

STORMWATER

'08

8th – 11th July, 2008
Holiday Inn Surfers Paradise
Surfers Paradise QLD

NSW & QLD Stormwater Industry Association



NSW & QLD Stormwater Industry Association

Conference Program

2008 Pre Conference Workshops Sessions

Tuesday, 8th July, 2008

Full Day Workshop

9.00 am – 5.00 pm

Introduction to the Blue Book

Rick Morse CPESC – Consultant, SEEC Morse McVey

This workshop is designed for people who need to understand key technical and management issues relating to erosion and sediment control in the urban environment in NSW. The workshop covers site assessment, erosion control, sediment control and site management and inspection. The workshop is broadly the same as the NSW Stormwater Trust's 2004 "Blue Book" Workshops. This workshop introduces the Revised Universal Soil Loss Equation as a tool for assessing erosion risk at a site under different management conditions. It does not address basic erosion and sediment control techniques, detailed engineering considerations, mathematical calculations or preparing plans for erosion and sediment control. This workshop is aimed at developers and consultants, civil and environmental engineers, local government officers and others wishing to update their knowledge in line with the current edition of the "Blue Book". All delegates must bring either a copy of the Blue Book (4th Edition) or a laptop computer to the workshop.

Full Day Workshop

9.00 am – 5.00 pm

Stormwater Management

Presented by the NSW Stormwater Industry Association

The workshop will cover water cycle and stormwater management in a catchment context and will answer questions such as: Is stormwater a problem? Are there consequences of creating impervious surfaces? Do we need to trade-off quantity versus quality issues? What strategies are there to deal with stormwater pollutants? How do you get the best outcomes from your local council? What is the impact on local government resources and asset management? What are the legal and operational issues regarding stormwater? What is the difference between mainstream and overland flooding?

The objective of the workshop is to advance the knowledge and understanding of stormwater management for those having to deal with issues involving stormwater. This workshop would be ideal for Local Government Councillors, professional engineers new to the stormwater industry, manufacturers, consultants and other non-engineers who have a need to understand the basics of stormwater management.

Half Day Workshop

9.00 am – 12.30 pm

Water Sensitive Urban Design - Getting the Right Mix

Simon Beecham, Professor of Sustainable Water Resources Engineering, University of South Australia

This course is designed for Council Development Application (DA) Assessors and Certified Checkers (CC). It will be a half day course aimed at giving assessors an insight into dealing with WSUD development proposals. The course will be structured around a best planning practice model with examples provided of specific Council planning requirements.

The workshop is intended to provide knowledge about how WSUD works, the required design elements and their configuration for proper performance. The role of modelling in WSUD will be explained by Prof Beecham, who will provide critical information on how to undertake checks. The workshop is suitable for council staff involved with DA assessment and Certified Checkers. The course would also be of interest to consultants wishing to gain a better understanding of council requirements.

Half Day Workshop**9.00 am – 12.30 pm****Natural Channel Design**

Grant Witheridge, Director, Catchments and Creeks Pty Limited

This course introduces the concepts of Natural Channel Design (NCD) for use in the design of drainage channels and the rehabilitation of minor watercourses within heavily modified catchments.

Half Day Workshop**9.00 am – 12.30 pm****Stormwater Management with Rain Gardens**

Rod Wiese, Managing Director, Storm Consulting

Rain Gardens are increasingly being employed as a stormwater device in WSUD treatment trains. Combining landscaped looks and engineered design, they fit perfectly into the urban fabric. Being bioinfiltration systems, they combine retention and water quality functions while at the same time looking contemporary. Rain Gardens have been used in car parks, parks, plazas and streetscapes.

This workshop is ideal for Council staff and consultants and will provide design skills with background information, case studies and worked examples. The course material draws from workshops developed by Melbourne Water's Clearwater Program.

Lunch**12.30pm – 1.30 pm****Half Day Workshop****1.30 pm – 5.00 pm****Treatment of Creek and Gully Erosion**

Grant Witheridge, Director, Catchments and Creeks Pty Limited

A practical-based course on the various forms and causes of watercourse and gully erosion, providing detailed discussion on the selection and application of a wide range of treatment techniques.

Half Day Workshop**1.30 pm – 5.00 pm****Stormwater Harvesting & Reuse**

Rod Wiese, Managing Director, Storm Consulting

Climate change, drought, water restrictions and rising water prices have combined to expedite the uptake of water conservation measures across the Australian community. Stormwater harvesting and reuse is one measure being adopted and is suitable for open space and landscape irrigation. Other specialised systems also supply houses in new residential developments with water for toilet flushing and laundry uses.

This workshop is ideal for Council staff and consultants and will provide planning and design skills with background information such as guideline compliance, case studies and worked examples. The course material draws from workshops developed by Melbourne Water's Clearwater Program.

Morning Tea**10.30am – 11.00am****Afternoon Tea****3.00pm – 3.30pm****Welcome Cocktail Reception and Conference Registration****6.00 pm – 8.00 pm****Attendance is included in all Workshop and Full Conference Delegate Fees**

2008 Conference Sessions

Wednesday, 9th July, 2008

8.00 am	DELEGATE REGISTRATION
9.00 am	WELCOME TO DELEGATES Steve Frost, President, NSW Stormwater Industry Association and A/P Margaret Greenway, President, QLD Stormwater Industry Association
9.10 am	CONFERENCE OPENING Councillor Ron Clarke MBE Mayor, Gold Coast City Council
9.30 am	KEYNOTE PRESENTATION Storm Water - Resource, Recovery and Re-Use Professor John Pigram University of New England
10.15 am	KEYNOTE PRESENTATION Mass Loading and Mass Load Design of Stormwater Filtration and Infiltration Systems James Lenhart Chief Technology Officer, CONTECH Stormwater Solutions Inc. USA
10.45 am	Morning Tea
11.15 am	EXHIBITOR AND SPONSOR PLENARY SESSION

Stream	Stormwater Harvesting	Water Quality Management	Policy and Planning	Biodiversity and Ecology
12.15 pm	Stormwater Harvesting on Landfill Sites Adrian Crocetti City Design & Landfill Remediation Brisbane City Council	Investigation of the sediment-capturing efficiency of selected Gross Pollutant Traps in the Lake Macquarie Catchment, NSW Zoe Rogers Environmental Consultant, The University of Newcastle	Climate Change and Stormwater Management Habib Rehman Principal, Cardno	Urban Sensitive Water Design Andrew O'Neill Worley Parsons
1.00 pm	Lunch			
2.00 pm	Double Bay Sustainable Commercial Development and Policy Implications Fiona Coe Senior Engineer, Worley Parsons	MUSIC Calibration Based on Soil Conditions Andrew Macleod Director Environmental Services SEEC Morse McVey	Sustainable Stormwater Management driven by Gosford City Council's Water Cycle Management Development Control Plan Peter Sheath Water Sensitive Urban Design Engineer, Gosford City Council	The Role of Media, Microbes and Macrophytes in Improving the Effectiveness of Bioretention Systems: Have We Got it RIGHT Assoc Prof Margaret Greenway Griffith School of Engineering
2.45 pm	Design Considerations of Using Stormwater Seeping into a Disused Railway Tunnel for Cooling Tower Make Up. Case study of NSW Parliament House Reid Butler, Manager, Sydney Water and Environment, BMT WBM	On the Breakdown of Leaf Litter Transported in Stormwater Runoff James Ball Faculty of Engineering, University of Technology, Sydney	Water Sensitive City: A Strategy for Adaptation Sara Lloyd EDAAW	Aquatic Fauna Connectivity for Urban Waterways - Life Beyond Conventional Pipe-flow and Drainage Design Ross Kapitcke Environmental Engineer, School of Engineering, James Cook University,
3.30 pm	Afternoon Tea			

4.00 pm	<p>Is it necessary to run a 100 Year Time Series Model to Predict Savings from Rain or Stormwater Harvesting?</p> <p>Guenter Hauber-Davidson Managing Director , Water Conservation Group Pty Ltd</p>	<p>Using WSUD to resolve Competing Objectives: A Case Study of a Sustainable Industrial Development</p> <p>Rod Wiese Sustainable Water Manager, Storm Consulting</p>	<p>Developing an Institutional Capacity Building Program for Sustainable Urban Water Management – the results of a Needs Analysis</p> <p>Alan Hoban Water by Design - Healthy Waterways Partnership</p>	<p>Green Valley Creek Rehabilitation</p> <p>Brian Long Senior Policy Advisor –Environment & Sustainability, Fairfield City Council NSW</p>
4.45 pm	<p>Urban Stormwater Harvesting & Reuse: Mining Existing Urban Infrastructure for Opportunities</p> <p>John Dahlenburg Sydney Metropolitan Catchment Management Authority</p>	<p>Exfiltration Sand Filters – Versatile Stormwater Treatment Devices</p> <p>Mal Brown Sustainable Water Manager, Storm Consulting</p>	<p>Capacity Building: Bridging the gap between science and policy by generating closer linkages between Government, research institutions and industry</p> <p>Kate Black Sydney Metropolitan Catchment Management Authority</p>	<p>Biological implications of Water Sensitive Urban Design principles</p> <p>Jason Dunlop Scientist, Aquatic Ecosystems Department of Natural Resources and Water, CSIRO Long Pocket Laboratories</p>
5.15 pm	Close of Day 1			
7.00 pm	2008 Conference Dinner			

2008 Conference Sessions

Thursday, 10th July, 2008

9.00 am	WELCOME TO DAY 2			
9.10 am	KEYNOTE PRESENTATION WSUD - Going Underground Professor Simon Beecham School of Natural and Built Environments, University of South Australia			
9.45 am	KEYNOTE PRESENTATION Adaptation to More Extreme Floods under Climate Change Stephen Lees Principal Water Resources Engineer, PB			
10.30 am	Morning Tea			
	Stormwater Harvesting	Water Quality Management	Policy and Planning	Other Stormwater Issues
11.00 am	Comparison of storage requirements for two different stormwater harvesting strategies Dr Ian Brodie Lecturer, Faculty of Engineering and Surveying, University of Southern Queensland	Stormwater Management in a Sensitive Coastal Environment – A Byron Bay Case Study Duncan Thomas Environmental Engineer, GeoLINK	Urban Interface Area Model - Linking Stormwater Management with Planning Controls: David Lemcke Senior Planner, Planning - Legal and Policy, Wyong Shire Council	ANUGA: An Amazing FREE Tool with Growing Capabilities Rudy Van Drie Shellharbour City Council

11.45 am	Stormwater Harvesting – Case Study of Edenborough Sportsfield, Lindfield, NSW Jay Jonasson Environmental Engineer, Ku-ring-gai Council	Comparison of Filter Media in Rain-gardens – Ku-ring-gai Council Case Study Sophia Findlay Technical Officer – Water, Ku-ring-gai Council	Stormwater Quality Asset Management and Planning Anthony Collins Parramatta City Council	Concrete Pipe for Sustainable Drainage Systems David Millar Executive Director, Concrete Pipe Association of Australasia
12.30 pm	Lunch			
1.30 pm	Stormwater Harvesting; an ‘end-of-pipe’ opportunity for a transition to sustainable urban water use Emma James Associate – Ecological Engineering Practice Area, EDAW	Flood constraints driving advanced WSUD in Regents Park, Sydney Rod Wiese Sustainable Water Manager, Storm Consulting	Deemed to Comply Stormwater Management Requirements for Parramatta City Council Anthony Collins Parramatta City Council	Recent Developments in Design Rainfall Estimation: Implications for Flood Guidelines Dr Seth Westra Water Resources Engineer, Sinclair Knight Merz
2.15 pm	Design Guidelines for Stormwater Harvesting Interception Gunter Hauber-Davidson Managing Director, Water Conservation Group Pty Ltd	Modelling Stormwater Volumes and Pollutants of the Botany Bay Catchment Tony Webber BMT WBM	WSUD in Gold Coast City Council Khairul Alam Supervising Engineer - Hydraulics & Water Quality, Gold Coast City Council	floodREADY are you? A Community Flood Awareness Campaign for All Damian McGarry, Principal Engineer, Maroochy Shire Council
3.00 pm	AFTERNOON TEA			

3.30 pm	<p>Harvesting of Car Park Runoff for Boat Washing & Irrigation - Sustainable, "Green" Credentials for Clarkes Point Sailing Club, Hunters Hill</p> <p>Rodney Swil General Manager, Environmental Water Group</p>	<p>Use of Stormwater Gardens to improve Urban Stormwater Quality</p> <p>Alastair McHarg Senior Environmental Scientist, Waterways</p>	<p>Delivering a Consistent Policy and Planning Framework for Waste Sensitive Urban Design in South Queensland</p> <p>Sarah Walker Healthy Waterways Partnership</p>	<p>How to Reduce Maintenance Costs by Improving Bioretention Design</p> <p>Damien D'Aspromonte Parsons Brinckerhoff</p>
4.15	<p>An innovative Stormwater Solution for a World Heritage Area</p> <p>Mike Hannah & Nick Vagar, Stormwater 360</p>	<p>Measuring the effectiveness of Water Sensitive Urban Design (WSUD) treatment trains</p> <p>Nathaniel Parker Scientist/ Water Cycle Sciences QLD Department of Natural Resources and Water</p>	<p>Effective WSUD Policy for Local Government: More than a DCP</p> <p>Alexa McAuley Ecological Engineering Practice Area, EDAW</p>	<p>Using Acoustic Velocity Sensors to Fast Track Stormwater Discharge Monitoring in Singapore</p> <p>Glenn McDermott, Earthtech Engineering</p>
5.00 pm	<p>Closing Conference Remarks</p> <p>Acknowledgements and Thanks</p>			
5.15 pm	<p>Conference Close</p>			

2008 Conference Technical Tour

Friday, 11th July, 2008

On Friday, 11th July, conference delegates have the opportunity to visit sites of recent revegetation and stormwater treatment works during the Conference Field Day.

Complimentary return coach transfers to the Technical Tour will depart the Holiday Inn Surfers Paradise Hotel at 9.15 am on the final morning of the conference. It is anticipated that participants will return to the hotel no later than 4pm.

Further details of the confirmed itinerary will be provided approximately 6 weeks prior to the Conference.

SIA FIELD DAY

The Technical Tour is hosted by the NSW and Queensland Stormwater Industry Associations. The Technical Tour provides an excellent opportunity to visit a number of stormwater sites in the Southern Queensland, Northern NSW region. You will be able to see examples of stormwater capture and treatment, plus stormwater harvesting and reuse projects.

For each project, you will learn the best management practices used, how they are maintained and alternative approaches considered. Each project will have a fact sheet with a short summary of the project and the learnings to take away.

Don't miss this valuable opportunity to see real projects and talk to your peers. This is a valuable networking occasion that will complete your conference experience and maximise its value to you.

For further information about the Field Day, please contact Julie McGraw at GEMS Event Management on 02 9744 5252.

Please note that pre registration is required for the Technical Tour. Registration for the Technical Tour includes transport, lunch and refreshments.