Australian Groundwater Technologies

'making water work'

Capability Statement

Mawson Lakes, South Australia

Constructed wetlands treat captured storm and waste water prior to injection to a target aquifer.

The wetlands are an aesthetic landscape feature, a habitat for plants and animals and demonstrate best practice techniques for stormwater management.

Australian Groundwater Technologies (AGT) is the pre-eminent provider of integrated water management solutions in Australia.

AGT has built a team of exceptional hydrogeologists and environmental engineers who provide technical excellence and innovative solutions to our clients in the areas of:

- urban water resources management, in particular stormwater harvesting coupled with managed aquifer recharge;
- catchment water resource management through resource condition assessments, groundwater numerical modelling, sustainable yield and water balance estimations;
- water management for mining; and
- strategic water resource policy and planning advice for regulators and industry.

Our dedicated team is committed to achieving exceptional results for our clients.

About AGT

AGT was founded in 2000 as a specialist groundwater consultancy with a focus on Managed Aquifer Recharge (MAR) and complementary hydrogeological services.

The company has carried out numerous feasibility investigations nationally and successfully delivered in excess of 40 MAR/ASR schemes in various aquifer types.

AGT has a proven track record in the sustainable development, management and environmental protection of the available groundwater resources throughout Australia using our proprietary technologies and processes.

Our services include:

- Managed aquifer recharge investigations, design and operation
- Groundwater numerical modelling including solute transport
- Integrated water cycle management
- Hydrogeological investigations including water supplies for mining
- Mine water management including dewatering, ASR, water auditing and accounting
- Insitu leach mining operations
- Well siting, supervision and testing
- Groundwater resource conditiion monitoring and reporting
- Water resource planning, management strategies and policy advice
- Risk assessments
- Independent reviews.

Through our associate group of independent specialists AGT is able to bring together the best technical team to meet our clients' project requirements complementing traditional water supply sources.

"New" water supplies for towns and cities

Climate change, population growth and escalating urbanisation are placing demands on available water resources in most urban centres throughout Australia. It is predicted that restrictions and costs associated with the supply of potable water will increase significantly in future.

For non-potable uses, and where conditions for capture, storage and recovery are favourable, stormwater harvesting coupled with managed aquifer recharge (MAR) represents the most cost effective and sustainable water supply option.

Collectively, MAR/ASR projects developed by AGT currently harvest in excess of 20 gigalitres of stormwater.

Water management for mining

AGT offers water management services to the mining and petroleum sector, in particular coal seam gas (CSG) extraction.

AGT employs leading water management practices to husband and manage the resource and enable the successful and sustainable development of a mine.

Catchment management

Our key staff have all held senior management positions within the State regulatory agencies. As a result, the AGT team has unrivalled experience in the development of policies to manage the competing demands on the available water resources within a catchment.

Successes

Morphetville Racecourse ASR Scheme

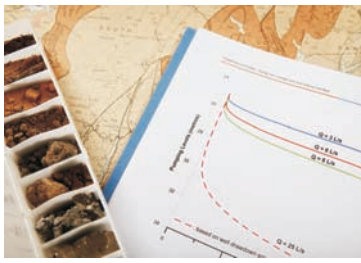
AGT carried out the preliminary feasibility, site investigations, design and supervision of the construction of this scheme. Stormwater harvesting, treatment and re-use from this scheme provides irrigation quality water for the Morphetville Racecourse. Up to 600 ML/year of urban runoff is harvested from an adjacent stormwater drain. AGT manages the operation of this scheme on behalf of the client.

Adelaide Airport ASR Scheme

AGT carried out an assessment into the viability of a large scale (>1 GL/year) ASR scheme at the Adelaide Airport. Preliminary estimates from the desktop study and numerical modellinig identified harvestable volumes of stormwater ranging from 3 to 8 GL/year.

A preliminary estimation of capital and operational costs for a scheme consisting of 30 wells in the two main tertiary aquifers was completed.

From this preliminary study an optimised scheme capturing 300 ML/year, incorporating bio-retention ponds and mechanical filtration to achieve the desired water quality prior to injection, is being installed. AGT is carrying out the hydrogeological investigations and scheme design.



AGT forms the nucleus of the Mecrus Group's water services business
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