



# Achieving Sustainable Groundwater Entitlements Program

fact sheet

## Sustainable Yield

Some groundwater supplies are severely depleted because of high levels of water extraction due to over-allocation in the past. To have a healthy, sustainable source of groundwater in the future, the use of that water has to be kept within sustainable levels.

Throughout the 1990s NSW embarked on a series of water reforms and has moved towards managing its groundwater systems with a focus on long-term sustainability.

### What is recharge and what is sustainable yield?

The total volume of water that enters the groundwater system each year is called the **annual recharge**. The recharge has been estimated for each of the major groundwater systems in NSW.

The **sustainable yield** of a groundwater system is that proportion of the recharge that can be extracted without compromising the integrity of the water source and the ecosystems and communities that depend on it.

### How will groundwater systems be managed to the sustainable yield?

Management of groundwater systems to the sustainable yield is one of the main objectives of the Water Sharing Plans for each of the six major inland groundwater systems. These systems are the Upper and Lower Namoi, Lower Gwydir, Lower Macquarie, Lower Lachlan, Lower Murrumbidgee and the Lower Murray.

Groundwater entitlements in each of these systems exceed the defined sustainable yield – in other words they are over-allocated.

Entitlements within each groundwater source will be reduced over the term of the Water Sharing Plan based on each licence holder's History of Extraction.

Licence holders who have a History of Extraction above their proposed new Aquifer Access Licence will have their access to water reduced from current levels of extraction to the sustainable yield of the system over the ten years of the Water Sharing Plan.

### Why do entitlements need to be reduced to 100% of the sustainable yield?

Reductions to entitlements in the current gazetted Water Sharing Plans range from 100% to 125% of the sustainable yield however, under the new ASGE program, this needs to be amended to 100% of the sustainable yield. There are a number of reasons why, as follows.

- Previously there was a much greater level of uncertainty than there is today over the recharge levels contained in the Water Sharing Plans. Furthermore, most plans allow for reviewing and updating recharge levels as more information becomes available.
- The available water determinations can be varied up or down to reflect any change in the sustainable yield.
- Recent amendments to the *Water Management Act 2000* now allow licences to be issued in perpetuity and announcements that are greater than 100% of the licence values to be made.

The government policy amendments that surround the new ASGE program provide for historical extraction to be recognised for the purpose of entitlement reduction, and for financial assistance to licence holders and communities of up to \$110 million.

The ASGE program assists licence holders to adjust to 100% share of sustainable yield.

---

Achieving Sustainable Groundwater Entitlements Program

© NSW Department of Natural Resources 2005

[www.naturalresources.nsw.gov.au](http://www.naturalresources.nsw.gov.au)

NR 05\_094

Printed on 100% recycled Australian made stock

**Disclaimer:** While every reasonable effort has been made to ensure that this document is correct at the time of printing, the State of New South Wales, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.