

Groundwater resource and management issues in Australia

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About 60% of Australia by area depends on groundwater due to the nation's aridity but only 14% by volume is used. The total water use in Australia (all purposes) is 20,000 GL/year. There are some 500,000 groundwater wells in Australia having a capital asset value of \$AUD6.5 billion. Estimates of groundwater available for extraction are in the range 26,000-30,000 GL/year. A number of estimates indicate Australia is probably using 10-18% (15% probably) of the sustainable groundwater yield. There are some 35 areas where actual or potential over development is occurring. In the Namoi Valley in New South Wales (NSW) there are conflicts between irrigation farmers, environmental groups and the government due to over pumping and sustainability in relation to river flows. In other regions land salinisation is being caused by rising saline water tables due to over clearing of trees or over irrigating. The States of Australia are responsible for water resource management. A reform process is underway following the signing of an agreement in 1994 by the Council of Australia Governments (COAG). This agreement and others promote efficient sustainable use, transferability of water entitlements (trading) a national drillers licensing system and user pays concept. Each state is developing groundwater policies. In NSW these cover water quality, quantity and groundwater dependant ecosystems. Some large basins are managed by cross-State committees or Councils. The Great Artesian Basin Co-ordinating Council for example co-ordinates the capping and management of flowing artesian bores.