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# 8. Reserve Policy

#### **Purpose**

To describe the reserves that apply in the Victorian water entitlement framework, and some implications of these reserves.

## Background

National and State policies place responsibility for managing water availability with customers and gives them tools to do so. Storing water is fundamental to providing reliable water supplies. Not only is storage in dams essential to meet demands in dry periods, so is the management of reserves in those storages. A water reserve is a volume of water that is held back from the seasonal determination process to avoid or mitigate the consequences of future shortages.

- System operating reserve is water set aside to ensure that the bulk supply system can operate across the planning period, normally for the current water year and the next. The volume reserved, in addition to a conservative assumption about inflows in the planning period, will meet storage evaporation losses, the minimum prescribed storage releases and river transmission losses (unavoidable evaporation and seepage).
- Critical human needs reserve is generally met by the reserve policies of the urban water corporations in managing their entitlements, but can also include water required for emergency domestic and stock supplies.
- Early season reserve this provides operating requirements to ensure that the irrigation distribution systems can
  operate for the whole irrigation season so that domestic and stock water and privately held carryover water can be
  delivered. The volumes required for this reserve are reducing as losses in the delivery systems are being reduced
  through infrastructure investments.
- Reserve to underwrite high reliability water shares (HRWS) after 100% HRWS is announced, an additional volume of water is reserved to ensure that under a conservative estimate of inflows next season's HRWS allocation will reach 100%.
- After all of the above reserves are established water will then be allocated to low reliability water shares (LRWS).

The system of reserves is a critical component of supporting entitlement holders to manage their own risks and is integral with the specification of the reliability of Victorian water products. This combination provides the necessary confidence for high value agriculture to thrive in northern Victoria.

The downside of any reserve is that it reduces the yield of the supply system. Without reserves water availability could be higher over the long term, but would be similar to the natural variation in runoff and there would be too many very low usage years to sustain high value agriculture. Setting aside water for any reserve can have a small impact on the seasonal allocations whilst the water is being set aside. Once a reserve is established, there is no adverse effect on seasonal allocations, until after a particular reserve is used to provide its intended benefit and the reserve must be re-established.

The availability of different water products – HRWS and LRWS from different basins - allows entitlement owners to adjust their water holding to reflect their requirements.

Delivering more than just water



The volumes required for these reserves depend on the assumptions made about inflows. The Millennium Drought has meant water management authorities have needed to adjust the low flow assumptions which has affected the reserve volumes required to meet the intended objectives of the reserve.

### Summary

The reserve policies increase the certainty that carried over water can be delivered in the GMID, removing one of the GMID's competitive dis-advantages. The impact on seasonal allocation is extremely small.

#### For more information:

http://www.gmwater.com.au/policy/reservemurraygoulburn http://www.mdba.gov.au/managing-water/water-markets-trade/water-markets-product-information