

# Carryover

## What is it?

Carryover is a tool available to irrigators to manage their water allocation from one season to the next. Carryover allows farmers to keep unused water in the dams at the end of the season for use in the following season.

Carryover was first introduced in Victoria in 2007 as a drought support measure and reviewed in 2012.

Carryover is also available in New South Wales (NSW) and South Australia (SA).

## How does carryover work in Victoria?

- Water can be carried over against High Reliability Water Shares (HRWS) and Low Reliability Water Shares (LRWS) up to 100% of entitlement.
- Any water carried over will first be deemed to be carried over against LRWS.
- There is a 5% reduction on water carried over for evaporation losses.
- If carryover and seasonal allocation are greater than 100% HRWS and LRWS, this excess water then goes into the spillable water account.
- Water in the spillable account is quarantined and lost in proportion to the storages spill. It can be used after a low spill risk is announced.
- A low spill risk is defined as a less than 10% chance that the storages will spill for the remainder of the season.

## How much water is being carried over in the southern connected system?

System	Drought			Wet	Average	Drying		Average	Drying		
	08-09 GL	09-10 GL	10-11 GL	11-12 GL	12-13 GL	13-14 GL	14-15 GL	15-16 GL	16-17 GL	17-18 GL	18-19 GL
Goulburn Private	89	94	314	872	860	298	357	204	220	538	285
Goulburn Environment	8	12	30	94	46	86	60	58	108	124	97
Goulburn Urban	10	14	34	105	74	61	38	35	59	60	51
VIC Murray Private	149	146	446	1200	1160	662	267	195	285	318	171
VIC Murray Environment	9	6	22	117	193	147	142	229	138	185	281
VIC Murray Urban	15	21	27	51	56	36	14	23	35	30	31
NSW Murray GS <sup>1</sup>	130	150	450	1100	750	215	500	515	450	730	530
NSW Murrumbidgee GS <sup>2</sup>	195	200	430	450	500	325	475	425	375	500	400
SA <sup>3</sup>	90	95	225						40		

<sup>1</sup> Murray General Security carryover calculations are made from information stated in the NSW water register and cross referenced with the NSW allocation dashboard each year. Carryover amounts are estimates and rounded.

<sup>2</sup> Murrumbidgee General Security carryover calculations are made from information stated in the NSW water register and cross referenced with the NSW allocation dashboard each year. Carryover amounts are estimates and rounded.

<sup>3</sup> The carryover amounts for SA from 2007-2011 came from entitlement. For the 2010-11 year when SA carried over 225 GL, they received a 67% allocation.

## How does carryover work in NSW?

**NSW Murray:** The maximum volume of carryover is limited to 50% of general security entitlement. The maximum volume of annual allocation and carryover held is set at 110% of entitlement.

**NSW Murrumbidgee:** The maximum volume of carryover is limited to 30% of the entitlement held by the irrigator. The maximum combined volume of annual allocation and carryover in any one year is set at 100% of entitlement.

## How does carryover work in SA?

In dry times, when SA projects a minimum opening irrigation allocation of 50% or less in April, SA irrigators can carryover up to 20% of total entitlements.

## Benefits of carryover

The VFF supports carryover for the following reasons:

- Carryover allows irrigators to manage their risk by holding, using or trading water when it is of greatest value to their business.
- Carryover allows irrigators to secure water for the start of the season, allowing them to maximise pasture/crop growth in spring.
- Carryover allows irrigators to reduce their reliance on the market early in the season when prices are often high.

- For dairy farmers in particular, who sold off HRWS during the millennium drought, carryover allows them to plan ahead and secure water for the start of the season.
- Victorian irrigators would be seriously disadvantaged if they did not have carryover but other States did.

The largest group who carryover over water is termed private. Private carryover includes water linked to land and owned by irrigators as well as water disassociated from land which includes investors and farmers. Some farmers have also chosen to disassociate water from land to allow for flexibility in irrigating between properties.

Large volumes of water in NSW and Victoria are being carried over in wet years and drawn down on during drier times as a risk management tool.

### How much water do speculators/investors own and carryover?

In 2015, the amount of water not tied to land was 7% of total water shares or 175 GL and in 2018 this number was 12% of total water shares or 298 GL of total water shares.

In 2014/15 only 4% of water not tied to land was carried over, 60% was sold commercially, 34% was moved to another account for \$0 which indicates it is farmers shifting water between properties and the final 2% was lost to evaporation.

In 2017/18, 8% of water not tied to land was carried over, 50% was sold commercially, 40% was moved to another account for \$0 and 2% was lost to evaporation.

Concerns about speculators in the market should be directly addressed rather than indirectly by diminishing the value of carryover.

The Australian Competition and Consumer Commission (ACCC) is yet to begin its review of water markets, one of its most pressing tasks is to review the concentration of water ownership and risk of excessive market power.

### What is the average amount of water carried over?

On average over the last 10 years, those privately carrying over water on the Murray totalled 454 GL, with 1200 GL carried over following the 2011 floods.

On the Goulburn, 375 GL was carried over on average over the last 10 years, with a peak of 872 GL following the 2011 floods.

NSW irrigators have on average carried over 505 GL on the Murray and 390 GL on the Murrumbidgee.

### If carryover was removed, would more water be made available?

Most likely, no. This question needs to be considered in multiple scenarios across the Southern Basin assessing likely irrigator behaviour in each of these scenarios. The removal of carryover would encourage people to use water at the end of season even if they didn't need to. It is unlikely farmers would return water to the communal pool for the following year given they would still be charged by their Water Authority.

### Possible behaviours if carryover was removed

Wet Year			
Cost of Water	VIC	NSW	SA
Low	Mixed farming will use as much water as possible. Dairy will use all allocation and require less on the temporary market. Unlikely horticulture will require water beyond entitlement. All industries will sell any unused water. Look to carryover water in NSW to manage risk.	Rice, cotton and mixed farming will maximise cultivated area. Actively purchase water to carryover.	May purchase some water, but likely entitlement will meet needs.
Average Year			
High An extra 800GL would be sought at the start of the season that has typically been carried over, therefore driving up prices.	Mixed farming will use allocation. Dairy will use all allocation and be active in the market. Horticulture will secure water at start of season. Almonds will be active in the market. All industries will sell any unused water. Look to carryover water in NSW to manage risk.	Rice and cotton use allocation and purchase additional water to finish crops. Actively purchase water to carryover.	Will purchase additional water.
Dry Year			
Very High If NSW is on a very low general security allocation, prices will be higher	Mixed farming will use or sell water mid season to secure feed. Dairy's water use will depend on hay and grain prices. Some may sell water and buy in feed requirements. Horticulture and almonds will use all allocation and be very active in the water market to keep plants alive. Look to carryover water in NSW to manage risk.	Rice and cotton will sell allocation to horticulture. Actively carryover to manage risks for the following season.	Likely to be active in the water market to maintain permanent plantings. Carryover will be made available.

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