

Basins Environmental Ltd

Hydrology and Environmental Monitoring Training Courses

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Open Channel Flow - ADCP's and QREV

Course Overview

Open channel flow measurement using acoustic doppler techniques is fundamental for the discharge calculations of rivers. Accurate water quantity measurements are critical for water availability assessments, consenting applications, flood discharge measurements and long term monitoring sites. This course is aimed at new staff with up to 3-5 years experience or University students wanting to expand their knowledge.



Course outline

- Three day course
- Day 1: Theory and exercises covering all topics with ADCP
- Day 2: Field day using ADCP gauging equipment, specifically looking at diagnostics and live plots
- Day 3: QRev Introduction and live QRev session tasks and training

Participant requirements

Course attendees are not required to have any previous knowledge or experience in the use of ADCP gaugings for hydrological monitoring. However, some previous applications or work experience would be beneficial. This course is not designed for experienced staff.

Course Details

- Hydrology site requirements, NEMS, health and safety
- ADCP Gauging principles and theory / Understanding the doppler effect
- Equipment choice
- Understanding errors and effects on measurement outputs
- Gauging site selection
- Measurement method choice, compass calibrations, moving bed test, edge extrapolation, transducer depth, vertical beam vs bottom track, QC/QC, GPS and RTK
- Software overview and QREV
- Practical exercise and processing of gaugings

Costs:

Price \$1450.00 excluding GST per participant, subject to venue hire and location.

This is subject to a minimum number of 6 attendees

Note: Students will be required to bring their own gauging equipment. Gauging equipment can be hired, note this could incur further costs depending on the number of attendees and location of the course.

Course location options:

Auckland, Hamilton, Taupo, Napier, Wellington, Nelson, Christchurch and Dunedin. Other locations can be arranged on a case by case basis. We can also host the training at an organisation's own venue which may reduce the cost per person.

Exclusions:

Travel to and from the course location, field day travel, Gauging equipment hire

Basins Environmental Ltd have designed this course to align with the National Diploma in Field Hydrology. This course is not a prerequisite required to complete the diploma. However evidence of this training can be used in conjunction with your evidence for on the job training records.