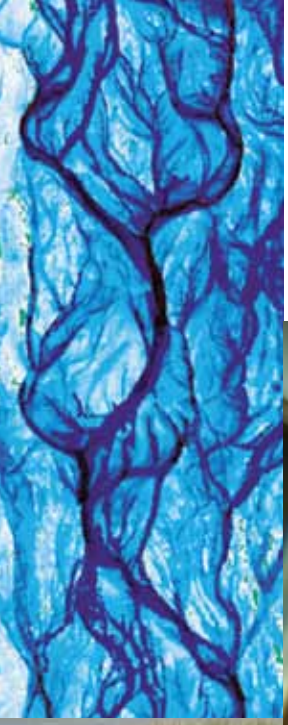
Training Courses 2011–12



enhancing the benefits of
New Zealand's natural resources

NIWA
Taihoro Nukurangi

Training Courses 2011–12

Course Name	*Date*	*Location*	*Cost pp*	*Min Req*	*Max Req*
Electric fishing for machine operators	12–13 September	Christchurch	$800	9	12
Electric fishing for machine operators	*On request*	North Island	na	na	12
Electric fishing for machine operators *– refresher*	*On request*	*On request*	na	na	12
Targeted riparian management	7–8 November	Hamilton	$1,100	12	16
Introduction to paua farming	16–17 November	Wellington	$1,350	8	8
Conservation planning	8–9 March 2012	Wellington	$450	17	30
Farm hydrology and diffuse pollution attenuation tools	20–21 March 2012	Hamilton	TBC	TBC	TBC
Hydrological statistics	28 March 2012	Christchurch	$650	9	16
Introduction to marine aquaculture	15 May 2012	Wellington	$350	8	12
Statistical methods for water quality studies	21–22 May 2012	Hamilton	$800	18	30
Introduction to high intensity rainfall estimation in New Zealand	TBC	Christchurch	TBC	TBC	TBC

To enrol in any of the courses listed, please go to www.niwa.co.nz/education-and-training/training-courses and register, or download the registration form and return it to training@niwa.co.nz or fax to 03 348 5548.

Courses are presented at various venues according to need and level of interest, in some instances courses can be presented in-house.

The courses listed in the table are tentative and will run only if there is sufficient demand for each. Enrolments normally close 3 weeks before the course date.

NIWA also runs courses on request tailored to your needs. If your organisation has specific training needs that NIWA could assist with please contact the Training Coordinator (Jenny White) via email (training@niwa.co.nz) or 03 348 8987 to discuss.

The courses listed are tentative and will run only if there is sufficient demand for each course.

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Course descriptions

Electric fishing for machine operators

This course is designed to teach safe, efficient, and ethical use of both backpack and bank-mounted electric fishing equipment. Fieldwork is a major component of the course, with the aim of applying basic theories of electric circuits, machine function, and fish physiology to the practical operation of machines over a range of situations and for a variety of fish.

Date: 12–13 September 2011
Location: Christchurch
Duration: 2 days
Trainer: Marty Bonnett/Shannan Crow
Level: All levels

NB. This course can be delivered at other locations and times, on request. Please contact training@niwa.co.nz to arrange a course.

Electric fishing for machine operators – refresher

The refresher course is designed to assist trained users to fish more effectively and ethically, and reinforce safe working procedures. This course is entirely based on practical field work, and is run in a workshop format, so that the demonstrations and application of techniques can be tailored to the needs of the participants. Please contact training@niwa.co.nz to arrange a refresher course.

Date: On request
Location: On request
Duration: 1 day
Trainer: Marty Bonnett/Shannan Crow
Level: Advanced

Targeted riparian management

This course provides training in how to assess what functions are occurring at different riparian sites – for example, denitrificaton, attenuation of contaminants in overland and subsurface flow, bank stability, stream temperature control, and invertebrate and fish habitat provision. It will also cover how to target management to maximise selected functions to meet site-specific goals for aquatic protection or restoration. Both days will involve undertaking assessments in the field.

Dates: 7–8 November 2011
Location: Hamilton
Duration: 2 days
Trainer: John Quinn
Level: All levels

Course descriptions *continued*

Introduction to paua farming

NIWA first started training in paua farming courses in the 1980s and ran courses for over 10 years, supporting the industry in its early years. Many of today's paua farmers learned the basics from these courses. The new course includes updated material, including discussion of the use of new technologies such as recirculating seawater systems. The course will provide the industry with direct access to NIWA's cutting edge research in an area that is seen by many as the future direction for the industry.

Date: 16–17 November 2011
Duration: 2 days
Level: All Levels
Location: Wellington
Trainer: Phil Heath & Graeme Moss

Conservation planning

This course is designed to introduce key concepts underlying the utilisation of scientific datasets in informing conservation planning decisions. The course will also include brief introductions to different conservation planning tools (Marxan and Zonation), data requirements, and advantages and caveats to using these tools in resource management such as marine protected area network designs.

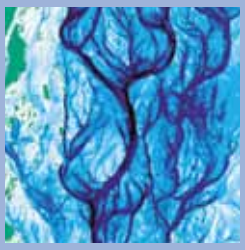
Date: 8 March 2012
Duration: 2 days
Level: All levels
Location: Wellington
Trainer: Carolyn Lundquist

Farm hydrology and diffuse pollution attenuation tools

This course provides training on diffuse pollution attenuation processes and tools (e.g., wetlands, riparian management, reactive materials, ponds). It will also cover how to assist farmers with decoding farm hydrology and planning how to best reduce diffuse water pollution on their farms. Both days will involve field trips.

Date: 20–21 March 2012
Duration: 2 days
Level: All levels.
Location: Hamilton
Trainer: Lucy McKergow

Hydrological statistics



This course provides an understanding of, and methods for, the estimation of hydrological statistics including floods and droughts. Topics covered will include: probability, distributions, moments, parameter estimation, annual exceedence probability and return periods, plotting positions, confidence intervals, hypothesis testing, and flow duration curves. We will also discuss the influence of El Niño and La Niña variations on climate and hydrological statistics. The course will incorporate a blend of illustrative material and applied problems. Familiarity with basic statistical concepts (normal distribution, mean, standard deviation) and standard least squares linear regression will be assumed. Participants should bring a calculator with basic scientific and statistical functions.

Date: 28 March 2012
Duration: 1 day
Level: Intermediate.

Location: Christchurch
Trainer: Alistair McKerchar

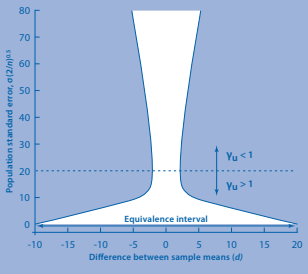
Introduction to marine aquaculture

This course provides a general introduction to marine aquaculture. It will give a global perspective on the status of marine aquaculture and then focus on the common species farmed in New Zealand and techniques used to farm them. The environmental implications and social benefits associated with aquaculture development, and potential for future development of aquaculture, will be discussed.

Date: 15 May 2012
Duration: 1 day
Level: All levels.

Location: Wellington
Trainer: Phil Heath

Statistical methods for water quality studies



This will be a hands-on course focussing on statistical procedures for examining water quality trends and differences using a mixture of techniques (including equivalence procedures), with some attention also to design of surveys and experiments. Instruction will include hands-on use of NIWA's Time Trends and Equivalence software (version 3.1, http://www.niwa.co.nz/our-science/freshwater/tools/time-trends).

Date: 21–22 May 2012
Duration: 2 days

Location: Hamilton
Trainer: Graham McBride

Level: Intermediate – participants will need a rudimentary statistical background, but the general issues in statistical analysis will be presented as part of the course.

Introduction to high intensity rainfall estimation in New Zealand

This one day course looks at the latest High Intensity Rainfall Design System – HIRDS Version 3. The course covers in brief the data and analysis behind its production, and explores improvements in HIRDS v3 compared to previous versions. Participants will learn how to use HIRDS v3, some common ways in which it can be applied to hydrology questions, and understand plans for future upgrades. Dates and costs details have not been set yet – please register your interest for this course with training@niwa.co.nz .

Dates: TBC, dependent on demand	Location: Christchurch
Duration: 1 day	Trainer: Graeme Horrell
Level: All levels	

Other courses that we can offer

NIWA has wide-ranging expertise and can offer training across various subjects. Some examples of courses that NIWA have previously offered are listed below. Please contact training@niwa.co.nz to express your interest in any of these courses.

Hydrological modelling – lumped catchment models

The hydrology of ungauged catchments

Water quality for rock lobster holding units

Managing coastal hazards

Managing extreme weather and flooding

Identifying New Zealand's native fish

Identifying wetland sedges and rushes

Identifying algae in rivers and lakes

Identifying aquatic macrophytes

Introduction to stream invertebrates

Identifying marine macroalgae

Instream habitat – survey and analysis

General environmental data logging

NIWA training course information can be found at: www.niwa.co.nz/education-and-training/training-courses

Training Courses 2011–12

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Registration Form

Acknowledgement

We will acknowledge receipt of your registration form by email.

Credit Cards

Visa and MasterCard are accepted. If payment is made by credit card, the merchant name, which will appear on your statement, is 'NIWA'.

Cancellations and refunds

Any amendments and/or requests for refunds must be notified in writing to the Training Coordinator. Cancellations received in writing at least two weeks before the course starting date will receive a full refund. Cancellations received within two weeks of the course date will not receive a refund, but substitute participants are welcome without penalty.

Please complete details in Sections 1–3 below and forward to:

Jenny White, Training Coordinator
NIWA
PO Box 8602
Riccarton
Christchurch 8440

Section 1: Course participants

Organisation

Postal address

Phone Fax Email

Title (Mr, Mrs, etc)	First name	Surname	Email

Special dietary requirements: No ☐ Yes ☐ (if yes, please specify name/s & requirements).

Training Courses 2011–12

Registration Form *continued*

Section 2: Course selection and fees

All costs quoted on this form are exclusive of GST

Course	*Date*	*Cost NZ$ (excl. GST)*	*No.*	*Amount*
Electric fishing for machine operators	12–13 September	$800		
Electric fishing for machine operators *– North Island*	*On request*	*na*		
Electric fishing for machine operators *– refresher*	*On request*	*na*		
Targeted riparian management	7–8 November	$1,100		
Introduction to paua farming	16–17 November	$1,350		
Conservation planning	8–9 March 2012	$450		
Farm hydrology and diffuse pollution attenuation tools	20–21 March 2012	*TBC*		
Hydrological statistics	28 March 2012	$650		
Introduction to marine aquaculture	15 May 2012	$350		
Statistical methods for water quality studies	21–22 May 2012	$800		
Introduction to high intensity rainfall estimation in New Zealand	*TBC*	*TBC*		

Sub Total	$
Plus GST	$
Total	$

Section 3: Payment details

Authorised amount NZ$_____ Please tick if GST receipt is required ☐

Purchase order (attached) Purchase order number_____

I've enclosed a cheque made out to NIWA*

I've enclosed a bank draft made out to NIWA*

Please charge my credit card

MasterCard ☐ Visa ☐

Card number ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Name on card_____ Expiry date__/__ Cardholder's signature_____

**Cheques or bank drafts may be drawn from any New Zealand bank in New Zealand.*

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