

# Basins Environmental Ltd

## Hydrology and Environmental Monitoring Training Courses

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# Open Channel Flow - Wader Gauging

## Course Overview

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



## Course outline

- Two day course
- Day 1: Theory, exercises, introduction to rating curves
- Day 2: Field day using gauging equipment. Practical office based exercises based on field data collection

## Participant requirements

Course attendees are not required to have any previous knowledge or experience in wader gauging for hydrological monitoring. However, some previous gauging or work experience would be beneficial. This course is not designed for experienced staff.

## Course Details

- Hydrology site requirements, NEMS, health and safety
- Gauging principles and theory (mean/mid sections) (0.2,0.6,0.8)
- Equipment choice
- Understanding errors and effects on measurement outputs
- Theoretical calculations weirs, flumes, surface velocity, surface alpha, volumetric
- Gauging site selection
- Gauging methods, ratings, controls and cross sections
- Gauging calculations
- Practical exercise and assessment

## Costs:

\$1150.00 excluding GST per participant subject to venue hire and location.

This is subject to a minimum number of 6 attendees, maximum of 12 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 and Christchurch. 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.*