# Water trade and transfer

### Lower Limestone Coast Water Allocation Plan | January 2015 | Factsheet 5

The groundwater resources of the Lower Limestone Coast are unique and precious, and underpin the region's people, townships, industries and environment.

The Minister for Sustainability, Environment and Conservation adopted the Lower Limestone Coast Water Allocation Plan (the WAP) to ensure the long term sustainability of the region's water resources, bring certainty for water users, and protect water resources into the future. Developing the WAP has involved significant research and stakeholder consultation, resulting in what is believed to be a world-first approach to sustainable water resources management in that it now includes commercial forests as a licensed water user.

The WAP proposes to express and manage all volumetric allocations in the form of tradeable and non-tradeable components. This approach will enable water to be moved between different users and provide flexibility as circumstances change.

This fact sheet describes the new, more flexible arrangements for moving water throughout the landscape and between different users, including forestry.

#### WHAT IS THE TRADEABLE COMPONENT?

The WAP converts all area based (hectare irrigation equivalent) allocations to a volume.

This volume will be comprised of a "tradeable component" and, where eligible, additional components of limited or no tradeability.

The tradeable component is calculated as the sum of the base allocation (crop water requirements) plus an additional 16%.

As the name suggests, water allocated within this component can be moved between different water users. This movement or transfer of water may be either temporary (such as via a lease or other agreement) or permanent (e.g. sale of water licence).

Tradeable components are fully transferable between different users, including irrigators, industry and forestry. Figure 1 shows an example of a drip or spray irrigator transferring water to an industrial water user, then transferring to a forest water licence.



Figure 1 Transfer of tradeable components between licensees

In addition, the WAP provides eligible flood irrigation operators (and spray irrigators in the Donovans, Benara, Moorak, Kongorong and McDonnell management areas) with a non-tradeable delivery supplement that is surrendered upon transfer (Figure 2). This non-tradeable delivery supplement is only re-issued where the purchaser proposes to use the allocation for flood irrigation (or spray in the aforementioned management areas) (Figure 3). Where water is being transferred from a non-flood irrigator to a flood irrigator, the flood irrigator must source the delivery supplement needed from the market (Figure 4).



Figure 2 Transfer of water from flood irrigator to a system not requiring a delivery supplement



Figure 3 Transfer of water between flood irrigators (or spray irrigators with a delivery supplement)







Figure 4 Transfer of water between a licensee with no delivery supplement to a flood operator

#### TRANSFER OF WATER ALLOCATIONS ASSOCIATED WITH FORESTRY

Commercial forests in existence at 1 July 2014 (the date of the declaration of the Lower Limestone Coast Declared Forestry Area) will be issued a forest water licence with a water allocation attached. The WAP provides for allocations

attached to forestry licences to be managed as a tradeable component for trading purposes. As a result, an allocation that is not offsetting an existing forest can be transferred to another licensee. Transfers from forest licences to nonforestry licensees are also subject to the Permissible Annual Volumes set under the Border Groundwaters Agreement.

#### WHAT'S CHANGED AS A RESULT OF COMMUNITY **CONSULTATION?**

The requirement for a year of fallow to occur prior to the transfer of an allocation attached to a forest water licence has been removed, in recognition of the fact that the deemed rate of forest water use is based on an average forest fallow period of 12 months, rather than a minimum.

#### TRANSFER OF WATER HOLDING ALLOCATIONS

The entire volume of a water holding allocation is tradeable. Transfers of water holding allocations for the purpose of conversion to a water taking allocation or an allocation for a forest, are subject to hydrogeological assessment.

#### TRADING ACROSS MANAGEMENT AREA BOUNDARIES

During the development of the WAP, the community identified that the limited options for trading water across management area boundaries constrains the trade of water.

In response to these concerns, once the volumetric conversion of all area-based allocations and the roll-out of allocations to forestry has been completed (or commencing two years from the date of adoption of the WAP, whichever is earlier), the WAP provides for water to be:

- a) temporarily transferred (for a maximum of five years) into an under-allocated management area; or
- b) permanently transferred into an under-allocated management area, regardless of whether the management areas are adjacent.

Both temporary and permanent transfers are subject to hydrogeological assessment.

#### HYDROGEOLOGICAL ASSESSMENT OF TRANSFERS

Allowing the temporary or permanent transfer of water is subject to a number of criteria, including in most cases, a hydrogeological assessment.

A hydrogeological assessment involves tests which determine how the proposed groundwater extraction will impact on groundwater levels and salinity.

To satisfy a hydrogeological assessment, the WAP requires that extraction activities should not cause or have the potential to cause resource condition triggers to be exceeded in the nearest representative observation well(s) to the proposed point of taking (or geometrical centre of the proposed forest). The resource condition triggers assess changes in groundwater level and salinity.

Transfers of water taking allocations and allocations for the purpose of commercial forests are also subject to the 16 km<sup>2</sup> circle test.

To satisfy this test, the level of allocation within a 16 km<sup>2</sup> circle centred over the proposed point of taking (or geometrical centre of the proposed forest) should not exceed 1.25 times the amount of annual average vertical recharge for the management area.

For the purposes of irrigating rotational crops for a period of one year or less, the hydrogeological assessment has been made less stringent. Rather than considering the level of allocation within the 16 km<sup>2</sup> circle, the test considers the level of extraction in the preceding water use year.

#### TRANSFER OF WATER IN MANAGEMENT AREAS WHERE ALLOCATIONS ARE TO BE REDUCED

In order to mitigate the potential impact of reductions to allocations, the WAP provides for a licensee to apply to transfer up to 75% of the volume of their reduction from within the same management area, without being subject to a hydrogeological assessment.

Additional volumes in excess of 75% of the volume of the reduction can also be transferred to the licensee's property, but these transfers will be subject to hydrogeological assessment.





#### SEASONAL CARRY OVERS

The WAP allows all licensees, excluding forestry to manage annual variability in climate, including rainfall, by means of a carry-over system. This approach recognises that licensees are now limited to a volume and that there can be variation in net irrigation requirements and water use depending on climate variations each year.

A licensee may carry-over their unused allocation into the next water use year, capped at a maximum of 25% of their annual allocation. Seasonal carry-overs are not transferable, except where the licence or allocation is transferred in its entirety and is to be taken and used on the same allotment or allotments for the same purpose.

It should be noted that until recently, the wording of the Natural Resources Management Act 2004 prevented the issue of a carry-over allocation where no groundwater extraction has occurred. This wording was recently amended, and licensees that extract no water in a water use year will now nevertheless receive a carry over. WHAT'S CHANGED AS A RESULT OF COMMUNITY CONSULTATION?

It was originally proposed in the Draft WAP that carry-over apply to allocations attached to forestry. However, the NRM Act does not provide for carry-over of forest water allocation. The maximum volume of unused allocation that can be carried over has been increased from 20% to 25% of a licensee's annual allocation. The sum of carry-over and any temporary transfers of unused allocation from other licensees, continues to be capped at 40% of the licensee's annual allocation.

#### TEMPORARY TRANSFERS EXEMPT FROM HYDROGEOLOGICAL ASSESSMENT

The WAP states that in three of every five years, all licensees, including forestry can transfer in a volume (capped at 20% of their allocation) of unused tradeable component from that water use year from another licensee in the same management area. The volume that can be temporarily traded is capped at 20%. However, the sum of any seasonal carry over and temporary trade cannot exceed 40% of the licensee's allocation. These transfers are not subject to hydrogeological assessment and expire at the end of the water use year.

This principle aims to provide for those cases where a licensee does not have a carry-over or it is an exceptionally dry year and the carry-over from the previous year is insufficient. It also provides licensees with the opportunity to trade any annual allocation not used in the water use year.

As a result of the above policy and the proposed carry-over principles, licensees can have access to up to as much as 40% additional allocation in a water use year. Licensees are not eligible to extract water from the next year's allocation in the form of an advanced draw.





Box 1

Example. A licensee has an annual allocation of 100 ML. The first year the licensee pumps only 90 ML. The unused 10 ML can be carried over into the following year.

In Year 2, the licensee is entitled to 100 ML of annual allocation, as well as the 10 ML of carry-over.

Year 1	Credit	Debit	Balance
Annual allocation	100ML		
Volume pumped		90ML	
Carry-over	10ML		10ML

Towards mid-season the licensee realises that they will require additional water due to seasonal conditions, and temporarily trades in 20 ML of unused annual allocation from another licensee, with no hydrogeological assessment. The licensee then pumps 120 ML leaving him with 10ML unused water. The licensee's "water account" will then look as follows: The following year, the licensee will be entitled to 100ML of allocation and a carry-over of 10ML.

Year 2	Credit	Debit	Balance
Carry-over	10ML		
Temporary trade in	20ML		
Annual allocation	100ML		130ML
Volume pumped		120ML	10ML

The order of use of the different components of the water account is:

- 1. carry-over;
- 2. temporary trade portion;
- 3. the licensee's annual allocation.

## WHAT IF I NEED MORE INFORMATION ON THE WATER ALLOCATION PLAN?

If you have questions about the WAP and how it will operate, you will find further information on our website:

www.naturalresources.sa.gov.au/southeast

If you are a licensee, you will also shortly receive further information including application forms from our licensing staff.

Assistance is also available from Natural Resources South East. Contact **08 8735 1177** 



#### FURTHER READING

Guide to the WAP

Factsheet 1 - Sustaining our region through water allocation planning
Factsheet 2 - Changes to how water is allocated
Factsheet 3 - Forest water use
Factsheet 4 - Protecting vulnerable water resources
Factsheet 5 - Water trade and transfer
Factsheet 6 - Protecting groundwater dependent ecosystems

- Factsheet 7 Managing the confined aquifer
- Factsheet 8 Managing water in the Border Zone
- Factsheet 9 Farm forestry





