within the plan's ten-year life, the holder is entitled to compensation from the State for any reduction in market value of a water allocation. While these compensation provisions provide a measure of security, the comfort this provides will rapidly diminish as the end of the ten year period of the Water Plan approaches.

Like NSW and Victoria, the registration of these new water allocations in Queensland is managed by the same body that maintains land titling. The water allocations register is publicly accessible and has similarities to the Queensland land registry, except for certain provisions that are not relevant to water or have been excluded for policy reasons. The most significant of these is that the title does not provide for indefeasibility i.e. the register is not proof of title and ownership may be challenged in court.

Water allocations are only transferred to the registers once they have been formally declared, having been through the Water Planning processes under the Act. All other licences and allocations remain on the database of the DNRME.

#### *Seasonal Assignments and Annual Announced Limits*

Queensland is subject to extreme variability and seasonality in rainfall, alternating between flood and droughts. Overall, however, the current level of utilisation of water resources is lower compared to most other States, with 'over-allocation' restricted to a few specific areas.

Annual Announced limits as a percentage of allocation are published on the DNRME website and the methodology for calculation is also published.

Reduction in the annual announced limits may be caused by drought, falling groundwater levels (groundwater mining) or in some cases to reduce salt water intrusion into the aquifer.

Queensland usually has a better level of water resource security than NSW Victoria and South Australia.

The registers for seasonal assignments are held by local water authorities and include the name of the holder of the allocation holder and show the running balance of the volume of water available for delivery to them. Feed lot owners should check whether or not unused seasonal assignments can be "carried over" from one season to the next and if so the percentage of unused seasonal assignment that can be carried over.

#### *Trading*

Irrigation licences that have been converted to Water Allocations become fully tradeable as assets separate from land – there is no requirement that only a landholder may hold an entitlement. The processes for dealing with transactions for water allocations depends on the nature of the transaction, and in particular whether or not the proposed transaction raises any water resource management issues that require approval by the Chief Executive of the Department of Natural Resources Mines and Energy (DNRME).

A trade that involves simply a change in legal beneficial ownership, without any change to the water allocation itself, can be lodged directly to the water register, without any need for departmental approval. However, transactions that entail a "change" to the underlying water allocation (and fall outside pre-tested trading rules) require prior approval of the DNRME because of their potential water resource management implications. As existing water entitlements are gradually separated from land and managed according to the Act, there is a need for them to be registered separate from land.

Feedlot operators should contact the local water authority and where necessary arrange a supply contract. Allocation has not been fully allocated in some areas and may be purchased through the relevant water authority. Allocation has been auctioned by the Queensland Government in the Warrego catchment and there have been recent releases for sale of allocation in the Flinders catchment.

Alternatively, in areas that are fully allocated, allocation may be available for purchase from private sellers. Feedlot owners should make their own enquiries if allocation they intend to purchase is affected by an unregistered mortgage. Mortgages over land title were not automatically transferred to the water allocation register and title is not guaranteed. One possible way of checking for unregistered interests is to check the associated land title for mortgages that pre-date the conversion of the allocation. Historically mortgages would have been over the land and the water rights.

Consideration should also be given to long term leases that may be available from Water authorities such as SunWater.

#### **4.2.2 Division 2 – Environmental Law (recycled water)**

The Water Supply (Safety and Reliability) Act 2008 (WSSRA) was commenced by the Queensland Government at the peak of the Millennium Drought with the aim of increasing the availability of urban and town water. There was a significant backlash at the time when it was proposed to introduce recycled water to the Toowoomba Town water supply. The Queensland Government has published “Water Quality Guidelines for Recycled Water Schemes November 2008”. It is worth noting the WSSRA is still in force.

A recycled water provider must have:

- A recycled water management plan approved by the regulator; or
- An exemption from the regulator for the requirement to have an approved recycled water management plan

The WSSRA requires recycled water to be treated to improve water quality. The WSSRA covers:

- sewerage or effluent from a service providers sewerage treatment plant;
- greywater from a large greywater treatment plant and
- wastewater other than treated sewerage or effluent or greywater.

Wastewater from agriculture, mining and petroleum activities are excluded by the WSSRA. The water quality criteria of recycled water for feedlots is not specifically covered and would need to be independently assessed. The water quality criteria relate to human health not animal health.

The most likely sources of recycled water would therefore be SunWater or local councils who provide water and sewerage treatment services.

Subject to the relevant council and public health approvals mine waste water is also a possible source of recycled water.



### 4.2.3 Division 3 – Planning Law

The Planning Act 2016 sets out the Queensland planning system. Planning Regulation 2017 Schedule 24 defines “intensive animal industries” as

**"intensive animal industry" —**

(a) means the use of premises for—

(i) the intensive production of animals or animal products, in an enclosure, that requires food and water to be provided mechanically or by hand; or

(ii) storing and packing feed and produce, if the use is ancillary to the use in subparagraph (i); but

(b) does not include the cultivation of aquatic animals.

The State Planning Policy (SPP) set out the overarching policy for planning purposes. Under the heading State Interest provides that growth in agricultural production and a strong agricultural industry is facilitated by promoting hard to locate intensive agricultural land uses such as intensive animal industries in appropriate locations and protecting existing intensive animal industries from encroachment by development.

The SPP sets out assessment benchmarks for material change of use for the intensive animal industries in relation to water buffer areas so as to minimise impacts on environmental values.

Regional Plans are in place for:

- Cape York
- Central Queensland
- Central West
- Darling Downs
- Far North Queensland
- Mackay Isaac and Whitsundays
- Maranoa-Balonne
- North Queensland
- North West
- South West
- Wide Bay Burnett

There is an additional non-statutory regional plan for the Gulf.

## 4.3 Part 3 – Local Councils

### 4.3.1 Division 1 – Local Plans

There are three local planning instruments local planning schemes, local planning policies and temporary local planning instruments. Local planning instruments are drafted by local councils. Local planning instruments must be consistent with the SPP and the SPP will override them if they are inconsistent.

## 4.3.2 Division 2 – Comparison of Council Areas with history of feed lots

### 1. Western Downs Regional Council

Western Downs Regional Council is within the Darling Downs Regional Plan 2013. Regional Policies 1 and 2 focus on protecting Priority Agricultural Land Use (PALU) as defined by the Australian Land Use and Management classification classes 3.3, 3.4, 3.5, 4 or 5.1 Version 7 May 2010. Intensive Animal Husbandry including cattle feedlots is classified as 5.2 and is therefore not protected by PALU.

The Western Downs Local Plan Rural Zone clause 9.3.4 covers intensive animal industries. At clause 6.9.2.2(a) the Plan provides that the Rural Zone is aimed at protecting land for rural uses from fragmentation and alienation particularly from residential development and provides for buffering from other zones. Rural Zones must also take into account the need to protect natural resources. Intensive animal husbandry is further categorised as high impact rural.

The Western Downs Local Plan provides at 3.5.3.1 Specific Outcomes provides at paragraph (3) that intensive animal industries are supported where off-site impacts on land, water resources, air and noise quality are managed to provide a reasonable level of amenity protection for Urban area.

There is no specific council planning policy in relation to intensive animal industries.

### 2. Toowoomba Regional Council

Toowoomba Regional Council is within the Darling Downs Regional Plan 2013. Regional Policies 1 and 2 focus on protecting Priority Agricultural Land Use (PALU) as defined by the Australian Land Use and Management classification classes 3.3, 3.4, 3.5, 4 or 5.1 Version 7 May 2010. Intensive Animal Husbandry including cattle feedlots is classified as 5.2 and is therefore not protected by PALU.

The Toowoomba Regional Planning Scheme Rural Zone clause 9.3.8 covers intensive animal industries and clause 9.3.8.3:1 provides assessment benchmarks. The Planning Scheme at clause 6.6.6 Rural Zone includes intensive animal industries and the purpose of the Rural Zone includes buffers for waterways and protects land use for intensive animal industries from encroachment of the land from residential and tourism uses.

There is no specific council planning policy in relation to intensive animal industries.

### 3. Southern Downs Regional Council

Southern Downs Regional Council is within the Darling Downs Regional Plan 2013. Regional Policy 1 and 2 focus on protecting Priority Agricultural Land Use (PALU) as defined by the Australian Land Use and Management classification classes 3.3, 3.4, 3.5, 4 or 5.1 Version 7 May 2010. Intensive Animal Husbandry including cattle feedlots is classified as 5.2 and is therefore not protected by PALU.

Southern Downs Planning Scheme use code is set out at clause 9.3.6. Tables 9.3.6.3, 9.6.3.4 and 9.6.3.5 respectively set out assessable development criteria separation distances and boundary setbacks and minimum site requirements.

Clause 3.6.4 states that intensive animal industries are an important part of the rural economy and are likely to be a continuing feature in the north of the region.

Clause 6.2.10 Rural Code Zone includes intensive animal industries and the zoning provides for feedlots in specific parts of the region subject to managing the impacts. Overall the southern Downs Planning Scheme indicates a supportive approach taking into account the need for buffers from natural resources in particular water.

Whilst there is no specific separate council policy for intensive animal industries the Planning Scheme is comparatively detailed and considered.

#### **4. Goondiwindi Regional Council**

Goondiwindi Regional Council is within the Darling Downs Regional Plan 2013. Regional Policy 1 and 2 focus on protecting Priority Agricultural Land Use (PALU) as defined by the Australian Land Use and Management classification classes 3.3, 3.4, 3.5, 4 or 5.1 Version 7 May 2010. Intensive Animal Husbandry including cattle feedlots is classified as 5.2 and is therefore not protected by PALU.

The Planning Scheme is referred to as the Former Goondiwindi Town Council Planning Scheme. Intensive animal industries are covered by Rural Zone under clause 4.1. The plan includes requirements for buffering and protection of water resources however it is less detailed than other comparable plans and appears to be under review.

There is no specific council planning policy in relation to intensive animal industries.

#### **5. Central Highlands Regional Council**

The Central Highlands Regional Council is within the Central Queensland Regional Plan 2013. Regional Policy 1 and 2 focus on protecting Priority Agricultural Land Use (PALU) as defined by the Australian Land Use and Management classification classes 3.3, 3.4, 3.5, 4 or 5.1 Version 7 May 2010. Intensive Animal Husbandry including cattle feedlots is classified as 5.2 and is therefore not protected by PALU.

The Central Highlands Regional Council Planning Scheme clause 6.2.16 relating to Rural Zones covers intensive animal industries. Tables of Assessment are included in Part 5 and assessment benchmarks are included at 8.3.14.3.2. The assessment performance outcomes cross refers to the Reference Manual for Beef Cattle Feedlots in Queensland. The assessment criteria includes the usual requirements for buffering and the protection of water resources.

There is no specific council planning policy in relation to intensive animal industries.

### **4.4 Part 4 - Risks– status, risks, gaps, practical implications**

Feedlots require reliable water supply and would sensibly obtain:

- a water connection to the town mains and a supply contract with the water service operator;
- Groundwater licence and water entitlements;
- High security surface water irrigation water entitlements and a supply contract with the water service operator.

The status of the MDB Plan as at February 2018 is uncertain.

The Millennium Drought created severe town and urban water shortages in Southern Queensland including in the Darling Downs and Central Queensland due in part to the failure of the Queensland Government to invest dams and water infrastructure. This shortage of surface water storage for drinking water in Queensland is gradually being addressed however dams take some years to construct.

Feedlots drawing groundwater from the Great Artesian Basin may be subject to further restrictions and regulations the details of which are as at February 2018 being considered by Government. Feedlots in coastal areas drawing on groundwater in some cases may be affected by salt water intrusion and additional restrictions due to nutrient runoff issues impacting on the Great Barrier Reef.

Unlike other State owned irrigation infrastructure irrigation schemes, maintenance and renewals and renewals has generally been better managed than other States. In a number of cases irrigation schemes are operated if not owned by local irrigators. Irrigators in Mackay own, operate and maintain Pioneer Valley Water.

## 5 Chapter 5 – Western Australia

### 5.1 Part 1 – Introduction – The inter-relationship between State and Local Councils

Local councils are an arm of the Western Australian State Government and are incorporated as statutory bodies under the Local Government Act 1995.

The role of local government includes, for the purpose of feedlots:

- Development and building approvals excluding certain approvals such as State Significant Projects.
- Public health responsibilities.

Urban and town water is supplied and delivered by State Government owned entities, in most cases the Water Corporation, however Bunbury and Busselton in the South West of Western Australia have their own State Government owned local water corporations. Wastewater and sewerage services are also provided the Water Corporation and other State Government owned water corporations.

### 5.2 Part 2 – Legislation

#### 5.2.1 Division 1 – Water Law and Water Management Plans

Water law in WA is currently administered under six separate acts. The four that are relevant to feedlot owners are:

1. Water and Rights in Irrigation Act 1914 (covers amongst other things water planning)
2. Water Agencies (Powers) Act 1984 (covers works and other Ministerial powers including delegated powers to the Water Corporation and locally owned irrigation schemes)
3. Country Areas Water Supply Act (covers supply issues for town water in rural areas amongst other things)
4. Metropolitan Water Supply Sewerage and Drainage Act (covers supply issues for town water in Perth amongst other things)

It is anticipated that at some stage all six separate acts will be repealed in part or full and replaced by the Water Resources Management Bill when it comes into force.

The key policy principle that environmental water provisions are determined first, with any allocations for development then made within the associated sustainable yield. Water allocation plans have no statutory basis and there is very limited accountability by the Department of Water when making the water management plans. Due to the plans being policy only, there is little capacity for judicial review by the Courts. Judicial review is mostly limited to whether plans comply with the underlying statutory and common law – the plans are policy only.

The Department of Water policy document “Planning for the Future” sets out the following water resource regions:

- North West
- Mid-West Gascoyne
- Swan-Avon
- Kwinana-Peel
- South West
- South Coast

Each region has a series of surface water and groundwater allocation plans. Each water allocation plan (WAP) establishes allocation limits and the methodology for allocation restrictions and manages water resources including surface water releases from dams.

#### Access

Licences issued under RIWI define the purpose, location and resource from which the water can be extracted. Water allocation plans under RIWI specify how much water can be licensed for abstraction. Western Australian water allocation plans are policy based only and non-statutory (in breach of the NWI which requires plans to have a statutory basis).

Water allocation plans detail allocation limits, water for the environment and the management of water resources within a defined plan area. Water resources within the plan area are divided into management areas. Water allocation plans have been completed for most of the state’s surface water and groundwater resources. These plans will subsequently fall under the new Water Resource Management legislation when it comes into force.

The two principal types of licences are Take Groundwater licences and Take Surface Water licences. These are held by both water service providers (e.g. Water Corporation and Ord Irrigation) and in proclaimed areas by individual private users (e.g. irrigators and mining companies).

The main water service provider in Western Australia is the government owned Water Corporation.

Other regional water service providers include:

- Bunbury Water Corporation
- Busselton Water Corporation
- Gascoyne Water Co-operative Ltd
- Harvey Water (South West Irrigation Management Co-operative Limited)
- Preston Valley Irrigation Co-operative Limited
- Ord Irrigation Co-operative Ltd

Water licences are currently issued with terms of between five and ten years. Decisions to renew licences are at the discretion of the Department of Water. The Department of Water also has the power to amend, suspend or cancel licences in certain circumstances. While under certain circumstances, compensation in theory may be payable where a licence is amended, suspended or cancelled, based on the experience of Harvey Water and OIC it is unlikely that compensation would ever be offered or paid.

Licences from the Department of Water may be cancelled without compensation during or at the end of their term and Department of Water discretions are very broad. The Department has adopted a “use it or lose it” policy. The Department of Water has the power to reduce rights to one licence holder so that those entitlements can be issued by the Department of Water to another licence

holder. The NWI principle is that water entitlements should only be reduced for environmental protection reasons not to maximise commercial returns to Government.

Private schemes have the ability to buy back “sleeper” (unused) water that has not been utilised for at least 3 years, however there is a protracted process that must be undertaken before this happens. Sleepers are encouraged to trade their water on the temporary market to prevent buy back occurring. Private schemes cannot cancel water entitlements (they may buy them back) but may impose other penalties for breaches of the private schemes rules.

### *Allocation*

Western Australia WA is more dependent on groundwater than the eastern States. However, nearly 30% of groundwater management plans are considered fully allocated, and two Groundwater Management Plan areas are considered overallocated.

The two principal types of licences are Take Groundwater licences and Take Surface Water licences. These are held by both water service providers (see above) and individual private users (e.g. irrigators and mining companies) in proclaimed areas. While generally specified in volumetric terms, these licences have various reliability levels reflecting their restriction during drought periods.

Irrigator owned co-operatives hold the licence on behalf of their members who hold water entitlements on the co-operative internal water register. The co-operatives adjust annual volumetric allocation in line with Government allocation announcements.

Irrigator owned co-operatives have well developed internal and external allocation trading rules and allocation trading has been occurring for over 20 years in most schemes.

Other than internal (between members in the irrigation scheme) and external trading of allocation (through the water service provider between a member and an external non-member) from grower owned schemes there is no formal structure in Western Australia for trading allocation.

### *Trading*

Water trading has been developing in grower owned co-operative schemes WA since 1996. The grower owned schemes since their inception have developed trading in permanent and temporary (allocation) markets and are more developed than trading in the Government issued entitlements. The RIWI Act enables trading of water entitlements separate to land.

Both permanent and temporary trades are permitted not only within the private grower owned schemes but are now permitted amongst irrigators outside those schemes.

Trading in proclaimed areas (outside grower owned schemes) is however subject to a prohibition on trade of ‘sleeper’ entitlements, and a condition that the holder of a licence may only transfer it to persons with physical and legal access to land. For trades outside the grower owned schemes, and not part of the sale of the landholding to which the licence is attached, the approval of the Department of Water is required.

The rules of the grower owned schemes encourage trading sleeper water.

All grower owned schemes have a sophisticated publicly available register of entitlements that meets NWI standards for water registers. The information on the grower owned scheme is proof of title subject to the co-operative’s bulk water licence. Entitlement holders in the grower owned schemes are not included on the Department of Water register, but on the grower owned scheme’s register.

The Department of Water maintains a centralised register of water licence holders which is publicly accessible. However, the Western Australian Government makes no guarantee of the register's accuracy – that is, title is not indefeasible and is not proof of title.

Feed lot owners should make their own enquiries about unregistered mortgages. Co-operative water registers include the registration of securities over water entitlements and in general financial institutions tend to register their charges (mortgages) on the co-operative water register. In our experience it is not unusual for there to be unregistered mortgages over licences on the Government Water Register when cross checked against mortgages on land on the DOLA land titles register.

### **5.2.2 Division 2 – Environmental Law (recycled Water)**

Western Australia has not developed legislation to encourage and support the use of recycled water. Approvals for water recycling are difficult to obtain and face significant regulatory barriers from the Department of Health. The Department of Health has issued "Guidelines for the Non-potable use of Recycled Water in WA" there does not appear to be any reference to "animal husbandry-intensive" (the usual terminology in WA) or feedlots although there is discussion on recycled water in relation to dairy cattle.

### **5.2.3 Division 3 – Planning Law**

Planning in WA is administered under the Planning and Development Act 2005. There is also separate planning legislation as follows:

- Metropolitan Redevelopment Act 2011
- Swan and Canning Rivers Management Act 2006
- Perry Lakes Redevelopment Act 2006
- Hope Valley Redevelopment Act 2000
- Swan Valley Planning Act 1995.

The Planning and Development Act 2005 provides for the State Planning Strategy and State Planning Policies. Amongst other statutory planning instruments there are also regional planning schemes and local planning schemes.

State Planning Policy 2.5 Rural Planning December 2016 includes animal husbandry-intensive in the definition of "Primary Production" and refers to feedlots as "Animal Premises". The WA Government policy on "Animal Premises" is set out at clause 5.7 and the clause notes that the most "animal premises" are mainly subject to environmental regulation. The Policy further notes that a major planning consideration in relation to existing and proposed "animal premises" is potential changes in nutrient loads in rivers estuaries and tributaries.

Local Government for planning purposes operates under gazetted delegated powers from the Western Australian Planning Commission under the relevant regional scheme.

## **5.3 Part 3 – Local Councils**

### **5.3.1 Division 1 – Regional and Local planning schemes**

As previously stated local government operates under delegation from the Western Australian Planning Commission.

An example of the delegation to Greater Bunbury is WA Government Gazette 9 May 2014 at page 1420 at 1423 which provides that an application for animal husbandry-intensive premises shall be



referred the Department of Planning, the Department of Agriculture and Food, Department of Health, Department of Environmental Regulation, Department of Parks and Wildlife and/or Environmental Protection Authority for advice and recommendation before being considered by the local government.

State Government Water Corporations are responsible for approvals relating to town and urban water connections. Where relevant it is worth considering contacting grower owned irrigation schemes if they supply water in the proposed feedlot area and enquires should be made regarding applications for membership. Water entitlements may be available for purchase from members of grower owned irrigation schemes:

- Gascoyne Water Co-operative Ltd (Carnarvon)
- Harvey Water (South West Irrigation Management Co-operative Limited)
- Preston Valley Irrigation Co-operative Limited
- Ord Irrigation Co-operative Ltd (Kununurra)

### **5.3.2 Division 2 – Comparison of Council Areas with history of feed lots**

#### **Shire of Waroona**

Waroona is on the coast south of Perth. The Shire of Waroona is within the WA Government State Planning Strategies “agricultural resource priority management areas”. The aim of the policy is to protect agricultural areas in proximity to Perth from encroachment by residential development.

Peel Region Scheme Policy ‘Strategic Agricultural Resource Policy’ and Statement of Planning Policy No. 2.5 ‘Agricultural and Rural Land Use Planning’ the Shire covers the Priority Agriculture Area. The Shire has established Priority Agricultural Areas with a combination of land and irrigation water that is suitable or has the potential for future agricultural intensification and diversification, including soils data and the existing lot sizes.

Intensive Agriculture is covered by Local Planning Policy 13 which focuses on the protection of the Peel-Harvey Estuary and groundwater and the presence of suitable soils. Whilst there is no Local Planning Policy specific to intensive agriculture- animal husbandry there has been a long history of beef and feedlots in the area.

Harvey Water delivers non-potable water in the Waroona Shire Council area.

#### **Shire of Kondinin**

The Shire of Kondinin is east of Perth the town of Kondinin is 279 kms east of Perth in the Eastern Wheatbelt. It is not considered to be under pressure from residential development extending from Perth.

Local Planning Scheme No1 for the Shire of Kondinin. Intensive Agriculture-Animal husbandry at clause 18 Notes provide:

1. Feedlots are not permitted in the Rural zone where such use is proposed to be located within a five (5) kilometre radius of an established townsite.
2. Feedlots are not permitted in the Rural zone unless such a use is proposed to be located more than five (5) kilometres from an established townsite and more than two (2) kilometres from an existing residential dwelling.

3. Feedlots are not permitted within two (2) kilometres of an existing neighbouring residential dwelling unless the local government has exercised its discretion by granting development approval after considering a site-specific study provided by the applicant addressing the proximity of sensitive land uses and potential impacts, and giving notice in accordance with clause 64 of the deemed provisions.

### Shire of Esperance

The Shire of Esperance is in the south east corner of WA and is relatively isolated.

The Shire of Esperance Planning Strategy specifically refers to planning for feedlots at the township of Cascade in Precinct 46 and the strategy and actions for supporting the Precinct. Cascade is noted as a low salinity area. The relevant information is as follows:

**Precinct 46 - Cascade Objectives:** To recognise existing land uses make provision for subdivision.

**Background/Location:** The Cascade precinct is located on the western boundary of the Shire. Cascade town site is on the watershed between the catchments of the Young and Lort Rivers. The town site is located approximately 100km north west of Esperance.

#### Strategy:

- Facilitate a mix of commercial and residential uses within the Cascade town site which will support the dominant land uses of cropping/grazing.
- Support the retention of remnant vegetation within the catchment of the Young River.
- Recognise the dominant land uses within the precinct are cropping and grazing (sheep and cattle), with stock feedlotting being carried out on some properties within the precinct.
- Ensure that the serious land degradation and other environmental impacts of stock feedlotting within the precinct are recognised and addressed.

Esperance Local Planning Scheme No. 24 makes provision for application for the development of animal husbandry-intensive under Schedule 2 Special Control Areas 10 Undeveloped Rural Area.

## 5.4 Part 4 - Risks– status, risks, gaps, practical implications

Feedlots require reliable water supply and would sensibly obtain:

- a water connection to the town mains;
- Groundwater licence and water entitlements;
- Surface water irrigation water entitlements from grower owned irrigation schemes such as Harvey Water, Gascoyne Water, Ord Irrigation or Preston Valley.

Legislation relating to recycled water is highly restricted and without the introduction of new legislation and policies supporting recycled water this presents considerable costs and difficulties compared to other States.

Feed lot owners should take into account sovereign risk issues in relation to failure to comply with the NWI and the lack of security of water “entitlements” in Western Australia.

WA does not comply and will not comply in the future with the NWI in that water licences are temporary renewable licences not permanent entitlements. Licences under the proposed Water Resources Management Bill are not permanent and can be reduced on an individual basis. Water that has been “over allocated” to an individual or company in the Department of Water’s view can be “recovered” and sold to another water user.

In 2003-2004 the WA Government advised Harvey Water that their “bulk” water licence (for all irrigators and a number of commercial users) would be suspended in full for 3 years and their water would be transferred to Perth. Harvey Water supplies water for beef, dairy, vineyards and annual and permanent crops. Harvey Water threatened legal action against the Minister and the order was withdrawn.

In 2017 the Department of Water significantly reduced the “bulk” water licence of Ord Irrigation Co-operative Ltd (OIC) at the end of its licence period. The reason given by the Department of Water was that OIC had failed to utilise its full allocation. Water use had altered due to changing agricultural land use and will change again in the future. The OIC licence requires it to pay for the total allocation even if it is not fully utilised. There was no allegation by the Department of Water that there was an over allocation issue in the Eastern Kimberley or that the OIC was in breach of its licence. The Department of Water wanted to transfer the “over allocation” to a different client. The matter is currently the subject of an appeal to the WA Supreme Court.

## 6 Chapter 6 Northern Territory

### 6.1 Part 1 – Introduction – The inter-relationship between State and Local Councils

Local Councils are an arm of the Northern Territory Government and are incorporated under the Local Government Act.

The NT Planning Scheme and policy documents, plans and guidelines are administered by the Department of Infrastructure Planning and Logistics. The NT Planning Scheme sets the policy for future development and sets out development and zones criteria. There are further policy documents for specific regions such as the Darwin Regional Land Use Plan

Each Council has either a municipal, regional or shire plan.

Local Councils in the Northern Territory have a more limited range of functions compared to their State equivalents.

### 6.2 Part 2 – Legislation

#### 6.2.1 Division 1 – Water Law and Water Management Plans

The Water Act 1992 (NT Water Act) covers investigation, use, control, protection, management and administration of water resources throughout the Northern Territory including those on Aboriginal and Commonwealth Lands. The NT Water Act also covers general provisions, water resource investigation, use of surface water, use of groundwater, and water quality protection. The NT Water Act also establishes water allocation plans (WAPs) for groundwater sources and sets sustainable diversion limits for each WAP

The NT Water Act is administered by the Department of Natural Resources (DENR). Useful information regarding water is provided in the Water Licence Decision Portal.

#### *Access*

Water for feedlots require a surface water extraction licence (SWEL) or a groundwater extraction licence (GWEL) for industrial use. Landholders have the right to take groundwater and surface water on their land for domestic purposes, watering stock and for a domestic garden no larger than a half-hectare. The Controller of Water Resources must accept all applications for a licence. At the present time licences are still available for issue by the Controller of Water Resources subject to:

- Availability of water in the area
- The rights of existing water entitlement holders
- Water allocation plan rules (If the licence is a GWEL)
- Impact on the water resource
- Development and land use in the area.

The Controller of Water Resources may grant a licence for up to 10 years but in special circumstances and with the approval of the Minister the Controller may grant a licence for more than 10 Years (GWEL section 60 and SWEL section 45 of the NT Water Act).

The Minister does not have the power to review a decision to revoke, suspend, modify or alter a licence to give effect to an order made by the Supreme Court under section 5 of the Environment Protection (Northern Territory Supreme Court) Act 1978.

### *Allocation*

Licence security don't apply to licence south of Larrimah which receive a full allocation each year.

North of Larrimah extraction limits may change with rainfall and groundwater recharge. Allocation announcements where the allocation is less than 100% for the following 12 months are announced on May 1.

The Minister has emergency powers to limit rights to take water.

### *Trading*

The Surface Water Entitlements Register (SWER) covers all surface water licences and all licence details are available on a spreadsheet online. Surface Water Entitlement Licences are shown for Darwin and Katherine. The SWER shows amongst other things:

- Water control district
- whether trading is allowed
- Licence number and expiry date
- Maximum megalitre water entitlement per year
- Use type (industry cultural aquaculture public water supply)
- Name and address of the licence holder

The trading of surface water is not permitted.

The Groundwater Water Entitlements Register (GWER) covers all surface water licences and all licence details are available on a spreadsheet online. Groundwater Water Entitlement Licences are shown for Alice Springs, Darwin and Katherine. The GWER shows amongst other things:

- Water control district
- Water allocation plan
- Water trading zone and whether trading is allowed
- Licence number security level and expiry date
- Use type (industry agriculture public water supply)
- Name and address of the licence holder

There is some capacity to trade water entitlements and allocation within declared WAP Areas but approvals are subject to the WAP connectivity and transmissability in groundwater systems. There is significant discretion in the hands of the Controller of Water Resources but there is a right of appeal to the Minister. The Ministerial discretion is not restricted.

## **6.2.2 Division 2 – Environmental Law (recycled water)**

The NT uses the Australian Guidelines for Water Recycling as the basis for regulatory approvals.

The Power and Water Corporation has a wastewater discharge licence under Section 74 of the NT Water Act. NT Power and Water provides recycled water under the Alice Springs Water Re-use Project.

### 6.2.3 Division 3 – Planning Law

The relevant legislation is the Planning Act administered by the Department of Infrastructure Planning and Logistics. The Northern Territory has a uniform planning scheme.

The NT Planning Scheme covers intensive animal husbandry at **10.1 Non-Urban Use and Development Performance Criteria** that provides that “Premises used for the purposes intensive animal husbandry must amongst other things be designed so as not to create the risk of pollution of ground and surface waters.”

Feedlots are covered by the definition of “intensive animal husbandry” and the relevant zoning is Zone DV.

### 6.3 Part 4 - Risks– status, risks, gaps, practical implications

Feedlots require reliable water supply and would sensibly obtain:

- a water connection to the town mains;
- Groundwater licence and water entitlements;

Whilst surface water is a possibility groundwater is a more likely option.

NT for its size and level of economic development is a relatively low risk jurisdiction. Issues may arise in relation to native title and associated water rights.

Levels of recycling of water are comparatively low there is a framework and policy in which it can occur.

## 7 Chapter 7 – South Australia

### 7.1 Part 1 – Introduction – The inter-relationship between State and Local Councils

Local Councils are an arm of the South Australian Government and are incorporated under the Local Government Act 1999.

Local Councils provide planning approvals but do not provide water supply and sewerage treatment services. Water and sewerage services are provided by SAWater.

### 7.2 Part 2 – Legislation

#### 7.2.1 Division 1 – Water Law and Water Management Plans

In South Australia, water access entitlements, licensing and permits are governed by the Natural Resources Management Act 2004 (NRMA) however parts 1 and 8 of the Water Resources Act 1997 dealing with Financial provisions continue in operation. The Act provides for the development of Water Management Plans across the State the most significant being the South Australian River Murray Resource Plan.

The South Australian River Murray Resource Plan when completed will cover the main channel of the Murray River and will include the Lower Lakes. The Plan has transitional status under the MDB 2012 and was originally anticipated to be completed in 2014. The Plan is meant to be compliant with the MDB Plan and in full operation by 2019 however it is still under review by the SA Government. The Plan in its present form does not have a clear methodology for determining water allocation. As at February 2018 the full implementation of the MDB Plan is uncertain due to the possibility of NSW and Victoria withdrawing from the agreement.

Licences are required for the taking of water from a prescribed watercourse, lake or well, or taking surface water from a surface water prescribed area.

#### *Access*

SAWater provides connections for urban or town water and sells water on a volumetric basis under contract. Water access entitlements are not required for customers of SAWater.

The NRMA requires the Minister to keep a register of all water access entitlement licences subject to certain requirements. A water access entitlement is a share in the consumptive pool of a specified water source within a specified water management plan. The number of water entitlements is specified on the licence. One unit share of water access entitlement is roughly equal to the right to access a maximum of 1 kilolitre of water in a season. Note water entitlements in other states are usually measured in megalitres.

The SA water register electronic database is a licensing and permitting system known as Water Licence and Permit Register. Currently, water access entitlements and allocations in South Australia are listed on Water Connect, which is the responsibility of the Department of Environment Water and Natural Resources (DEWNR). The Water Licence and Permit Register is the formal public register for all South Australian water access rights and detail volumes, use conditions, trade history and financial interests and is publicly accessible. In private irrigation districts, a separate register of water rights is held by the irrigation trust.

Water access entitlements are permanent, subject to conditions of access determined by Water Allocation Plans. Water allocation plans are subject to regular review that may be altered periodically. Licences may be attenuated under the water allocation plans following a prescribed process of consultation. No compensation is payable for the effects of any consequent reduction in water allocation or changes to access conditions on entitlement holders.

At the bulk level, volumetric water licences are held by supply authorities (e.g. SA Water and Irrigation Trusts). Individual end user irrigation water entitlements may be specified as either a 'Taking Allocation' approved for use on a specific land title or a 'Holding Allocation' not attached to a particular land title, but not yet approved for use. Water licences may be surrendered by the licensee at any time.

### *Allocation*

Much of South Australia is arid or semi-arid, and it is largely dependent on water flowing from other States, particularly via the Murray River.

Water allocation is the annual announced percentage of water available per unit share note water access entitlement in SA is equivalent to one kilolitre not one megalitre.

Nevertheless, SA licences represent high security entitlements. During the Millennium Drought full allocation was available virtually every year. More recently allocation has been reduced however the methodology for doing so remains unclear particularly in years when South Australia receives its full allocation under the Murray-Darling Basin Agreement.

### *Trading*

Water access entitlements on the River Murray are fully issued and water access entitlements must be bought on the private market.

Trading of water access entitlements and allocation is permitted, as well as leasing of water entitlements. While various approvals for trading in 'Taking Allocations' are required, trade in 'Holding Allocations' are automatic because no site or resource impact assessments are necessary.

Transfer of annual volumetric water to the River Murray from interstate is also permitted.

## **7.2.2 Division 2 – Environmental Law (recycled water)**

The new water treatment facilities will commence construction in April 2018 within the Bolivar precinct with completion in 2019. The new project is known as the Northern Adelaide Irrigation Scheme (NAIS). The new project will increase recycled water for irrigation water by 60 per cent.

This project will deliver up to 12 GL (Stage 1) of reclaimed water suitable for commercial food production. NAIS infrastructure will deliver high reliability water for irrigation in North Adelaide. The infrastructure is scaleable up to 20GL in the future.

SAWater should be contacted in relation to the availability of recycled water in other areas.

## **7.2.3 Division 3 – Planning Law**

Planning in SA is subject to the Planning, Development and Infrastructure Act 2016.

South Australian Planning Policy Library (SAPPL) as the primary source of land use policy regarding the use and development of rural/ primary production land.



Feedlots are called “intensive animal keeping”.

South Australian Planning Policy Library Version 6 in the General Section under “Animal Keeping”. Unlike other jurisdictions the policy does not distinguish between the capacity of the different feedlots i.e. feedlots with a capacity of 50 are the same as feedlots with a capacity of 1000. The provisions are also not included under the rural zoning but under general.

Additional controls on Intensive animal keeping are also included in clause 17 Water catchments.

Intensive Animal Keeping clauses 9-11 provide:

Intensive Animal Keeping 9 (Core policy in relevant Greater Adelaide and Regional Development Plans)

Intensive animal keeping operations and their associated components, including holding yards, temporary feeding areas, movement lanes and similar, should not be located on land within any of the following areas:

- (a) 800 metres of a public water supply reservoir
- (b) the 1-in-100 year average return interval flood event area of any watercourse
- (c) 200 metres of a major watercourse (third order or higher stream)
- (d) 100 metres of any other watercourse, bore or well used for domestic or stock water supplies
- (e) 2000 metres of a defined and zoned township, settlement or urban area (except for land based aquaculture)
- (f) 500 metres of a dwelling (except for a dwelling directly associated with the intensive animal keeping facility).

10 Intensive animal keeping operations in uncovered situations should incorporate:

- (a) a controlled drainage system which:
  - (i) diverts runoff from external areas, and
  - (ii) directs surface runoff into an effluent management system that has sufficient capacity to hold runoff from the controlled drainage area
- (b) pen floors which:
  - (i) ensure that effluent does not infiltrate and contaminate groundwater or soil, and
  - (ii) are graded to a consistent uniform slope of between 2 per cent and 6 per cent
- (c) effluent drainage into an effluent lagoon(s) that has sufficient capacity to hold runoff from the controlled drainage area.

11 (Core policy in relevant Greater Adelaide and Regional Development Plans) Intensive animal keeping facilities and associated wastewater lagoons and liquid/solid waste disposal areas should be sited, designed, constructed and managed to avoid adverse odour impacts on nearby sensitive land uses.

## **7.3 Part 3 – Local Councils**

### **7.3.1 Division 1 – Council Development plans**

Each council has its own council development plan and bylaws. Councils also have their own strategies and policies that can be used to encourage business activities in their council area.

### **7.3.2 Division 2 – Council Areas with history of feed lots**

#### **Coorong District Council**

Coorong District Council includes the towns of Meningie and Tintinara and adopts the requirements of South Australian Planning Policy Library Version 6 in the General Section in relation to intensive animal keeping. Coorong District Council has not developed policies to encourage intensive animal keeping in their council area.

Development and support of water recycling is generally the responsibility of SAWater.

## **7.4 Part 4 - Risks– status, risks, gaps, practical implications**

Feedlots within the MDB require reliable water supply and would sensibly obtain:

- a water connection to the town mains;
- Groundwater licence and water entitlements;
- Surface water irrigation water entitlements and where relevant in the future, delivery rights.

Shortages of urban water in Adelaide have in part been addressed by the construction of a desalination plant. Whilst it increases the cost of water it provides a greater level of water security.

In theory SA has predominantly high security irrigation water. However, at the peak of the Millennium Drought there were severe water shortages in the Coorong and Lower Lakes.

The delays in completing the South Australian River Murray Resource Plan and its failure to include a transparent methodology for determining allocation announcement is a cause for concern.

Unlike NSW and Victoria, SA has not reviewed the number of water entitlements on the Water Licence and Permits Register that have been issued in comparison to the MDB allocation. There is no certainty that what are in theory high security water entitlements which should in an average year have 100% allocation actually align with the MDB Plan SDLs that are volumetric and not based on permanent water entitlements.

## 8 Chapter 8 – Victoria

### 8.1 Part 1 – Introduction – The inter-relationship between State and Local Councils

Local Councils are an arm of the Victorian State Government under the Constitution Act 1975(Victoria). Local councils are incorporated under the Local Government Act 1989 and operate under the Local Government Charter.

The Victorian Government provides over-arching legislation for Victoria. Local councils pass their own regulations and by-laws. Relevant council specific regulations and by-laws cover area relevant to feedlots include:

- Development and building approvals,
- public health,
- environment and amenity.

Councils often manage the local drainage network (for example, section 198 of the Local Government Act 1989 (Vic) vests public sewers and drains in Councils. In some case sewerage treatment is done by water service providers. Council operated reticulated sewerage systems are also regulated under the Public Health and Wellbeing Act 2008 (Vic). It is therefore useful to remember that some council have sewerage treatment works when considering the option of recycled treated sewerage effluent.

Water service providers are not owned by local councils they are State Government owned.

### 8.2 Part 2 – Legislation

#### 8.2.1 Division 1 – Water Law Sustainable Water Strategies and Water Resource Assessments

The primary legislation governing water entitlements, allocations, water plans and trading is the Water Act 1989. The legislation is administered by the Department of Environment, Land, Water and Planning Victoria (DELWP).

The Victorian Government has published its sustainable water strategy on a regional basis. The strategies are reviewed on a 10 yearly basis. Strategic water strategies are reviewed every 5 years. Sustainable water strategies cover:

The management of threats to the supply and quality of water resources,  
trade and carryover policies;  
waterway health.

The Northern Sustainable Water Strategy in particular, is linked and impacted by the Murray Darling Basin Plan. At the present time it is uncertain whether or not Victoria will continue to be part of the Murray Darling Basin Plan.

Individual long-term water resource assessments are also done on a regional basis. Long term water resource assessments are reviewed on 15 yearly basis. Water resource assessments determine resource availability for consumptive and environmental use.

System operators (water service providers) are government owned and are responsible for determining allocation to their customers. Urban water suppliers are responsible for their own water strategies that are reviewed every 5 years. Rural water service providers vary allocation based on water levels in the dams and climatic conditions.

Urban water and wastewater recycling and sewerage treatment is delivered by Victorian Government owned entities the largest of which is Melbourne Water with the second largest being Wannon Water. Charges are based on infrastructure, volumetric water and administration costs. As in all other jurisdictions individuals on the metropolitan or town water supply do not own water entitlements they are supplied on a volumetric basis.

The Land Conservation Act and the Catchment and Land Protection Act prohibits feedlots in 102 water supply catchments. The prohibited areas are set out in Victorian Code for Cattle Feedlots August 1995 at Appendix 2.

The approval of feedlots is subject to a wide range of planning, local government, EPA, health and human services and water service providers approvals. State Government is currently working on a clearer definition in the planning regulations of intensive animal industries.

Irrigation water and rural town water is also delivered by Victorian Government owned entities:

#### **Irrigation Water:**

- Lower Murray Water
- GMW Water
- Goulburn Murray Water
- Southern Rural Water

#### **Rural Town Water and Wastewater**

- Lower Murray Water (irrigation water, water, wastewater, effluent treatment and disposal and disposal of subsurface irrigation drainage water)
- GMW Water (irrigation water, water, recycled wastewater)
- Goulburn-Murray Water (irrigation water, water wastewater recycling and drainage services)
- Barwon Water (water recycled wastewater and sewerage)
- Central Highlands (water and sewerage)
- City West Water (water and recycled wastewater)
- Coliban Water (water and recycled wastewater)
- East Gippsland Water (water and wastewater)
- North East Water (water and recycled wastewater)
- South East Water (water and wastewater recycling)
- South Gippsland Water (water and wastewater recycling)
- Western Water (water wastewater collection and treatment)
- Westernport Water (water and wastewater recycling)
- Yarra Valley (water and sewerage services)

#### *Access*

Water shares (water entitlements) are registered on the Victorian Water Register. Unlike other water registers the Victorian Water Register is an integrated water register. Water registers generally hold the records of water entitlements together with information recorded on the title whilst primary documents are held by the relevant government department or irrigation

corporation. The Victorian Water Register holds all relevant water entitlement related information including:

- Water shares (water entitlements) and any securities registered over the water shares including mortgages and leases;
- Licences to take and use surface and groundwater;
- Works licences
- Water allocations;
- Tracks and reconciles water entitlements by system and trading zone;
- Water use licences and delivery shares held against water corporations;
- Prices and audit trails of water dealings.

Water shares are specific to catchments and zones and there is a specified limit on the amount of water entitlements available in any catchment or zone. We understand all surface water entitlements have been issued and may now only be acquired by purchase from an existing owner.

Water shares are further divided by levels of reliability the most relevant categories available for sale are high security (usually acquired for permanent plantings) and low security (usually acquired for annual crops).

Care needs to be taken to only acquire water shares (preferably high security) in the catchment and zone in which the feedlot is situated.

Feedlot owners are not entitled to use “stock and domestic” water as this water is for relatively small individual water users.

#### *Allocation*

Victoria is characterised by variable rainfall and streamflow, giving rise to the need for storages to enable supply during dry years.

Low security shares in Victoria often have very low levels of allocation.

Allocation announcements are usually issued by water service providers and are based on a relatively transparent formula. It should be noted that errors in the past have resulted in allocation being reduced after it has been announced.

#### *Trading*

Unlike NSW and Queensland, Victoria has a cumbersome process of requiring water entitlements to be subdivided as the shares are treated similar to land, not company shares that are individually tradeable. Water shares can only be sold within the catchment and where relevant the individual zone as they are geographically specific. Feed lot owners will also need to acquire delivery shares. Delivery shares relate to the capacity of the infrastructure to deliver water and relate to a proportional share in the channel or pipe. Care should be taken to ensure that sufficient delivery shares are available on the relevant infrastructure. Normally water users hold one delivery share for each megalitre unit of entitlement.

Allocation is tradeable where systems are interconnected. For example, allocation is traded between NSW and Victoria on a regular basis. Most Victorian zones where allocation is traded with NSW have a fixed amount per annum that can be traded. Once the cap for that season is reached no further allocation in that zone can be traded out of that zone.

There are a number of water trading platforms. The most popular are Waterfind, Waterexchange, Ruralco and H2Ox as well as local water brokers. Victorian Government owned entities are not permitted to operate trading platforms.

### **8.2.2 Division 2 – Recycled Water**

Proposed feedlot owners interested in acquiring recycled water should in the first instance contact DELWP. DELWP is working with water service providers on increasing the availability and use of recycled urban, storm water and possibly irrigation water. In some areas in Northern Victoria water is pumped from groundwater to reduce pressure on the aquifers and to reduce the problem of rising salinity. Depending on the level of salinity this water may be suitable for stock water and cleaning.

There may be recycling incentive programs and grants available from time to time. Treated sewerage effluent from council sewerage treatment works is mainly utilized on public open space (sports fields, parks and public gardens).

DELWP may be able to assist in discussions with the Environment Protection Authority and the Department of Health and Human Services in relation to regulatory arrangements for recycled water and storm water.

Water services providers are also working with local councils to develop integrated water management strategies that will include stormwater management and may include water recycling.

### **8.2.3 Division 3 – Planning Law**

The Planning and Environment Act 1987 establishes the Victorian Planning Provisions which provides the template for individual local planning schemes.

The Victorian Planning Provisions provide:

#### **52.26 CATTLE FEEDLOT**

##### **Purpose:**

To facilitate the establishment and expansion of cattle feedlots in Victoria in a manner which is consistent with orderly and proper planning and the protection of the environment.

##### **Requirements to be met:**

All use and development of cattle feedlots must comply with the Victorian Code for Cattle Feedlots - August 1995.

The Code must be complied with to the satisfaction of the responsible authority.

Feedlots are divided into 50 cattle and over and 1000 and over for the purposes of the Code.

Feedlots of over 5000 head require a Works Approval from the EPA (Environment Protection Authority, Victoria). The Victorian Code for Cattle Feedlot Code August 1995 was designed to meet EPA requirements however, proposed feed lot owners should discuss their proposal with the EPA.

## 8.3 Part 3 – Local Councils

### 8.3.1 Division 1 – By-laws

Local Government by-laws for feedlots are based the Victorian Planning Provisions 52.26 on the Victorian Code for Cattle Feedlots - August 1995. Councils have the ability to vary the requirements of the Victorian Planning Provisions, but the local planning scheme clause would always be numbered 52.26.

### 8.3.2 Division 2 – Council Areas with history of feed lots.

#### 1. Wangarratta

Wangarratta is covered by the Northern Region Sustainable Water Strategy and as a result, feedlot owners should be aware that the availability of water entitlements and allocation may be reduced over time.

Wangarratta has its own Wangarratta Planning Scheme and it adopts 52.26 of the Victorian Planning Provisions adopting the Victorian Cattle Feedlot Code August 1995 as the approval standard.

#### 2. Buloke

Buloke is covered by both the Western Region Sustainable Water Strategy and the Northern Region Sustainable Water Strategy. Both Strategy areas are caught by the Murray Darling Basin Plan. Feedlot owners in the Buloke Council area should check the relevant Water Strategy and the Long-Term Water Resource Assessments for their proposed site. It is probable that reliability of supply will vary between the two areas over time.

Water security in the Buloke Council area has recently been improved by the Stage 1 completion of the South West Loddon Pipeline project and Stage 2 has now been commenced.

Buloke has its own Buloke Planning Scheme and it adopts 52.26 of the Victorian Planning Provisions adopting the Victorian Cattle Feedlot Code August 1995 as the approval standard.

## 8.4 Part 4 - Risks– status, risks, gaps, practical implications

Significant investment has been made by the Commonwealth in State owned infrastructure. Commonwealth funding does not include future maintenance and renewals. State Government owned water infrastructure is therefore vulnerable in the future to the low priority given by NSW Treasury for the funding of maintenance and renewals from Consolidated Revenue.

GMW has closed many smaller channels as part of the Commonwealth funded upgrade of its infrastructure. This primarily possible because water service operators in Victoria are Government owned and accountability is to the Victorian Government not to local irrigator customers. Whilst this upgrade process is almost complete the impact of this policy approach has created local uncertainty about actions by GMW in the future. There is also local concerns about GMWs current balance sheet.

Feedlots require reliable water supply and would sensibly obtain:

- a water connection to the town mains;

- Groundwater licence and water entitlements;
- High security surface water irrigation water entitlements and delivery rights

In the past issues have arisen where smaller GMW channels have been closed. Water entitlements have not been reduced or cancelled but the water is no longer supplied. These channel closures do not trigger a right to compensation but do in many cases force a sale of water entitlements.

Recycling in Victoria is well developed and should also be investigated as a possible option.



## 9 Chapter 9 – Tasmania

### 9.1 Part 1 – Introduction – The inter-relationship between State and Local Councils

The Constitution Act 1934 (Tasmania) provides for local government (Part IVA).

Part 3 of the Local Government Act 1993 (Tasmania) sets out the structure, functions and powers of Councils. A Council is a body corporate with perpetual succession (s 19). Councils are able to pass regulations and by-laws for their local area.

Local Government is responsible for:

- Development, building and planning approvals
- Health regulations

Councils are not responsible for water and sewerage. There are three regionally based corporations licensed under the Water and Sewerage Corporations Act 2008 (Tasmania):

- Tasmanian Water and Sewerage Corporation (Southern Region) Pty Ltd
- Tasmanian Water and Sewerage Corporation (Northern Region) Pty Ltd
- Tasmanian Water and Sewerage Corporation (North West Region) Pty Ltd

with a fourth common services entity Tasmanian Water and Sewerage Corporation Pty Ltd created to service these regional corporations. These corporations are proprietary companies limited by shares, but only the constituent councils may hold one or more shares or other securities in them.

### 9.2 Part 2 – Legislation

#### 9.2.1 Division 1 – Water Law and Water Management Plans

The Water Management Act 1999 (the Act) provides for the management and allocation of water resources. Under the Act, access to water is controlled through a licensing and allocation system.

The Act is administered by the Department of Primary Industries, Parks, Water and Environment (DPIPWE).

The Water Management Act provides for the determination of Water Management Plans (WMP). A WMP may provide for the allocation and use of water and for the licensing of specified classes of persons taking water from the relevant water resource. The WMP may also cover transfer rules and name the responsible water entity.

The following WMPs have commenced:

- Ansons WMP
- Boobyalla WMP
- Great Forrester WMP
- Lakes Sorrell and Crescent WMP
- Little Swanport WMP

- Macquarie WMP
- Mersey WMP
- Ringarooma WMP
- River Clyde WMP
- Sassafras Wesley WMP
- South Esk WMP
- Tomahawk WMP

Surety levels are set out in Subsection 94(1) of the Water Management Act and relate to the use of water. The highest level of security is Surety Level 1 for town water, stock and domestic (excluding feedlots) and firefighting. Unlike the Murray Darling Basin States Surety Level 2 is environmental needs.

Level of surety vary from WMP to WMP based on the use of water within the WMP. Some WMPs have 6 levels of surety and others have 8. Each level of surety in each WMP has a specific total number of water entitlements attached to it. For example, Lakes Sorrell and Crescent WMP has 5000ML (water entitlements) for Surety level 5 and for Surety level 6.

The maximum amount of take is set out in the relevant water management plan for each level of surety for example in the Macquarie River Catchment WMP July 2017

Feedlot owners may request connection to the urban water system where it is available. Urban systems do not require a licence under the Water Management Act and are based on a contract for connection and periodic charges to cover volumetric water, infrastructure and administration. Urban water is charged at a significantly higher rate than rural water, but it does have the benefit of the highest level of security after environmental water.

#### *Access*

Licences issued under the Act specify an allocation in volumetric terms and is not attached to land. A water licence is normally issued for 40 years, with provisions for review of conditions after 5 years. Not all entitlements under the relevant water management plans have been fully allocated.

Feedlot owners should contact DIPWE in the first instance to find out whether licences in the relevant area are still available from the Department or whether it is necessary to buy them privately.

The *WMA* provides for the establishment of irrigation districts and the administration of such districts by a responsible water entity (eg. a Government Business Enterprise, council, company, co-operative, trust).

In the past decade there has been significant investment in new dams and pipelines in Tasmania to improve water security.

The Tasmanian government and some other corporate entities own or manage irrigation schemes, which provide water for a defined 'Irrigation Scheme district', and each property within that district is granted an irrigation right based on the area of irrigable land. Irrigation rights may also be transferred within that irrigation district.

The Minister is required to keep a register of all licences and permits granted under the Act containing such information as the Minister may direct. The accuracy of the Water Information System of Tasmania (WIST) is uncertain and the information it provides is very basic. The register of licences and permits is the responsibility of DPIPWE, the department with overall responsibility for the management of water resources in the State.

Licences are personal property providing specific details of a person's right to take the water allocation(s) detailed on the licence. Licences may be surrendered at any time.

Licences in some areas have been significantly reduced without a right to compensation or appeal.

In some scheme areas it is necessary to have delivery rights in addition to a water licence. Delivery rights provide a capacity share in the infrastructure in a particular zone during the season.

#### *Allocation*

Rainfall across Tasmania is highly differentiated. Hobart has the second lowest rainfall for an Australian capital city after Adelaide. The West coast has the highest average rainfall, whilst the Midlands has the lowest average rainfall. Coastal areas generally have higher rainfall than inland areas.

Tasmanian Irrigation sets the allocation in each scheme area at the start of the irrigation season. New schemes have been developed under the CSIRO Tasmanian Sustainable yields project and in theory have 95% reliability projected through to 2030.

#### *Trading*

Both a water licence or water allocation can be transferred with approval from the DPIPWE. There is also a system that has been developed that allows allocation to be leased over a specified number of years without transferring the licence. Water licences are separate to land but are specific to the local catchment. Water licences cannot be transferred between catchments or zones. Allocation can be transferred between catchments and zones subject to DPIPWE confirming connectivity between the two systems.

The intended recipient of an allocation transfer must also hold a water licence or submit a water licence application at the same time. A temporary transfer (not more than 21 days) of a water allocation may be granted at the DPIWE's discretion, without holding a water licence, if dire water shortage affecting livelihood can be demonstrated.

Water licences and the allocations within them may be traded either permanently or temporarily to another person who holds a licence, subject to an approval process.

Transfers of water are subject to rules established by the Minister and under the Water Management Plans.

- Formalised trading is still in its development stage and licences are still available from Government or when licences are auctioned when new water projects are completed. New irrigation infrastructure is funded in part by the pre-sale of water entitlements to prospective non-urban water users.
- Wide discretionary powers are vested in the Minister.

## 9.2.2 Division 2 – Environmental Law (recycled water)

The Environmental Protection Authority of Tasmania (EPA) provides advice on new sustainable water reuse schemes based on the Environmental Guidelines for the Use of Recycled Water in Tasmania 2002. Local Councils are the relevant regulatory authorities for recycled water schemes.

Depending on the source of water (sewerage or wastewater) and the proposed use of the water washdown or stock water it may be necessary to require a higher level of treatment such as the National Guidelines for Water Recycling: Managing Health and Environmental Risks, 2006. The level of treatment required should be discussed with the local council.

## 9.2.3 Division 3 – Planning Law

The relevant legislation is the Land Use Planning and Approvals Act 1993. The Environmental Management and Pollution Control Act 1993 is also relevant. State policies on planning are made under the State Policies and Projects Act 1993.

The State Policy on Water Quality Management 1997 covers surface water and groundwater quality and sets water quality objectives for specific bodies of water. DPIPWE has issued Wastewater Management Guidelines for Intensive Animal Husbandry Activities. Regulators (including local councils) would normally seek advice from the Board of Environmental Management and Pollution Control in relation to the approval of new feedlots. The Guidelines cross refer to the 1992 CSIRO National Guidelines for Beef Cattle Feedlots in Australia as the acceptable broad framework of acceptable feedlot and establishment and operations.

## 9.3 Part 3 – Local Councils

### 9.3.1 Division 1 – By-laws

Local Councils pass by-laws under the Local Government 1993 that cover amongst other things:

- Health and environmental services;
- Wastewater, sewerage, stormwater and drainage.

Each council has its own planning scheme under the Land Use and Planning Approvals Act 1993.

[www.iplan.tas.gov.au](http://www.iplan.tas.gov.au) provides a useful interactive map showing the overlay between council planning schemes and water infrastructure.

### 9.3.2 Division 2 – Council Areas with history of feed lots

Northern Midlands Council

Northern Midlands Council is situated in one of the lowest average rainfall regions in Tasmania.

The Northern Midlands Council Interim Planning Scheme at **3.3.3 Agricultural Processors** indicates a proactive approach and recognises the need for access to water/wastewater treatment and energy sources such as gas. Northern Midlands Council has indicated that Powranna (Area 7) is the preferred site in the council area for agricultural processors including “intensive animal husbandry”. The use class is “Resource Development”.

Proposed feedlot owners should review the Wastewater Management Guidelines for Intensive Animal Husbandry Activities and the 1992 CSIRO National Guidelines for Beef Cattle Feedlots in

Australia. It is also suggested that contact should be made with the Board of Environmental Management and Pollution Control in relation to the approval of new feedlots.

Most Areas in the Northern Midland Council Interim Planning Scheme require wastewater to be treated on site. This presents a problem if feedlot owners are trying to access recycled wastewater to supplement their water supply and should be discussed further with Council.

Powranna is on South Esk and is covered by the South Esk WMP. The majority of the water in the South Esk WMP has been allocated for the generation of hydro-electricity. Consideration should be given to acquiring water from existing users or developing a proposal for wastewater reuse.

#### **9.4 Part 4 - Risks– status, risks, gaps, practical implications**

Tasmania does not comply with the NWI in that water licences have a fixed term and there is no guarantee of renewal.

The Tasmanian Government has taken some steps to improve water reliability and has undertaken a number of new rural water infrastructure projects. Due to the policy of full cost recovery the cost of water entitlements in new projects is comparatively high. As a result, water entitlements in many areas have not been fully issued.

## **10 Chapter 10 – Australian Capital Territory**

### **10.1 Part 1 – Introduction – The inter-relationship between Territory and Local Councils**

The Australian Capital Territory (ACT) does not have separate local councils.

### **10.2 Part 2 – Legislation**

#### **10.2.1 Division 1 – Water Law**

In the ACT access to water is controlled and surface water and groundwater access rights are issued under the Water Resources Act 2007 (the Act) which is administered by the Environment and Planning Directorate.

The ACT Water Strategy 2014-44: Striking the Balance sets out the long term approach to water use and sustainability and is supported by a series of five yearly Implementation Plans the first one was for the 5 years 2014-2018.

ACT Water Resource Plan is currently being drafted as part of the ACT obligations under the Murray Darling Basin Plan. The ACT Water Resource Plan will set the sustainable diversion limit for ACT surface water at 40.5GL per year. Icon Water a government owned corporation that currently holds a water access entitlement and licence to take 65GL per annum although consumption is less than 50% of the that amount.

The Act provides for local plans of management be developed for each catchment or area.

#### *Access*

Surface water and groundwater users must hold a water access entitlement and a licence to take water from the Environment Protection Authority (EPA). Licences once issued may be varied or cancelled however there is an independent appeal system available through the Administrative Appeals Tribunal.

Icon Water (the water supply authority) is the largest holder of water access entitlements and has the main licence to take from ACT dams.

Icon Water is the urban water supplier for the ACT. Icon Water urban water supply customers do not require a licence. Icon Water supplies customers with a connection and volumetric water under contract.

#### *Allocation*

The EPA is responsible for the Annual Allocation Announcement which is an annual percentage of all water access entitlements. Unlike other jurisdictions the EPA is not required to make an announcement and from 2014 to date annual allocation has been 100%.

EPA may reduce a water allocation in three circumstances: reduced flow in the waterway; problems with the quality of the water in a waterway or problems with damage to ecosystems.

### *Trading*

The ACT Water Register cannot be relied upon as proof of title. The Register site includes a disclaimer that information about water access entitlements and licences on the ACT Water Register have been taken from unsigned copies on the water licensing database.

The holder of a licence may transfer the licence in whole or in part, on a temporary or permanent basis, with the approval of the EPA. Unlike the Murray Darling States inter-state trading is not permitted at the present time.

#### **10.2.2 Division 2 – Environmental Law (recycled water)**

Icon Water provides sewerage treatment services in the ACT. According to information provided by Arris Pty Ltd on their webpage Recycled Water in Australia, the ACT at less than 10% has the lowest level of recycled water in Australia.

The Wastewater Re-use Guidelines 1997 were issued under the Environment Protection Act and cover sewerage effluent and wastewater re-use. The EPA is the relevant regulatory approval Authority and the most likely source of recycled water would be Icon Water.

#### **10.2.3 Division 3 – Planning Law**

Planning law in the ACT is covered by the Planning and Development Act 2007 which is administered by the Environment and Planning Directorate. The Territory Plan sets the strategic objectives of planning in the ACT. References to cattle are limited to animal welfare.

Feedlots will require authorisation under the Environment Protection Act 1997.

At the present time it appears that the ACT Government does not anticipate feedlots being developed in their jurisdiction.

### **10.3 Part 3 – Local Councils**

The ACT does not have separate local councils.

### **10.4 Part 4 - Risks– status, risks, gaps, practical implications**

It does not appear that the ACT anticipates that feedlots will be established in the ACT in the foreseeable future.