



Department of Environment, Land, Water & Planning



















# A Workshop in **Stream Management Principles and Practices**

26 - 30 October 2015 Venue: George Kerferd Hotel, Beechworth

#### Presented by

North East Catchment Management Authority Department of Environment, Land, Water & Planning Jacobs

La Trobe University
River Basin Management Society
Alluvium Consulting Pty Ltd
Charles Sturt University
Water Technology

The Murray-Darling Freshwater Research Centre Arthur Rylah Institute for Environmental Research

## **Testimonial:** Professor Jane M Doolan

## The Evolution of CMA's in Victoria - Connecting Communities and Catchments

This talk explores the evolution of catchment management in Victoria - from the recognition of serious environmental problems in the 1970s and 80s, through the development of community-based movements in the areas of salinity management, river management and Landcare, to the establishment of the CMAs in 1997 and their evolving role since then in response to changing NRM problems and priorities.

A key theme throughout this whole period has been the need to engage communities in all facets of NRM decision-making and implementation.

It is recognized as a critical factor for success which was then built into the design of the CMAs structures and planning processes and is still as essential today as it was then.



Professor Jane M Doolan University of Canberra

### **Vision**

To provide a forum for a comprehensive overview of Stream Rehabilitation and Management Principles and Practices.

### **Aims**

An integrated approach to Stream Management: Hydrology, Water Quality, Ecology, Riparian Vegetation, Geomorphology and Rehabilitation Techniques.

To provide extensive "hands on" experience through group assignments.

## **Background**

In the sixteen years that the Workshop has been running, over 790 people have completed the program. The program has evolved over this time, reflecting the issues faced by water managers of today. Wise Water Ways is supported by the water industry. The program features speakers who are leaders in their field. On completion of the Workshop participants will receive a subject credit towards either Charles Sturt University's Graduate Certificate in River Restoration or Master of Water Resource Management or other relevant CSU course.

For more information go to:

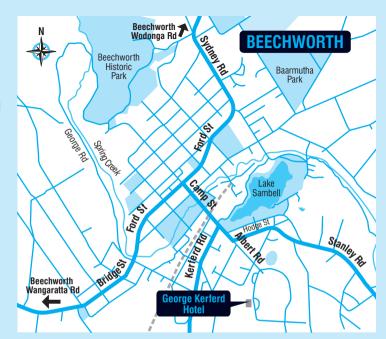
http://www.csu.edu.au/faculty/science/ses/courses or contact Matthew Hunt E: enviroscience@csu.edu.au T: 02 6051 9651.

### Who Should Attend?

The course is aimed at people working in, or who are interested in stream management, particularly those involved in practical natural resource works programs.

## The Region / Travel

Beechworth is situated in North East Victoria. It is approximately 3 hours drive from Melbourne. The nearest airport is Albury Airport (30 minutes drive). Hire cars are available from both airports and transfers from Albury Airport are either by Border Shuttle Bus or taxis. Beechworth is an ideal location for Wise Water Ways. Diverse vegetation, macro-invertebrates and geomorphic issues in the area provide a number of opportunities for managers to evaluate stream systems.



## **Accommodation**

Accommodation has been reserved for participants at The George Kerferd Hotel, Beechworth.

Special rates have been organised. They range from a single occupancy room - \$110.00 per room per night to shared rooms at \$180.00 per room per night. The rates include a fully cooked breakfast.

Please contact the secretariat via email: nemeet@bigpond.com to explore options before completing the registration form at the back of this brochure.

www.wisewaterways.org.au

	Sessions	Presenter	
Monday 26/10	Day One Introduction to Stream Management	1 I GSGIII GI	
12.30 – 12.45pm	Program and Assessment	Professor Andrew Boulton University of New England	
12.45 – 2.30pm	Stream Rehabilitation Concepts  • Steps for stream rehabilitation  • Assessment  • Investigations  • Concepts  • Design  • Community consultation  • Prioritisation	Ross Hardie Alluvium Consulting Pty Ltd	
2.30 – 3.00pm	Afternoon Tea		
3.00 – 5.45pm	Riparian Vegetation Field Demonstration	<b>Paul Wilson</b> Department of Environment, Land, Water & Planning	
7.00pm	Keynote Address and Dinner The Evolution of CMAs in Victoria - Connecting Communities and Catchments	Professor Jane M Doolan University of Canberra	
Tuesday 27/10	Day Two Assessment Techniques		
8.30 – 9.00am	National River Health Strategy Policy - context, priorities	Paul Wilson	
9.00 – 12.00pm	Stream Assessment Techniques Introduction and overview Assessment of hydrology, vegetation and physical condition Role of macro-invertebrates Water quality	Paul Wilson Dr Ewen Silvester Associate Professor La Trobe University Albury Wodonga Campus Dr Phil Suter	

12.00 – 12.45pm	Fish Habitat Fish ecology - flows, habitat, water quality, barriers, large woody debris Fish migration triggers and patterns	<b>Zeb Tonkin</b> Arthur Rylah Institute for Environmental Research
12.45 – 1.30pm	Lunch	
1.30 – 5.30pm	Demonstration of Field Data Collection and Aboriginal Heritage Identification  • Field surveys (level and staff)  • Macro-invertebrate sampling  • Vegetation assessment  • Physical condition assessment  • Aboriginal Heritage Assessment	Paul Wilson Chris Dwyer Jacobs Dr Phil Suter Alan Murray Elder
6.45pm	Assessment Requirements	Professor Andrew Boulton
7.00pm	Dinner and Entertainment	
Wednesday 28/10	Day Three Processes	
8.30 – 9.15am	Hydrology and Water Budget Concepts	Ben Tait Water Technology
9.15 – 10.00am	Geomorphology and Sediment Budget Concepts	<b>Dr Geoff Vietz</b> Streamology
10.00 – 10.30am	Morning Tea	
10.30 – 11.10am	Applications Hydraulic Models	Ben Tait
11.10 – 11.45am	<ul> <li>Environmental Flows</li> <li>Water resource allocation</li> <li>Environmental flows importance and assessment methodology</li> <li>Streamflow management</li> </ul>	Dr Geoff Vietz

11.45 – 12.45pm	Stream Ecology - Scale and Disturbance  • Why is ecology important?  • Streams as ecological systems  • Indicators of stream health	Professor Andrew Boulton
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1.00 – 1.15pm	Briefing on Field Work	Professor Andrew Boulton
1.15 – 2.00pm	Lunch	
2.00 – 5.30pm	Project Data Collection and Write-up / Field Work	
	Free Evening or Master Class Dinner with Professors Gerry Quinn (Deakin University, Warnambool Campus) and Andrew Boulton	
Thursday 29/10	Day Four Rehabilitation Techniques	
8.00 – 8.40am	Community Engagement	<b>Dr Jane Roots</b> Department of Environment, Land, Water & Planning
8.40 – 9.10am	Riparian Vegetation The role of filter strips, organic carbon, shading, biodiversity and revegetation Components and importance of riparian vegetation Vegetation management and revegetation techniques Ecological vegetation communities	Dr Jane Roots
9.10 – 9.55am	Willows/Exotic Trees  Identification and reproduction  Coology, dispersal and management issues  Control techniques  Rehabilitation	Andrew Briggs North East Catchment Management Authority
9.55 – 10.25am	Morning tea	

10.25 – 12.00pm	Stream Channel Management  • Replicating natural systems • Working with stream processes • Grade control structures • Sediment stabilisation	Dr lan Rutherfurd Associate Professor University of Melbourne
12.00 – 12.45pm	Lunch	
12.45 – 1.30pm	Field Projects and Construction Works Works. What works?	Terry McCormack, Andrew Briggs North East Catchment Management Authority
1.30 – 5.30pm	Preparation of project reports	
6.30 – 7.30pm	Dinner	
8.00 – 10.00pm	Presentations of Group Projects	
Friday 30/10	Day Five Field Visit	
8.45 – 12.30pm	Field Visit to Ovens Catchment  • View structural works  • Revegetation and willow management	Chris Dwyer, Terry McCormack, Andrew Briggs
12.30pm	Lunch on the Run	

Details are correct at time of program production, although may be subject to change.

## Registration Form (Return by 12 October 2015) Title: Dr 🗆 Mr 🗀 Mrs 🗀 Ms 🗔 A PARTICIPANT Position: Organisation: Address: ...... Postcode Phone(B): Mobile: Special Dietary Requirements: ..... Privacy - I give permission for my details to be disclosed (no tick will be taken as yes) ☐ Yes ☐ No To register for the workshop please complete the registration on the following page and forward / scan it to: Wise Water Ways PO Box 645, Wangaratta VIC 3676 Email: nemeet@bigpond.com www.wisewaterways.org.au Contact: Virginia Eckels

Tel: 0408 109 707

#### B. REGISTRATION FEES (by 12 October 2015)

#### Tax Invoice - Wise Water Ways Workshop ABN 67 721 867 449

Full Workshop Fee includes morning teas, lunches, dinners (excluding Wed), annual subscription to RBMS

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\$99

(GST Inclu



I would like more information about the RBMS?

No. of nights

#### For Members of the River Basin Management Society (RBMS)

\$952 (GST Inclusive)

Total

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### C. ACCOMMODATION

(includes fully cooked breakfast)

#### Hotel Double Room

Single - \$110.00 per room per night (GST inclusive)

#### **Hotel King Room**

Single (larger room) - \$120.00 per room per night (GST inclusive)

#### Linaker (art deco inspired suites)

Single - \$140.00 per room per night (GST inclusive)

#### Linaker - twin share (art deco inspired suites)

Sleeps up to 2 - \$180.00 per room per night (GST inclusive)

Sharing with:	

#### TOTAL

Check in date ..... / ..... Check out date ..... / ..... **GST Inclusive** 

### Method of payment

If invoice required please complete the following:

Purchase Order No:..

If paying by cheque make payable to: Wise Water Ways Workshop

Cancellation Policy: Full refund less 20% if advised 5 days prior to the Workshop

cheque enclosed EFT

EFT payment Bank: Bendigo Bank

BSB: 633-000 Acc: 141 820 498

Please ensure you email details of your EFT payment and use your surname / organization as your reference. If EFT advice is not received then payment may not be associated with your registrations - and your registrations may not be

#### Forward registration form and cheque to:

NECEP, Wise Water Ways Secretariat, PO Box 645,

WANGARATTA VIC 3676

## We would like to thank the following partners:









Environment, Land.













## **A Stream Rehabilitation Workshop**

#### For further information contact:

Virginia Eckels, North East Conference and Event Planners Tel: 0408 109 707 or Email: nemeet@bigpond.com www.wisewaterways.org.au

