

GROUNDWATER MODELLING AND MONITORING

GREENCAP'S TEAM
OF GROUNDWATER
EXPERTS ASSIST
CLIENTS IN
DEVELOPING AND
IMPLEMENTING
COMPLIANCE
DRIVEN
GROUNDWATER
MONITORING
PROGRAMS

Monitoring the quality of groundwater at and around sites that may have been impacted is an important aspect of any environmental site assessment.

Greencap has a wealth of experience in the design and implementation of groundwater monitoring programs that involve the installation and sampling of groundwater bores and testing for a range of chemicals of potential concern.

Groundwater modelling is an important tool used by hydrogeologists to assess and predict potential negative impacts on groundwater and any sensitive receptors on site or surrounding the target sites. Greencap employs a range of models, including flow models, solute transport packages and hydro-geochemical models and selects the appropriate tool according to the specific site conditions.

Groundwater monitoring and modelling benefits projects by focussing on areas of risk, providing critical information to avoid unnecessary costs whilst maintaining compliance and implementation.

Greencap's services include:

- Hydrogeological (Groundwater) Assessment
- Vapour sampling and risk assessment
- Desktop and quantitative groundwater assessments
- Site specific risk assessments
- Hydrogeological assessments in accordance with the regulatory guidelines
- Groundwater remediation options assessment and implementation
- Assessment of beneficial uses in accordance with NEPM guideline and government expectations
- Long term monitoring programs.



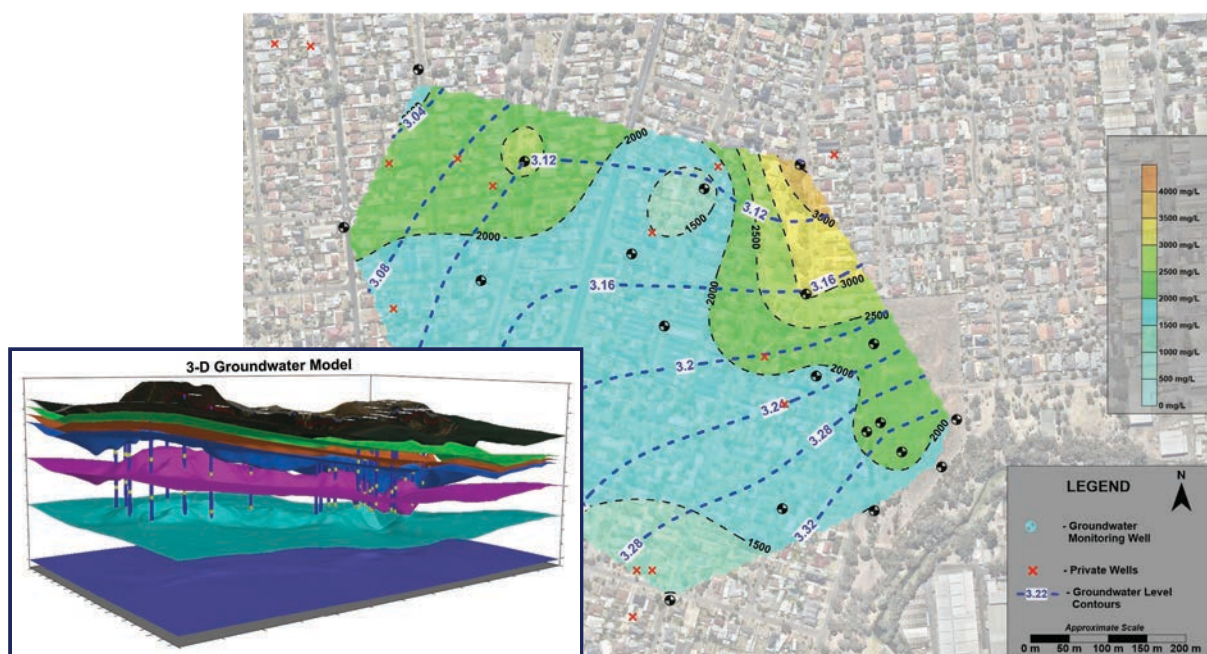
Greencap can review existing groundwater monitoring program requirements and liaise with Regulators to negotiate more streamlined and cost effective programs that are fit for purpose.

Ongoing monitoring may also be undertaken using electronic transducers (data loggers) which continuously measure parameters like water levels, temperature, pH and salinity. Greencap has extensive experience in using data loggers, including the set-up of telemetered systems which allow continuous receipt of groundwater data on a specified remote server.

The range of groundwater modelling packages Greencap typically use include MODFLOW (3D numerical model), BioScreen (1-2D models for petroleum hydrocarbons), BioChlor (1-2D models for chlorinated solvents) and a number of analytical spreadsheets which incorporate 1D analytical models using RBCA and other equations.

Our team of highly experienced scientists and hydrogeologists can assess your groundwater monitoring requirements and provide solutions that are tailored to your specific needs. We adopt a risk-based approach to contaminated land and groundwater monitoring issues and we have an excellent track record in finding innovative solutions to complex problems that may rise during the course of any project lifecycle.

Groundwater Level and Salinity Map



For further information on these services go to:
greencap.com.au/services

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greencap.com.au

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