

OVER-ALLOCATION or OVER-USE?

A major difficulty in addressing over-allocation in water systems is the lack of consistent definitions and methods for assessing over-allocation of water resources.

In the 2008 update report to the Council of Australian Governments (COAG) on progress in water reform, the National Water Commission found that there were conflicting interpretations of the concept of sustainable levels of water extraction across jurisdictions. In a few states, doubts still remain about the adequacy and timeliness of current responses to over-allocation.

Despite there being no shared understanding of what is meant by over-allocation, all states have indicated that parts of their surface water and groundwater systems continue to be considered as under stress, potentially under stress, at risk, requiring water beyond the basic ecological needs, or over-allocated.

The term over-allocation is being used more and more when referring to the water resources in the Murray-Darling Basin (MDB). The correct term at the present time is in fact over-use. With the prolonged drought affecting many areas of Australia, but especially the MDB, the issue is the amount of water, or lack thereof, which is available to be shared. In NSW, the system works such that regular determinations are made as to what the available water is (AWD). The AWD is based on current storage levels, current inflows and, sometimes, anticipated inflows.

The available water is then divided pursuant to a series of Water Sharing Plans (WSP's). These statutory plans state the critical human needs and town water will first be provided, followed by stock and domestic, environmental and industrial requirements. Water for irrigators is last in line and only arrives once other use requirements are met.

The climate is always changing and as such there are times when the AWD is not exact, hence over-use. Now over-allocation suggests that at all times there are more entitlements than can be sustained. In a drought sequence without any AWD this would be correct. With an AWD this is not correct as the "pool" is divided up so it is sustainable.

Over-use can happen at any time, even when there is plenty of water.

Understanding these terms:

Over-allocation – where more entitlements have been issued for a system than can be sustained at 100% of their megalitre value.

Over-use – where more water has been allocated to users within a given period than can be sustained.

How did we get here?

As a result of past decisions by state and territory governments to issue more water access entitlements than can be delivered by water systems.

Not all entitlements were always used to their full extent. This has changed in recent years with the prolonged drought and increasing pressure on water supplies.

What is being done to address this?

Firstly, ask if “over-allocation” is, in fact, a problem!

Australia tends to exist, in general weather terms, in either drought or flood. Unlike European or North American systems, there is rarely a “normal” or “average” year. The system in NSW of allocating water against a share in the available resource – as a percentage of entitlement – provides sufficient flexibility to meet our unique climate. When water is scarce, there are too many entitlements – when water is abundant, there are too few! Our unique climate makes it nigh impossible to develop a system where an “exact” number of entitlements are allocated; such a system would not provide the flexibility required to meet our climate.

If, however, we base water use on shares in an available resource, then the determination of that available resource is the key focus. It doesn't matter how many shares are issued in that available resource (from an environmental perspective) as only the available amount will be used. **That is, overuse – not over-allocation – is the problem.**

Improved water planning and management aims to return previously over-used surface and groundwater systems to environmentally-sustainable levels of extraction. This is a key component of the NWI.

Under the NWI, over-allocation:

'refers to situations where with full development of water access entitlements in a particular water resource system, the total volume of water able to be extracted by entitlement holders at a given time exceeds the environmentally sustainable level of extraction for that system'

The National Water Initiative sets out the arrangements by which state and territory government water plans for catchments and aquifers should be developed, including making substantial progress in addressing over-allocation and over-use by 2010. On current trajectories, this objective is unlikely to be met without a significant intervention.

Under the \$12.9 billion national water plan, Water for the Future, the Commonwealth Government will invest up to \$3 billion over ten years to address over-allocation in the MDB. Planned in conjunction with the modernisation program, this will be achieved by providing assistance to irrigation districts to reconfigure irrigation systems and retire non-viable areas, such as those at the end of isolated channels or in salt affected areas. Assistance will be provided to help relocate non-viable or inefficient irrigators, or help them with exiting the industry. Where necessary, entitlements will also be purchased on the market.¹

¹ Some information gathered from DEWHA and Nation Water Commission web-sites.