
building the **MOMENTUM**

CONFERENCE REGISTRATION BROCHURE

Gold Conference Sponsor

SPEL ENVIRONMENTAL

2017 Stormwater
NSW Conference

6th - 8th September 2017
Newcastle Exhibition &
Convention Centre



STORMWATER
NEW SOUTH WALES

The Stormwater NSW Conference Organising Committee, would like to invite you to the 2017 Stormwater NSW Conference

The 2017 Conference will be held at the Newcastle Exhibition Centre (NEX) from Wednesday, 6th September to Friday 8th September, 2017. The Conference will consist of:

- Two days of Conference presentations on Wednesday, 6th and Thursday 7th, September
- Conference Dinner and Stormwater NSW Awards for Excellence on Wednesday, 6th September
- A full day Technical Tour which will explore the design, construction, operational and jurisdictional challenges encountered in local stormwater projects on Friday 8th September.

In 2017, we are excited to be travelling for the first time to Newcastle. Set on the southern bank of the Hunter River, Newcastle was established in the early 1800's as a port for the coal mines in surrounding areas, and is now the world's largest coal export port and the centre for trade from the mining resources of the Hunter Valley. The city continues to be a booming industrial centre for the wider Hunter area.

Newcastle has faced a period of challenge and change in recent years. Nobody could forget the results of the storms in June 2007. The worst series of storms to hit the NSW coast in three decades caused thousands of homes to be flooded, and the infamous Pasha Bulker to run aground at Nobby's Beach, where it stayed for more than six weeks. Changes in the large industrial operations in the area have created opportunities for diversification into other sectors and subsequent renewal and reshaping of the city centre to create a vibrant hub.

It is apt, therefore, that this year's Conference theme is 'Building the Momentum'. This is a theme that resonates not only with Newcastle's story of growing through change, but our story as a part of the stormwater industry in Australia. We too have been 'Rising to the Challenge' (the theme of the 2016 Stormwater Australia Conference) and fresh off the heels of last year's senate inquiry into stormwater, we are working on not just overcoming these challenges, but pushing forward, gathering speed and support to approach stormwater a little differently. We want to recognise the importance of stormwater as one of many factors integral to the liveability and resilience of our cities, and achieve a truly integrated approach to its management.

So this year we are seeking out all of our partners to share their experience in stormwater and related fields, so we can teach and learn from each other and build the momentum together!

The Conference will include a series of industry and inspirational keynote speakers, supported by presentations from across NSW on the following areas of interest:

- Policy and planning
- Capacity building
- Business cases
- Design and master planning
- Construction challenges and opportunities
- Handover, operation and maintenance of stormwater assets
- The role of stormwater assets in the creation of liveable and resilient cities
- Floods and coastal inundation
- Urban renewal and green infrastructure
- Landscape design and stormwater systems
- Community engagement.

We look forward to 'Building the Momentum' with you this September in Newcastle!



Rebecca Bell
Conference Convenor
Vice President, Stormwater NSW

2017 KEYNOTE SPEAKERS

Carol Ellinger Haddock, P.E.

Deputy Director, Engineering and Construction Division, Department of Public Works and Engineering, City of Houston, Texas



Carol leads a team of more than 250 employees who are responsible for the design and construction of more than \$600 million in annual capital improvements. Currently, there are more than 300 ongoing design efforts and nearly 175 active construction projects valued at more than \$1 billion.

Prior to this assignment, she led the Infrastructure Planning Branch which is responsible for the long-range planning that leads to the development of specific infrastructure projects for programming in future Capital Improvement Plans. She is the co-author of the City's Capital Improvement Plan Process Manual for Infrastructure Programs which documents an objective and transparent process and criteria to identify and prioritize infrastructure needs throughout the city. This document is the basis for project development as part of ReBuild Houston.

Carol has served as the City's representative on environmental and water quality initiatives including the Municipal Separate Storm Sewer System Joint Task Force, the regional Bacteria Implementation Group and has led both the Brownfields Redevelopment Program and Municipal Settings Designations Program.

Carol has been with the City for nearly thirteen years. Prior to joining the City, Carol spent 6 ½ years as a project manager for the Harris County Flood Control District including a 1-year assignment as a Congressional Fellow in Washington, DC. She was also a project manager with the Houston consulting firm Klotz Associates, Inc. She has a B.S. in Civil Engineering from Rice University and a M.A. in Public Administration from the University of Houston.

Dr Mehreen Faruqi

NSW Member of Legislative Council representing the NSW Greens



Dr Mehreen Faruqi joined the NSW Legislative Council in June 2013 as a member of the NSW Greens. Since migrating from Pakistan to Australia in 1992, with her young family, Mehreen's work has focussed on developing real solutions to social and environmental challenges.

Mehreen has a Bachelor of Civil Engineering from University of Engineering and Technology, Lahore, and a Master and PhD in Environmental Engineering from the University of New South Wales (UNSW). She has worked in leadership positions in local government, consulting firms and higher education institutions in Australia and internationally. This includes her role as Manager of Environment and Services for Mosman Council, Manager of Natural Resources and Catchments for Port Macquarie-Hastings Council, and as the Director of the Institute of Environmental Studies (UNSW) and an Associate Professor in Business and Sustainability (AGSM UNSW).

Mehreen has delivered major projects such as stormwater reuse and recycling infrastructure, cycle ways, hydropower generation and rainforest rehabilitation as well as doing work for action on climate change and waste reduction. She has chaired a number of panels and committees on sustainability, water and waste management for industry, local, state and federal government. She is a Fellow of the Institution of Engineers Australia and a member of the Environment Institute of Australia and New Zealand.

Mehreen is a passionate activist on a range of issues, and has worked as a volunteer, campaigner, Convenor of NSW Greens' Women's Group and candidate for The Greens NSW, including achieving a record 30% of the vote in the 2012 Heffron by-election.

In 2013, Mehreen received the UNSW Faculty of Engineering Award for Leadership and was voted No.5 in Fairfax Media Daily Life list of top 20 women for 2013 who made a difference and inspired Australians and a finalist in 2015. In 2015 she was announced as one of the top 100 Most Influential Engineers in Australia.

Dr Jim Bentley

Managing Director, Hunter Water



Jim Bentley is a senior executive in the infrastructure sector, with more than 20 years' experience, much of it in the water business. His career has spanned several countries from the UK to NZ and he has played senior roles in public and private sectors, as client, contractor, operator, investor, consultant and researcher.

In 1998 Jim moved from London to live in Istanbul and oversee commercial operations of the largest privately financed water project in the world: the US\$900m Public-Private-Partnership for the Iznit Water Supply Project. Shortly afterwards a massive earthquake hit this part of Turkey, killing 15,000 people, and Jim found himself managing a complex range of issues, including the humanitarian response of an essential service provider in the region.

Jim moved to Newcastle in July 2016 to take up his position as Managing Director of Hunter Water Corporation. His interests outside his day job include his role as Chairman of Building for Education, a NZ registered charity which funds the building of schools and related infrastructure for poor communities in East Africa

Dianne McGrath

Mars One Astronaut Candidate



Dianne McGrath is one of 7 Australian shortlisted Mars One astronaut candidates in the remaining "Mars 100". The Mars One mission seeks to establish the first permanent human settlement on Mars – it is a one-way journey.

What makes Dianne a suitable astronaut candidate? She is a leader, team player, project manager and creative problem solver. Her experience working in and managing teams in sales, marketing, emergency services and government provides her with a strong platform to work as a unit to deliver on outcomes. Dianne's sense of adventure, determination and fitness has seen her sail tall ships in the southern ocean, cycle extreme distances, jump from planes, and run marathons and an ultra marathon. She believes nothing is insurmountable.

Dianne has a special interest and growing expertise in sustainable food systems - something that will be critical in a completely new environment for human habitation.

Dianne's work experience has provided her with strong expertise in project management, marketing and government organisations in her time with the Australian Energy Regulator, Department of Resources, Energy and Tourism and GlaxoSmithKline (GSK). While at GSK she held numerous positions, including a global marketing position based in Europe where she was responsible for a \$1billion (AUD) brand portfolio, and won a global marketing award.

Dianne leads a purposeful life that seeks to create better environmental outcomes. Towards this goal, she is currently the Director of the sustainability and business consultancy, Food for Thought Consulting Australia. Passionate about sustainable food systems, she is also a Director on the boards of three not-for-profit organisations that operate in the food sustainability/community food space: Cultivating Community, 3000acres and the Open Food Network.

A Higher Degree by Research Master of Engineering (Environmental Engineering) student at RMIT University, Dianne has completed 4 university degrees with a more recent focus on environmental engineering, environmental management and sustainable food systems. Her current research project in her Higher Degree by Research, Watch My Waste, examines food waste in the Australian hospitality sector. Watch My Waste is a national study that aims to quantify food waste across the foodservice sector, as well as identify the contributing factors.

CONFERENCE PROGRAM

Tuesday 5th September 2017

9:00 am	Living Waterways Framework Pre Conference Workshop Presented by SPLASH
12:00 pm - 5:00 pm	Exhibitor Bump In
6:00 pm	2017 Informal Drinks at Coal and Cedar

Wednesday 6th September 2017

7:30 am	Conference Registration – Tea and Coffee on Arrival		
8:45 am	Conference Welcome and Housekeeping		
8:55am	Acknowledgement of Country		
9:00 am	Official Conference Opening Richard McManus and Keysha Milenkovic Co Presidents, Stormwater NSW		
9:10 am	Keynote Address Carol Ellinger Haddock, P.E. Deputy Director, Capital Projects Department of Public Works and Engineering, City of Houston, Texas		
9:55 am	Presentation and Open Forum Developing a Local Government Position on the NSW Stormwater Levy		
10:40 am	Morning Tea		
	Handover, Operation and Maintenance of Stormwater Assets	Design and Master Planning	Policy and Planning for Sydney
11:10 am - 11:40 am	Blacktown City Council: Getting the Most Out of Stormwater Pollution Control Devices Russell Cadman Blacktown City Council	Harnessing the Momentum – Incorporating the Lessons Learnt During Construction, Operation and Maintenance of Bio-retention Systems, Along with Observations of Natural Templates, Into the Design Process Nigel Bosworth Calibre Consulting	The Future of Stormwater Quality Targets in Sydney: A Review and Case Study Richard McManus Alluvium Consulting Australia
11:45 am - 12:15 pm	Auditing to Lower Maintenance Costs Murray Powell Optimal Stormwater	Transformation of an Urban Lake at Mt Annan, NSW Dov Ben-Avraham Northrop Consulting	Stormwater and Waterway Planning for Growth in Sydney Daniel Cunningham Sydney Water
12:15 pm	Lunch		
	Handover, Operation and Maintenance of Stormwater Assets	Capacity Building and Engagement	Building in Resilience - Construction Challenges and Opportunities
1:15 pm – 1:45 pm	Can MUSIC Reliably Predict Gross Pollutant Loads in Urban Catchments? Should it be Used to Forecast the Maintenance Requirements of Gross Pollutant Traps? Ben Penhallurick, Renew Solutions and Brad Dalrymple, BMT WBM	H2OK: Keeping our Waterways Healthy Kathryn Rhook ACT Government	Clever Use of Existing Infrastructure to Minimize Construction Cost – Tally Ho Stormwater Harvesting Project Rod Wiese Storm Consulting

CONFERENCE PROGRAM

Wednesday 6th September 2017 (cont.)

	Handover, Operation and Maintenance of Stormwater Assets	Capacity Building and Engagement	Building in Resilience - Construction Challenges and Opportunities
1:50 pm – 2:20 pm	Stormwater Quality Management: What's the Situation? Charles Coathup Renew Solutions	Stormwater Industry Mentoring Model (SWIMM) Kristy Good SPLASH Program and Blacktown City Council	Landscape on the Edge – How to Build Longer Term Resilience in Raingarden Planting Martin O'Dea Clouston Associates
2:25 pm – 2:55 pm	Stormwater Waste – Recycling NOW - Improving the Sustainability of our Treatment Systems Murray Powell Optimal Stormwater	Can We Use Choice Experiments to Evaluate Community Expectation and Willingness to Pay for Stormwater Quality Management? Ben Penhallurick Renew Solutions	Supercharging an Undercapacity Pipe that Just Needs to Take More – Case Study WestConnex Stage 2 David Gaskell Calibre Consulting
2:55 pm	Afternoon Tea		
	Handover, Operation and Maintenance of Stormwater Assets	Technology and Innovation	Policy and Planning
3:25 pm - 3:55 pm	Lessons Learnt from the Operation and Commissioning of the Angus Creek Stormwater Harvesting Scheme: How to Improve Water Quality and Extraction Capacity Craig Bush Blacktown City Council	The Next Evolution of Stormwater Harvesting Rod Wiese Storm Consulting	An Effects-based Assessment Framework for Stormwater and Wastewater Overflow Management in Lake Macquarie Frances Rutledge Hunter Water
4:00 pm - 4:30 pm	Without Data, You are Just Another Person with an Opinion Peter Terrett Rapid Map	Standardised Condition, Functionality and Risk Assessment of Stormwater Quality Improvement Devices in an Automated, Cloud-based Asset Management System Ben Penhallurick Renew Solutions	Landscape Hydration as the Underpinning of Future Cities and Human Landscapes Peter Stevens University of Newcastle
4:35 pm – 5:05 pm	Council Depots – What Lies Beneath Rod Wiese Storm Consulting	Physical Model Testing of an Improved WSUD Stormwater Strategy Christopher Drummond University of NSW	Moving Towards a Water Sensitive Newcastle Nathan Evans Newcastle City Council
5:05 pm	Close of Day 1		
7:00 pm - late	2017 Conference Dinner and Awards for Excellence – Newcastle Museum Pre Dinner Drinks from 7.00 pm. Guests seated at 7.30 pm. Featuring Mission to Mars Candidate, Dianne McGrath as the after dinner speaker.		

Thursday 7th September 2017

8:00 am	Conference Registration – Tea and Coffee on Arrival
8:30 am - 9:00 am	Stormwater NSW Annual General Meeting
9:15 am	Welcome to Day 2
9:20 am	Keynote Address Dr Jim Bentley Managing Director, Hunter Water
10:05 am	Keynote Address Dr Mehreen Faruqi MP Member of the NSW Legislative Council, NSW Greens

CONFERENCE PROGRAM

Thursday 7th September 2017 (cont.)

10:50 am	Morning Tea		
	The Role of Stormwater Assets in the Creation of Liveable and Resilient Cities	Stormwater Quality Management	The Role of Stormwater Assets in the Creation of Liveable and Resilient Cities
11:20 am - 11:50 am	Insights from Two Decades of Whole of Water and Energy Cycle Monitoring of a House in Carrington – Battery Storage and Rainwater Harvesting Professor Peter J Coombes Urban Water Cycle Solutions	A Project to Deliver Citywide Stormwater Quality Improvement Justin Foley ACT Government	Living Waterways for Resilient Communities Dr Andrew O'Neill Water by Design / Healthy Land and Water and Kristy Good SPLASH Program and Blacktown City Council
	Handover, Operation and Maintenance of Stormwater Assets	Stormwater Quality Management	The Role of Stormwater Assets in the Creation of Liveable and Resilient Cities
11:55 am - 12:25 pm	Can We Borrow Lessons from Ecological Monitoring to Better Understand the Maintenance Requirements of Our Stormwater Quality Improvement Devices? Ben Penhallurick Renew Solutions	Swimming in Parramatta River – Translating the Vision into Opportunities David Knights McGregor Coxall	Renewing Sydney Water's Stormwater Assets Through Channel Naturalisation to Improve Waterway Health and Liveability Dan Cunningham Sydney Water
12:25 pm	Lunch		
	Policy and Planning - Councils	Stormwater Quality Management	The Role of Stormwater Assets in the Creation of Liveable and Resilient Cities
1:25 pm - 1:55 pm	Updating Stormwater Management Policy in 2017 - What's the Focus? Nona Ruddell Fairfield City Council	Borg Manufacturing – Stormwater Champion or Shrewd Operator? Stephanie Noble Sustainability Workshop	Developing a Stormwater Runoff Amelioration Method – Case Studies in South Creek Stephanie Kermode Sydney Water
2:00 pm - 2:30 pm	Councils Creating Change – Driving the Sustainable Water Management Agenda in Local Government Alexa McAuley McGregor Coxall	The Importance of Determining Pollutant Loads from Varying Rainfall Events for Stormwater Harvesting and Reuse Schemes Craig Bush Blacktown City Council	Sustainable Water Management Within Private Recreation Land Mark Wainwright Alluvium Consulting Australia
2:35 pm - 3:05 pm	How to Make it Easy to Comply with a Stormwater DCP in a Notoriously Complex LGA Mark Liebman Sustainability Workshop	Bill Mitchell Park Stormwater Harvesting Hugh Williamson Optimal Stormwater	Effective Public Bushland Asset Management and its Role in the Environmental Sustainable Operation of the City of Newcastle Dr Anne Clements Anne Clements & Associates
3:05 pm	Afternoon Tea		
	Planning for Stormwater Harvesting	Design and Master Planning	Catchment Management
3:30 pm - 4:00 pm	Stormwater Harvesting and Reuse - A Checklist for Master Planning and Design Guy Amos Optimal Stormwater	Assessing Directly Connected Impervious Areas in Residential Subdivisions in Western Sydney Stephen Gribble Cardno	The Goliath of Catchment Management Planning Nona Ruddell and Leonie Gray Fairfield City Council

CONFERENCE PROGRAM

Thursday 7th September 2017 (cont.)

	Planning for Stormwater Harvesting	Design and Master Planning	Policy and Planning
4:05 pm - 4:35 pm	What Does it Cost to Build a Stormwater Harvesting Scheme? Findings from Council Schemes in Sydney Phillip Birtles Sydney Water	Understanding Complex Stormwater Systems through Physical Modelling Ben Modra University of NSW	Insights from Editing the Urban Book of the Revised Australian Rainfall and Runoff and Application of Case Studies Professor Peter J Coombes, Urban Water Cycle Solutions, Mark Babister, WMA Water and Steve Rosso
4:40 pm	Conference Wrap Up, Thanks and Exhibitor Prize Draw		
5:00 pm	Close of 2017 Stormwater NSW Conference		

Disclaimers

All conference activities and schedules are subject to change without notice. For any questions about the conference schedule please see the Registration Desk throughout the Conference.

Session attendance is on a first come, first served basis, except for the Technical Tour which is subject to pre registration.

Friday 8th September 2017 Technical Tour Program

The Conference Technical Tour will be held on Friday, 8th September and will showcase a range of Stormwater Projects through out the Hunter Region. Sites will include:

- Dixon Park and John Parade Raingarden and Biofilter sites. These sites have presented some unique challenges in establishing the systems in a highly exposed area adjacent to the beach.
- Ironbark Creek / Blue Wren Creek Rehabilitation Works
- Northlakes Estate Development at Cameron Park
- The Sanctuary at Fletcher Development

The Technical Tour will depart from the Newcastle Convention and Exhibition Centre at 9:00 am and will return at 4:30 pm. Morning Tea and Lunch will be provided for all delegates attending the Technical Tour.

SOCIAL EVENTS

Casual Welcome Drinks @ Coal and Cedar

380/ 382 Hunter Street, Newcastle

6:00 pm - 8:00 pm on Tuesday, 5th September

You'll need to be in on a few secrets to visit Coal & Cedar. This hidden speakeasy has no signage and no doorbell. Instead, you'll need to text a special code to a number on the wall and a host will open the door and usher you inside. Rest assured, it's worth the effort, having just won Best Regional bar in Australia 2016.

Once inside, you'll discover a moody, eclectic cocktail bar with an urban edge. Exposed brick walls and dark timber are complemented by dim lighting from vintage chandeliers. Holding fewer than 60 guests, it's this old world ambience that sets Coal & Cedar apart from Newcastle's bar scene.

Rather than the traditional Welcome Reception, this year Stormwater NSW is inviting those delegates who will be arriving in Newcastle on Tuesday night, to join us for casual networking drinks at this 'hole in the wall' - one of Newcastle's best kept secrets. Drinks will kick off at 6pm. Stormwater NSW will be paying for the first round of drinks at 6pm. Cash bar available for all other beverages.

*Please note that there is a \$20 EFTPOS minimum at this venue, and cash is preferred for ease of service.

2017 Stormwater NSW Awards for Excellence and Conference Dinner @ the Newcastle Museum

6 Workshop Way, Newcastle

7:00 pm - 11:00 pm on Wednesday, 6th September

The 2017 Stormwater NSW Awards for Excellence and Conference Dinner will kick-off at 7:00 pm for pre-dinner drinks, followed directly by a three course meal in the stunning 'Link Gallery' at the Newcastle Museum.

A ticket to attend the Conference Dinner is included in some Registration packages. Additional tickets for the Dinner can be purchased at \$125 per person.

The Conference Dinner will feature Dianne McGrath as our after dinner speaker. Dianne is one of only 7 Australians remaining in the last 100 candidates for the Mission to Mars Expedition.

REGISTRATION FEES

Please find below the list of Registration Fees for the 2017 Stormwater NSW Conference. All registration fees are inclusive of GST and are shown in Australian Dollars.

Standard Conference Registration Fees

Conference Registration will be available until Friday, 31st August, 2017.

Member Rate	\$AUD
Two Day Conference Registration including the Conference Dinner and 2017 Awards for Excellence	\$895
Two Day Conference Registration	\$795
Single Day Delegate Registration	\$525
Technical Tour Registration	\$325
Non Member Rate	\$AUD
Two Day Conference Registration including the Conference Dinner and 2017 Awards for Excellence	\$1045
Two Day Conference Registration	\$945
Single Day Delegate Registration	\$575
Technical Tour Registration	\$375

Social Functions and Student Registration Fees

The Stormwater NSW Awards For Excellence and Conference Dinner is being held on the evening of Wednesday, 6th September at the Newcastle Museum and although it is included in some Full Conference Registration Packages, tickets can also be purchased as an additional extra.

	\$AUD
Additional Conference Dinner Ticket	\$125

For further information or to register visit
www.snswconference.com.au or contact
GEMS Event Management Australia on **02 9744 5252**.