

# Australian Groundwater Schools

Fundamentals of Groundwater Science, Technology and Management



Established in 1987, the Centre for Groundwater Studies (CGS) has now merged with the National Centre for Groundwater Research and Training (NCGRT).

When	Where
<b>39<sup>th</sup> Australian Groundwater School</b> Monday 24 <sup>th</sup> – Friday 28 <sup>th</sup> <b>May 2010</b>	Mercure Sydney, 818-820 George St, SYDNEY <b>NSW</b>
<b>40<sup>th</sup> Australian Groundwater School</b> Monday 11 <sup>th</sup> – Friday 15 <sup>th</sup> <b>October 2010</b>	Novotel Perth Langley, 221 Adelaide Tce, PERTH <b>WA</b>

Established in 1965, the *Australian Groundwater School* is Australia's primary groundwater training program. The School offers a broad overview of groundwater processes and is led by a distinguished group of industry professionals, addressing the fundamentals of groundwater science, technology and management.



## Who Should Attend

The Australian Groundwater School is a postgraduate-level course designed to build on the knowledge found in our book *ABCs of Groundwater* (to order: see [www.groundwater.com.au/industrytraining](http://www.groundwater.com.au/industrytraining)), and also the *Getting to Know Groundwater & Surfacewater* course. Attendees to the School come from various backgrounds including:

- Specialists and non-specialists working on a range of land and water resource management issues
- Professional and technical staff involved in groundwater management, environment consulting, mining, hydrogeology, land care and natural resource management organisations

## Course Description

The School is an intensive 5 day course, with an optional 1 day field trip. This course acts as a bridge for scientific, engineering, technical, policy and management personnel to gain a broad groundwater education. The week will cover the fundamentals of hydrogeology, assessment methods, applications and management. There is also a School dinner on the Tuesday night, included in registration fees.

## Course Outline

- Surfacewater-groundwater interaction and ecosystem dependence on groundwater
- Importance of groundwater
- Hydrogeology
- Hydraulics
- Groundwater chemistry
- Environmental isotopes in groundwater
- Groundwater microbiology
- Aquifer testing by pumping
- Groundwater geophysics
- Recharge/discharge determination
- Groundwater modelling
- Water well technology: *drilling methods & bore design*
- Monitoring & sampling methods
- Dryland salinity & waterlogging
- Groundwater pollution
- Groundwater & soil remediation
- Groundwater management: *sustainability, water quality protection, water trading, aquifer recharge*
- Groundwater investigation technologies
- **School Dinner on the Tuesday night included in registration fees**
- **Field Trip** of significant groundwater sites (optional extra)  
**NB: Attendees of the Field Trip will need to prepare for weather conditions, eg. sunscreen, hat, wet-weather gear, strong shoes and water bottle**

## Course Leaders

### 39<sup>th</sup> Groundwater School - NSW:

Colin Hazel *Qld GW Engineer*, Ian Acworth *UNSW*, Tony Laws *WA Dept of Water*, George Gates, Michael Williams *NSW Dept Water & Energy*

### 40<sup>th</sup> Groundwater School – WA:

Tony Laws, Phil Commander, Peter Muirden, Susan Worley, Tim Sparks *WA Dept of Water*, Colin Hazel *Qld GW Engineer*, Ray Freund *ECU*, Steve Appleyard *WA Dept of Env & Conservation*

## Course Fees

**AU\$1990** (incl GST) includes: notes, tuition, morning and afternoon teas, and lunches. Also included in the registration fees is a School Dinner. The Saturday field trip is an optional extra.

## Accommodation

Attendees are to **arrange own accommodation.**

*If you mention that you are part of this Course, you **may** be eligible for an accommodation discount at the course venue.*

### 39<sup>th</sup> Australian Groundwater School

Mercure Sydney, 818-820 George St, SYDNEY NSW

Ph: +61 2 9217 6666 **Freecall (AUS):** 1800 633 948 **Fax:** +61 2 9217 6616 **Email:** h2073@accor.com

### 40<sup>th</sup> Australian Groundwater School

Novotel Perth Langley, 221 Adelaide Tce, PERTH WA

Ph: +61 8 9221 1200 **Fax:** +61 8 9221 2830 **Email:** h1764@accor.com



To register please see over leaf.

For more information contact: **Phone:** +61 8 8201 5632 **Fax:** +61 8 8201 5635  
**Email:** [industrytraining@groundwater.com.au](mailto:industrytraining@groundwater.com.au) **Web:** [www.groundwater.com.au/industrytraining](http://www.groundwater.com.au/industrytraining)

# REGISTRATION FORM / TAX INVOICE

ABN: 65 542 596 200

Please register early by faxing this form to **FAX: +61 8 8201 5635**

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TITLE: .....FIRST NAME: ..... SURNAME: .....

EMAIL: .....NB:Most communication will be via email

JOB TITLE: .....

COMPANY: .....

DEPARTMENT: .....

ADDRESS (Postal): .....


CITY: .....COUNTRY/STATE: ..... POSTCODE: .....

PH: ..... MOB: ..... FAX: .....

WEB: .....

DIETARY REQUIREMENTS: .....

### Fees – AU\$

Course Title	Course Fee Includes GST	
<b>39<sup>th</sup> Australian Groundwater School, Mon 24—Fri 28 May 2010 (Incl Tues Dinner) NSW</b> <i>Early bird before Friday 9 Apr</i> <i>After Friday 9 Apr</i>	<input type="checkbox"/> \$ 1990.00 <input type="checkbox"/> \$ 2100.00 <input type="checkbox"/> \$ 110.00	<b>National Groundwater Working Group</b>  
<i>NB: Field trip on Saturday 29 May, is an optional extra</i> <i>Field Trip, Saturday 29 May</i>		
<b>40<sup>th</sup> Australian Groundwater School, Mon 11—Fri 15 October 2010 (Incl Tues Dinner) WA</b> <i>Early bird before Friday 27 Aug</i> <i>After Friday 27 Aug</i>	<input type="checkbox"/> \$ 1990.00 <input type="checkbox"/> \$ 2100.00 <input type="checkbox"/> \$ 110.00	
<i>NB: Field trip on Saturday 16 October, is an optional extra</i> <i>Field Trip, Saturday 16 Oct</i>		
<b>Less (choose 1 option only):</b> <input type="checkbox"/> 5% discount on <u>*Course Fee only</u> for IDA, IAH, AWA, NZHS, SIA, ACLCA Members (Member No.....) <input type="checkbox"/> 10% discount on <u>*Course Fee only</u> for NCGRT, NCED Partner Staff (Partner name.....) <input type="checkbox"/> 15% discount on <u>*Course Fee only</u> for Full-time Students (Institution name.....)	-\$	
<b>TOTAL AU\$</b>	\$	

### PAYMENT – Please select payment method below:

ABN: 65 542 596 200

1.  **Credit Card** Please debit my:  **Visa**  **Mastercard**

Card Number: \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Cardholder's Name: ..... Signature: .....

Expiry Date: \_ \_ / \_ \_

2.  **Cheque** Payable to: **"NCGRT Groundwater Industry Training"**  
 Addressed to: NCGRT Groundwater Industry Training, Attn: Glenys Flight  
 GPO Box 2100,  
 ADELAIDE, SA 5001, Australia

3.  **Please send me a Tax Invoice**  **Purchase order number:** .....



Terms, Conditions, Transfers and Cancellations for all NCGRT Groundwater Industry Training:		
<p>1 CONFIRMATION letter will be sent to all participants prior to a course. Participants must have received their confirmation letter before attending a course.</p> <p>2 TRANSFER of your registration to a different course must be made in writing. This will incur an additional administration fee of \$220.</p>	<p>3 CANCELLATIONS must be made in writing. Then the following terms will apply:</p> <p>a. <i>Less than 3 business days</i> before a course: <i>No refund</i></p> <p>b. <i>Between 3 business days and 3 weeks</i> before a course: <i>50% refund</i></p> <p>c. <i>More than 3 weeks</i> before a course: Refund of the course fee minus an administration fee of \$220</p> <p>d. However, to avoid loss of the course and administration fees, a substitute attendee is welcome, by submitting a new Registration Form</p>	<p>4 If attendees CANCEL Field Trips, generally no refund will be paid.</p> <p>5 While every attempt will be made to deliver courses as advertised, we reserve the right to cancel a course at short notice for conditions beyond our control. Notification of any such cancellation will attract a refund.</p>