

Webinar: Risk management strategies

Real-world examples to manage water requirements (Case Studies)

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Case study # 1 - Grower looking to carry water over to next year

500ML Class 3 entitlement, 100ML allocation left on the account which they want to carry over to 2020/21

Options:

1. Use Class 3 entitlement's 20% carryover capacity
2. 'Park' water interstate and return to SA next year
3. Sell remaining allocation and contract forward water for next year

Case study # 1 - Grower looking to carry water over to next year

Option 1: Use Class 3 entitlement's 20% carryover capacity

Pros:

- No cost associated with carrying water over with your own entitlement
- Do not need to apply, is automatic (given that meter readings are submitted by 31 July)

Considerations:

- Risk of 'spill' – if Class 3 announced allocation increases in 2020/21 to >80%, water that would take your account above 100% will not be available for that year (will roll over to Year 3 per Private Carryover rules)
 - Rollover will only become carryover on your account in Year 3 if 2021/22 opens at 50% or less (as announced in April).
- Carryover will be made available in Sep-Oct, do you need access to water before that?
- If you want to carry over more than 20%, you'll need to park that elsewhere anyway
- (if you don't have excess water on your account, you need to purchase it from the market so will require cash to do so)

Case study # 1 - Grower looking to carry water over to next year

Option 2: 'Park' water interstate and return to SA next year

Pros:

- Relatively straightforward process to protect your carryover water
- You can get the water returned to you early in the new season (as per contract, but typically July return is possible)

Considerations:

- Can you find suitable Holders to park your water in terms of
 - Minimising the spill risk – lower risk entitlements such as Victorian LR in the Murray Below Choke attract higher prices, whereas all contracts where Placers bear the spill risk may result in you owing water to the Holder if spills occur
 - Holder's zone so that delivery to SA is not compromised due to trade limits (e.g. Murrumbidgee & Goulburn may not be ideal for parking)
 - You will lose 5% for evaporation if water is parked in Victoria, but NSW Holders with 'secure' carryover space may be harder to find
- Total cost per ML – are there cheaper alternatives?

Case study # 1 - Grower looking to carry water over to next year

- **Vic – Murray/Goulburn High & Low Reliability**

- 100% of the entitlement can be used to carry over water
- If allocation + carryover exceeds 100% of entitlement volume, the excess goes to a spillable account that can only be accessed when a low risk of spill is declared
- 5% of carryover water will be lost to evaporation

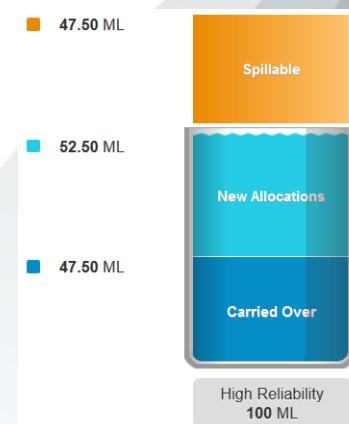
- **NSW – Murray General Security**

- Up to 50% of the entitlement can be used to carry over water
- Allocation + carryover cannot exceed 110% of entitlement volume

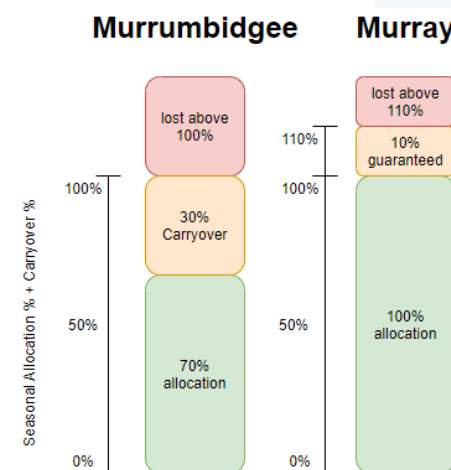
- **NSW – Murrumbidgee General Security**

- Up to 30% of the entitlement can be used to carry over water
- Allocation + carryover cannot exceed 100% of entitlement volume

➤ **Important to recognize risk of 'spill' with carryover parking. Parking contracts determine who bears the spill risk – the Placer or the Holder.**



Source: Vic Water Register



Case study # 1 - Grower looking to carry water over to next year

Option 3: Sell remaining allocation and contract forward water for next year

Pros:

- Cash injection from selling the remaining allocation to the market
- Secure guaranteed volume for 2020/21, no risk of spill
- Lock in the price for water, pay deposit now (typically 20%) and the rest upon delivery

Considerations:

- Can you find suitable parcel(s) in terms of
 - Price per ML
 - Zone of delivery so that delivery to SA is not compromised due to trade limits (e.g. Murrumbidgee & Goulburn water may not be ideal)
 - Delivery time – e.g. if you need water early on in the new year, can you find a seller who will commit to early season delivery?

Case study # 1 - Grower looking to carry water over to next year

500ML Class 3 entitlement, 100ML allocation left on the account which they want to carry over to 2020/21

Indicative cost estimates*:

Option 2: Park in Vic

| | |
|--|----------------|
| Transfer Out (SA) | \$272.00 |
| Transfer In (Vic) | \$47.50 |
| Parking Cost: \$60 x 100ML | \$6,000.00 |
| Transfer Out (Vic)~ | \$47.50 |
| Transfer In (SA)~ | \$272.00 |
| Total cost | \$6,639.00 |
| Total per ML (based on 95ML returned) | \$69.88 |

Option 2: Park in NSW

| | |
|---|----------------|
| Transfer Out (SA) | \$272.00 |
| Transfer In (NSW) | \$49.94 |
| Parking Cost: \$60 x 100ML | \$6,000.00 |
| Transfer Out (NSW)~ (includes trade out fee from NSW to interstate) | \$524.94 |
| Transfer In (SA)~ | \$272.00 |
| Total cost | \$7,118.88 |
| Total per ML (based on 100ML returned) | \$71.19 |

Option 3: Sell Allocation & purchase Forward

| | |
|---|-----------------|
| Sell remaining water now: \$250 x 100ML | -\$25,000.00 |
| Contract Forward water from Zone 7: \$500 x 100ML | \$50,000.00 |
| Transfer fees Vic +(SA)~ | \$319.50 |
| Total cost | \$25,319.50 |
| Total per ML (based on 100ML "returned") | \$253.20 |

Case study # 1 - Grower looking to carry water over to next year

500ML Class 3 entitlement, 100ML allocation left on the account which they want to carry over to 2020/21

Indicative cost estimates including opportunity cost of Vic evaporation*:

Option 2: Park in Vic

| | |
|--|----------------|
| Transfer Out (SA) | \$272.00 |
| Transfer In (Vic) | \$47.50 |
| Parking Cost: \$60 x 100ML | \$6,000.00 |
| Transfer Out (Vic)~ | \$47.50 |
| Transfer In (SA)~ | \$272.00 |
| Evaporation 5%: 5ML @ \$250 per ML (the value you 'lose' instead of selling the water to the market) | \$1,250.00 |
| Total cost | \$7,889.00 |
| Total per ML (based on 95ML returned) | \$83.04 |

Option 2: Park in NSW

| | |
|---|----------------|
| Transfer Out (SA) | \$272.00 |
| Transfer In (NSW) | \$49.94 |
| Parking Cost: \$60 x 100ML | \$6,000.00 |
| Transfer Out (NSW)~ (includes trade out fee from NSW to interstate) | \$524.94 |
| Transfer In (SA)~ | \$272.00 |
| Total cost | \$7,118.88 |
| Total per ML (based on 100ML returned) | \$71.19 |

Option 3: Sell Allocation & purchase Forward

| | |
|---|-----------------|
| Sell remaining water now: \$250 x 100ML | -\$25,000.00 |
| Contract Forward water from Zone 7: \$500 x 100ML | \$50,000.00 |
| Transfer fees Vic +(SA)~ | \$319.50 |
| Total cost | \$25,319.50 |
| Total per ML (based on 100ML "returned") | \$253.20 |

Case study # 1 - Grower looking to carry water over to next year

500ML Class 3 entitlement, 100ML allocation left on the account which they want to carry over to 2020/21

Indicative cost estimates including opportunity cost of Vic evaporation and Forward prices decreasing*:

Option 2: Park in Vic

| | |
|--|----------------|
| Transfer Out (SA) | \$272.00 |
| Transfer In (Vic) | \$47.50 |
| Parking Cost: \$60 x 100ML | \$6,000.00 |
| Transfer Out (Vic)~ | \$47.50 |
| Transfer In (SA)~ | \$272.00 |
| Evaporation 5%: 5ML @ \$250 per ML (the value you 'lose' instead of selling the water to the market) | \$1,250.00 |
| Total cost | \$7,889.00 |
| Total per ML (based on 95ML returned) | \$83.04 |

Option 2: Park in NSW

| | |
|---|----------------|
| Transfer Out (SA) | \$272.00 |
| Transfer In (NSW) | \$49.94 |
| Parking Cost: \$60 x 100ML | \$6,000.00 |
| Transfer Out (NSW)~ (includes trade out fee from NSW to interstate) | \$524.94 |
| Transfer In (SA)~ | \$272.00 |
| Total cost | \$7,118.88 |
| Total per ML (based on 100ML returned) | \$71.19 |

Option 3: Sell Allocation & purchase Forward

| | |
|---|----------------|
| Sell remaining water now: \$250 x 100ML | -\$25,000.00 |
| Contract Forward water from Zone 7: \$300 x 100ML | \$30,000.00 |
| Transfer fees Vic +(SA)~ | \$319.50 |
| Total cost | \$5,319.50 |
| Total per ML (based on 100ML "returned") | \$53.20 |

Case study # 1 - Grower looking to carry water over to next year

500ML Class 3 entitlement, 100ML allocation left on the account which they want to carry over to 2020/21

Indicative cost estimates if I'm happy to bear the spill risk*:

Option 2: Park in Vic

| | |
|--|----------------|
| Transfer Out (SA) | \$272.00 |
| Transfer In (Vic) | \$47.50 |
| Parking Cost: \$5 x 100ML | \$500.00 |
| Transfer Out (Vic)~ | \$47.50 |
| Storage fee (Vic)~ | \$419 |
| Transfer In (SA)~ | \$272.00 |
| Evaporation 5%: 5ML @ \$250 per ML (the value you 'lose' instead of selling the water to the market) | \$1,250.00 |
| Total cost | \$2,808.00 |
| Total per ML (based on 95ML returned) | \$29.56 |

Option 2: Park in NSW

| | |
|---|----------------|
| Transfer Out (SA) | \$272.00 |
| Transfer In (NSW) | \$49.94 |
| Parking Cost: \$30 x 100ML | \$3,000.00 |
| Transfer Out (NSW)~ (includes trade out fee from NSW to interstate) | \$524.94 |
| Transfer In (SA)~ | \$272.00 |
| Total cost | \$4,118.88 |
| Total per ML (based on 100ML returned) | \$41.19 |

Option 3: Sell Allocation & purchase Forward

| | |
|---|----------------|
| Sell remaining water now: \$250 x 100ML | -\$25,000.00 |
| Contract Forward water from Zone 7: \$300 x 100ML | \$30,000.00 |
| Transfer fees Vic +(SA)~ | \$319.50 |
| Total cost | \$5,319.50 |
| Total per ML (based on 100ML "returned") | \$53.20 |

Conclusions

Access to interstate water is a significant benefit to SA irrigators

Provides opportunities for SA irrigators to access carryover capacity or allocation water from interstate. However, need to consider:

- Deliverability – can you get allocation water delivered to your SA account?
- Cost of products – what is the right one for you?
- Risk of spill in relation to carryover – some entitlements offer better protection, but is such carryover space available from the market?
- Broader availability outlook – is there a shift towards a wetter pattern underway?

It is pivotal to be able to access reliable and independent information to support decision-making!

Let's talk more



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