



PROJECTS

HYDROGEOLOGY

Perth Airport
Construction of a Subregional Numerical Model:
Development of an Average Annual Maximum Groundwater Level
(AAMGL) map

Hydro23



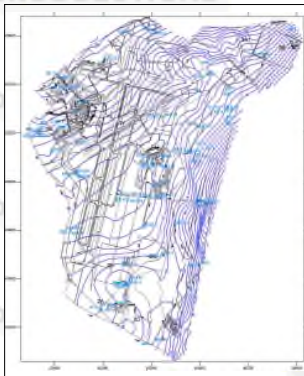
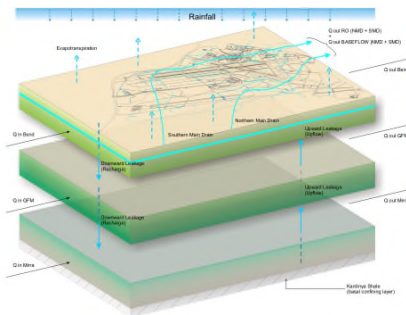
Initial mapping had previously defined wetland associations and typing across the airport.

A detailed hydrogeological investigation was undertaken to provide:

- a network of nested piezometers completed in the three shallow aquifer units across the site.
- Hydrogeological data, including isopachytes, ground levels & hydraulic parameters



A hydrogeological conceptual model was developed as the basis for a numerical model of the aquifer systems.

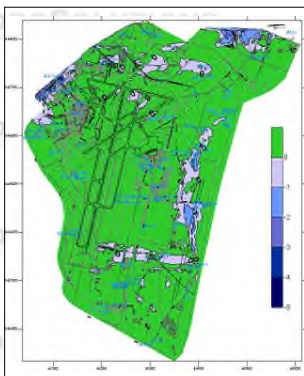


A subregional numerical groundwater model was constructed using MODFLOW to describe the groundwater system to provide:

- a network of nested piezometers completed in the three shallow aquifer units across the site.
- Hydrogeological data, including isopachytes, ground levels & hydraulic parameters

An average annual maximum groundwater levels was developed using:

- the current airport development scenario
- AAMGL levels based on the historical rainfall data



The groundwater supported wetlands were defined based on the AAMGL and a digital elevation model for the site.

Hydrosolutions Pty Ltd
U14, 14 Whyalla Street
Willetton
Western Australia 6155
Tel: (+61 8) 9457 5448
Fax: (+61 8) 9457 4293
Mob: 0403 021533

E-mail: stuart.jeffries@hydrosolutions.com.au
Website: www.hydrosolutions.com.au