















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

12 - 16 November 2012 Venue: Quality Hotel Wangaratta Gateway, Wangaratta

Presented by

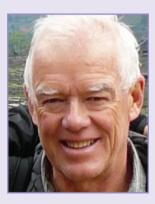
North East Catchment Management Authority
Department of Sustainability and Environment
Sinclair Knight Merz
La Trobe University
River Basin Management Society
Alluvium Consulting Pty Ltd
Charles Sturt University

Testimonial: Dr John Tilleard

Watching Waterways for (nearly) Four Decades

John Tilleard has 38 years consulting and research experience in waterway management in Australia and internationally. His original qualification is in Civil Engineering with a Masters in River Mechanics from Colorado State University and a PhD from Melbourne University looking at the relationship between hydrology and river morphology below dams. John became a Principal of Ian Drummond and Associates in 1991 and subsequently a Director of ID&A, Fisher Stewart, Southern Rural Water and Greening Australia (Vic). He is currently a Director of Yarra Valley Water and Coordinator of the Graduate Certificate in River Health Management for the University of Melbourne.

John's project experience ranges from the practical to the theoretical with current projects in PNG and USA as well as locally. He will use that experience to illustrate a series of observations on the changing approach to waterway management over the last (nearly) four decades and challenges for the future.



Dr John Tilleard
Principal
Moroka Consulting

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

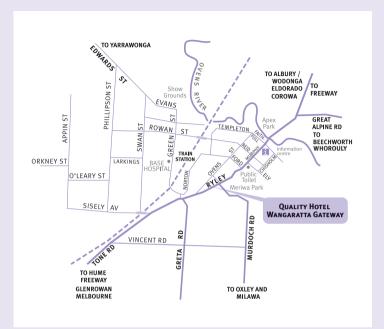
In the thirteen years that the Workshop has been running, some 720 participants have completed the program. The program has evolved over this time, reflecting the issues faced by water managers of today. Wise Water Ways is supported by the water industry. The program features speakers who are leaders in their field. On completion of the Workshop participants will receive one credit towards either Charles Sturt University's Graduate Certificate in River Restoration or Master of Water Resource Management. For more information go to: http://www.csu.edu.au/faculty/science/ses/courses or contact Jonathon Howard E: JHoward@csu.edu.au T: 02 6051 9685.

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

Wangaratta is situated in North East Victoria. It is approximately $2^{1/2}$ hours drive from Melbourne. The nearest airport is Albury Airport (45 minutes drive). Hire cars are available from both airports. If you are travelling from Melbourne, an alternative is to catch a train from Melbourne's Southern Cross Station to Wangaratta (V-Line or Countrylink). 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 Quality Hotel Wangaratta Gateway, 29 Ryley Street, Wangaratta.

Special rates have been organised. They range from a single occupancy room - \$145.00 per room per night to apartments / townhouse sleeping 4 people at \$320.00 per night. There are also twin and triple rooms available. 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.

	Sessions	Presenter
Monday 12/11	Day One Introduction to Stream Management	
12.45 – 2.30pm	Stream Rehabilitation Concepts • Steps for stream rehabilitation • Assessment • Investigations • Concepts • Design • Community consultation • Prioritisation	Dr Ian Rutherfurd Associate Professor, University of Melbourne Director, Water Group, DSE
2.30 – 3.00pm	Afternoon Tea	
3.00 – 5.45pm	Riparian Vegetation Field Demonstration	Paul Wilson Office of Water DSE
7.00pm	Keynote Address by Dr John Tilleard Watching Waterways for (nearly) Four Decades	Dr John Tilleard Principal Moroka Consulting
Tuesday 13/11	Day Two Assessment Techniques	
8.30 – 9.00am	National River Health Strategy Policy - context, priorities	Paul Wilson Office of Water DSE
9.00 – 12.30pm	Stream Assessment Techniques Introduction and overview Assessment of hydrology, vegetation and physical condition Role of macro-invertebrates Water quality	Paul Wilson Associate Professor Ewen Silvester Dr Phil Suter La Trobe University Albury Wodonga Campus

12.30 – 1.30pm	Lunch	
1.30 – 5.30pm	Demonstration of Field Data Collection • Field surveys (level and staff) • GPS data collectors • Macro-invertebrate sampling • Vegetation assessment • Physical condition assessment	Paul Wilson Chris Dwyer SKM Phil Suter
6.45pm	Assessment Requirements	Professor Andrew Boulton UNE Armidale
7.00pm	Dinner and Entertainment by Pete Denahy	
Wednesday 14/11	Day Three Processes	
8.30 – 9.10am	Stream Ecology Why is ecology important? Streams as ecological systems Indicators of stream health	Professor Gerry Quinn Chair in Marine Biology Deakin University Warrnambool Campus
9.10 – 9.50am	Fish Habitat Fish ecology - flows, habitat, water quality, barriers, large woody debris Fish migration triggers and patterns	Dr David Crook Arthur Rylah Institute for Environmental Research DSE
9.50 – 10.50am	Morning Tea at Kaluna Park What makes a successful restoration program	Andrew Snowdon Rural City of Wangaratta Rick Felton Trust for Nature
10.50 – 12.20pm	Catchment Hydrology and Geomorphology Open channel hydraulics Stream geomorphology	Dr Dean Judd Goulburn Broken CMA Dr Tony Ladson Moroka Consulting

12.20 – 1.00pm	Environmental Flows	Dr Geoff Vietz
	Water resource allocation	Department of Environmental
	Environmental flows importance and assessment methodology Streamflow management	Engineering The University of Melbourne
1.00 – 2.00pm	Lunch	
2.00 – 5.30pm	Project Data Collection and Write-up / Field Work	
7.00pm	Free Evening	
Thursday 15/11	Day Four Rehabilitation Techniques	
8.30 – 9.10am	Riparian Vegetation	Jane Roots
	 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 	School of Environmental Sciences Charles Sturt University
9.10 – 9.55am	Willows/Exotic Trees	Andrew Briggs
	Identification and reproduction	North East Catchment
	 Ecology, dispersal and management issues Control techniques Rehabilitation	Management Authority
9.55 – 10.25am	Morning tea	
10.25 – 12.00pm	Stream Channel Management	Ross Hardie
	Replicating natural systems Working with stream processes Grade control structures Continue and tablifications	Alluvium Consulting Pty Ltd
12.00 – 12.45pm	Sediment stabilisation Lunch	
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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 16/11	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	

 $\label{eq:decomposition} \textbf{Details are correct at time of program production, although may be subject to change.}$

Registration Form

A. PARTICIPA	ANT	Title: Dr U Mr U Mrs U Ms U
Name:		
Position:		
Organisation:		
Address:		
		Postcode
Phone(B):		Mobile:
Fax:		
Email:		
Special Dietary Requirements:		
	•	ny details to be disclosed
(no tick will be	e taken as yes)	□ Yes □ No
To register for the workshop please complete the registration on the following page and forward / scan / fax it to:		
Wise Water Wa PO Box 645, W	ays Vangaratta Vic 367 @bigpond.com 7518	
Contact	Virginia Eckels	

Tel: 0408 109 707

B REGISTRATION FEES

Tax Invoice - Wise Water Ways Workshop ABN 67 621 867 449

Full Workshop Fee includes morning teas, lunches,	
dinners, annual subscription to RBMS	

\$990	
GST Inclusive)	

(GST In

No. of nights

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I would like more information about the RBMS?

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

\$952 (GST Inclusive)

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Total

C. ACCOMMODATION

Town House

Sleeps up to 4 - \$320.00 per room per night (GST inclusive)

Apartment

Sleeps up to 4 - \$320.00 per room per night (GST inclusive)

Queen Suite

Single - \$145.00 per room per night (GST inclusive)

Family

Sleep up to 2 - \$165.00 per room per night (GST inclusive)

Family Suite

Purchase Order No:

Sleeps up to 3 - \$180.00 per room per night (GST inclusive)

Sharing with:	
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TOTAL

Check in date / Check out date /

GST Inclusive

Method of payment

If invoice required please complete the following:

Billing Addresss: .

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 processed.

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:

















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

