

Water Trading Tool Kit - Fact Sheet 1

New to Irrigation or just need a refresher? Important information to help you get started.

Introduction

Water is a critical input for irrigated dairy farms in the Murray Dairy region. Anyone new to irrigation in the Murray Dairy region needs to understand some basics about water management.

Entitlements and Allocations

An entitlement is the legal right to a volume of water.

An allocation is the volume of water allocated against that entitlement each season. The allocated volume can vary with seasonal conditions, and depends on the type of entitlement. For example, a high security entitlement means you will be allocated the full volume almost every year. A lower security entitlement means that in drier years, you will be allocated only a portion of your entitlement volume or nothing at all in the very dry years.

To gain access to water, an irrigator will either own water entitlements and then receive a volume of water based on the seasonal allocation; or they will buy someone else's allocation from the water market. The allocation market is also commonly known as the temporary water market. It is basically water that has been allocated against an entitlement, but the owner has decided to sell the water rather than use it.

For an irrigator owning entitlement, if a seasonal allocation is 80% and they own 100 ML of water entitlement, then they will have 80 ML of water to use in that year.

Types of Entitlements

A range of entitlements are available. The entitlement name will generally relate to its reliability – that is, the average annual volume of water an irrigator can expect to be allocated against their entitlement.

Northern Victoria has two entitlement types in its irrigation systems: High Reliability Water Share (HRWS) and Low Reliability Water Share (LRWS). The total volume of water held in HRWS is about double the volume in LRWS.

NSW Murray irrigation districts have three entitlement types: HRWS and General Security (GS). GS is the most common entitlement, representing 90% of entitlements on issue in the NSW Murray. The third is supplementary water licence that is opportunistic water and only available in wetter seasonal conditions.

South Australia has only HRWS.

Taking Delivery of water

A range of costs apply to the storage and delivery infrastructure that make up the irrigation system. There are fixed costs for activities such as operating and maintaining the storages and irrigation channels (a constant cost irrespective of the volume of water used) and variable costs (based on the volume of water used). Fixed costs generally account for most of your water bill.

The table below refers to the two major irrigation areas in the Murray Dairy region, the Goulburn Murray Irrigation District in Victoria and the Murray Irrigation area in NSW. The payment principles are similar but with slightly different terminology as outlined in the table.

Table-1: Costs associated with irrigation storage and delivery infrastructure ¹

Cost In	Explanation
Storage fees	Cost is associated with owning an entitlement and goes towards maintaining the major storages. Storage fees vary on the different irrigation areas and entitlement type.
Service (Victoria) Landholding access fee (NSW)	Annual charge to service a property
Service point (Victoria) Extra large, large or small outlet charge (NSW)	Annual charge per water delivery point located on a property
Delivery Share (DS) (Victoria – Goulburn Murray Water)	<p>Cost attributed to maintaining the irrigation delivery infrastructure. One DS entitles the owner to have 270 ML per year delivered to their property in gravity irrigation districts and 365 ML per year in pumped irrigation districts.</p> <ul style="list-style-type: none"> ▪ If an irrigator owns only one DS but has more than 270 ML of water delivered in gravity districts or 365 ML in pumped irrigation districts, they will be charged a casual user fee for every ML above what their DS entitlement (casual user fees range from \$50/ML to \$90/ML depending on the irrigation system). ▪ The casual user fee is for using the infrastructure at a higher rate than what is paid for through the DS. DS cost is fixed irrespective of the volume of water used. ▪ The volume that can be delivered under the delivery share is known as the annual delivery allowance (ADA). DS costs vary between irrigation systems but typically range from \$2600 per DS to \$4800 per DS.
Delivery Entitlement (DE) (NSW – Murray Irrigation Limited)	<p>Cost attributed to maintaining the irrigation delivery infrastructure. One DE entitles an irrigator to have 1.2 ML of water delivered to their property. For example an irrigator owning 100 DE can access 120 ML before casual user fees are applied (casual user fees range from \$26/ML to \$46/ML).</p> <p>DE costs are in the range of \$10 per DE. There is also temporary trade in DEs to avoid casual usage fee.</p> <p>MIL also have efficiency allocations and are issued against permanent DEs.</p>
Infrastructure Use Fee (Victoria) Standard water usage Fee (NSW)	<p>Cost per ML of water used on a property. In Victoria this price varies according to the irrigation system (range \$5 to \$11/ML).</p> <p>In NSW the water usage fee is based on a tiered price structure with first 5 ML charged at \$130/ML, water used from 6 ML to 100 ML is charged at \$27/ML and water used above 100 ML is charged at \$13/ML.</p>

¹ Prices in the above table are only a guide and will change from year to year. The water authorities publish current prices on their websites : <http://www.g-mwater.com.au/general-information/pricing-review> ; <http://www.murrayirrigation.com.au/customers/fees-and-prices/>



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