



Alexandra Badenhop is a project engineer at the Water Research Laboratory where she has worked on a range of engineering projects. These studies include groundwater testing and feasibility, field work, flood studies and water quality assessment. She enjoys working on a wide variety of projects, applying her strong formal background along with creativity and expression to produce clearly reported outcomes. In her Masters, she is acquiring specialist hydrogeochemical and groundwater knowledge.

**ALEXANDRA
 BADENHOP**
PROJECT ENGINEER
 B.E. (Hons 1)

QUALIFICATIONS	B.E. (Hons1) Environmental Engineering, UNSW, 1999 Currently completing MEngSc, UNSW
PROFESSIONAL HISTORY	2000 – 2001: Project Officer, Central Coast Waste Board 2002 – 2003: Shipment Officer, Crossroads International, Hong Kong 2004 – : Project Engineer, WRL, UNSW

Alexandra has experience in the specialist fields of:

- Water Quality Assessment
- Groundwater Hydraulics and Geophysics
- Flood Frequency Analysis
- Brine Outfall Dispersion
- Field Investigations
- Groundwater and geophysical instrumentation
- ArcGIS

RELEVANT EXPERIENCE

Water Quality Assessment

Stormwater Assessment, Darling Harbour (2004)
 Stormwater Assessment, Botany Bay (2004)
 Groundwater Assessment, Darling Harbour (2005)
 Assessment of Residential Bores (various)

Groundwater Hydraulics and Geophysics

Marrickville Groundwater Feasibility Study (2004)
 Aquifer testing of Irrigation Bores, Waverly (2004-2005)
 Aquifer testing, Lakes Beach (2004)

Hydrodynamic and Water Quality Modelling

Sydney Desalination Options Study (2005)
 Far Field Water Quality Modelling
 Dense Plume Modelling
 Perth Desalination Study (2005)

ArcGIS

Sydney Desalination Options Study
 Producing maps including hydrodynamic modelling results.
 Marrickville Groundwater Feasibility Study (2004)
 Importation and analysis of catchment data

Literature Compilation and Program Review

Penrith Lakes Pump and Pipeline Design (2005)
 Compilation and review of references and data for the basis of information required for the water quality study.
 Marrickville Groundwater Feasibility Desktop Study (2005)
 Review of ERIM Effluent Reuse by Irrigation Program (2004)

Flood Studies

North Esk Flood Frequency Analysis (2004)