

GROUNDWATER SERVICES

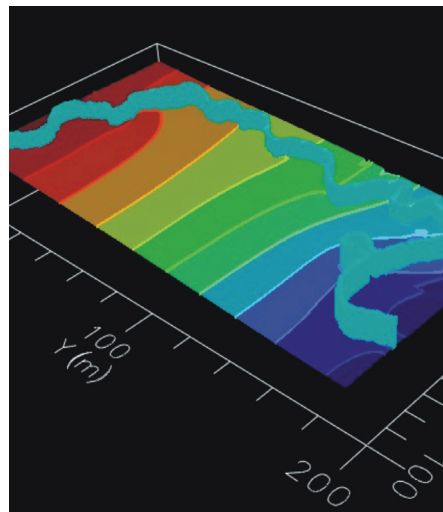
Groundwater is an increasingly scarce resource which can be subject to pressures from development, overuse and contamination. E3's Hydrogeologists undertake groundwater assessments for a range of issues related to development of land, groundwater usage and contaminant impacts.

- Groundwater Characterisation and Monitoring
- Groundwater Use
- Impact Assessment Studies
- Groundwater Contamination Assessments
- Groundwater Modelling
- Groundwater Remediation

GROUNDWATER CHARACTERISATION AND USE

The characterisation and understanding of the available use of groundwater is based upon the assessment of prior data and development of an understanding of the occurrence of groundwater, its movement and beneficial uses.

E3's hydrogeologists have undertaken characterisation of aquifers for beneficial use for clients ranging from mining companies to the construction and development industry. This includes desktop feasibility studies, site drilling, downhole geophysical assessment of aquifers, pump testing and hydraulic assessment. Groundwater Quality testing is used to assess potential beneficial uses for identified groundwater resources.



GROUNDWATER IMPACT ASSESSMENT

The impact of proposed development on groundwater and the impact of groundwater usage schemes is assessed against potential impacts on adjacent aquifers, neighbouring users and environmental receptors. Environmental receptors can include both springs and connected surfacewaters as well as local stygofauna. Impact assessments feed into environmental impact studies.

GROUNDWATER CONTAMINATION AND REMEDIATION

Contamination of groundwater can form a liability to land and projects unless managed in a timely manner with a focus on the desired outcomes. E3 assesses and characterises on-site and off-site impacts from contamination from a range of sources including landfills, fuel storages, industrial activities including heavy metal, solvent and organic chemical users. Characterisation of contaminant plumes is used to assess risks to potential receptors, as an input to groundwater contaminant fate and transport modeling, quantitative risk assessments, for management plans and remediation design.

