

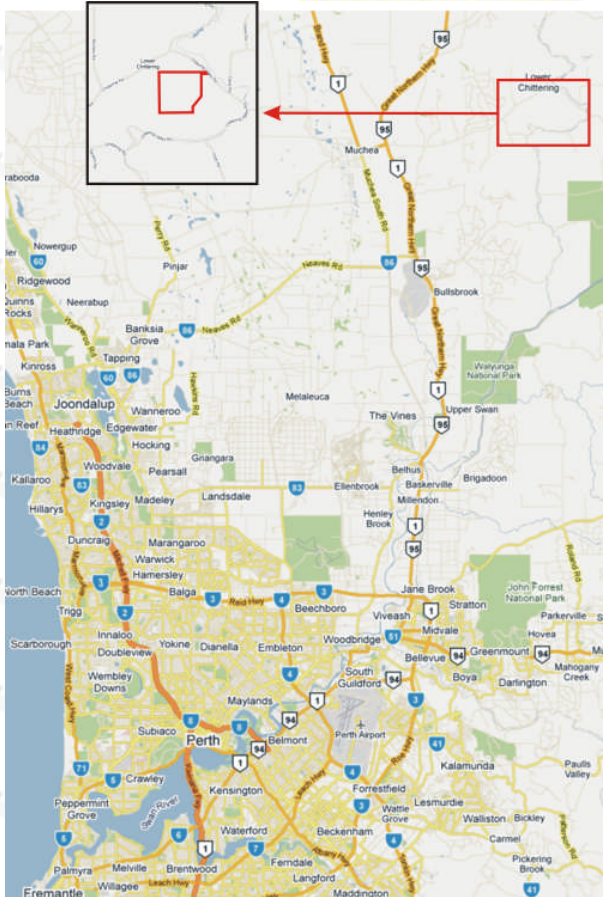


PROJECTS

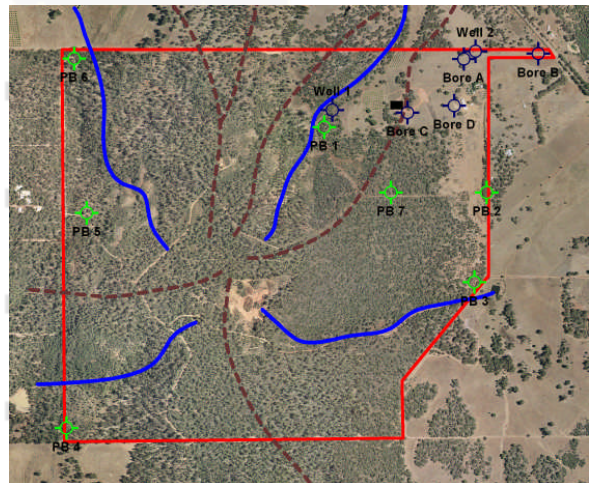
HYDROGEOLOGY

HydroSol Hydro35

Private Landholder, Lower Chittering Valley Prospects for Alternative Water Supplies



A hydrogeological survey was undertaken to identify prospective groundwater bores and alternative water resources on a 197ha private landholding, located in the lower Chittering Valley. The site comprises undulating high ground, predominantly uncleared bush but with some clearing for pastoral use on the lower slopes. The site overlies outcropping Archaen quartz-feldspar-biotite Gneiss, with local groundwater supplies of variable quality being obtained.



The published geology and aerial photographs, including existing vegetation and drainage lines were reviewed, together with the local topography to identify shear or fracture structures, contact zones and weathered rock areas with the potential to provide secondary porosity. Existing bores were dipped/ plumbed and tested to establish sustainable yields and groundwater quality. Ten potential bore locations were identified, from the most to least prospectivity in terms of porosity development and recharge potential next to existing creek lines or at topographic breaks. Proposals were developed for a pilot drilling campaign with target depths and airlift yield determinations.

Prospects for alternative water supplies were also examined, including:

1. Rainfall harvesting to tanks from existing building roof areas
2. Damming of existing on-site ephemeral creeks
3. A private lease agreement to access riparian rights from properties along the adjacent Brockman river.

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