

# UDG Autumn Conference & Exhibition 2016

## *Embedding best practice and integrating innovation into Urban Drainage Management*



## PROGRAMME

### Wednesday 9<sup>th</sup> November

- 15.30 - 19.30 Registration
- 16.00 - 19.00 UDG Research & Development Workshop – UDG Modelling Code of Practice Update.  
Chair: Chris Digman, MWH
- 19.00 - 21.00 Evening meal

### Thursday 10<sup>th</sup> November

- 08.15 - 09.00 Registration and coffee
- 09.00 – 09.05 Welcome/Housekeeping
- 09.05 - 09.30 **Keynote by Malcolm Horne – Head of Asset Management, Severn Trent Water**

#### **09.30-10.45 Session 1: Strategic Modelling Programmes** **Chair: Gwion Kennard, Atkins**

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|-------------|--|-------------------------------|------------------|
| Paper 1     | Thames Water Drainage Strategy Plans, Principle 1 Partnership & Stakeholder Engagement                 | Andrew Western<br>James Hoare | MWH<br>Atkins    |
| Paper 2     | The Contribution of Sustainable Drainage Plans to DCWW's Outcome Delivery                              | Rhona Kirkham<br>Paul Grabham | RPS<br>Dwr Cymru |
| Paper 3     | Integrated Delivery to Provide Stakeholder Benefit - Anglian Water Integrated Urban Drainage Programme | Paul Brayshaw<br>Russ Wilkes  | Atkins<br>RPS    |
| 10.45-11.15 | Coffee/Exhibition  |                               |                  |

#### **11.15-13.00 Session 2: Managing Modelling Risk.** **Chair: Vicki Harty, Mott MacDonald**

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|-------------|--|-----------------------------|---------------------|
| Paper 4     | Are models too conservative leading to over designed solutions?    | Ed Gower                    | Black & Veatch      |
| Paper 5     | Strategic Growth Planning – Proactively Managing Uncertainty       | Alan Wisdich<br>John Barnes | Atkins<br>EnginSoft |
| Paper 6     | Development of a Rapid Response Operational Management System..... | Paul Taylor                 | Intertek            |
| Paper 7     | Update on SRM Structural Design of Sewer Renovation Systems        | Zac Alexander               | WRc Plc             |
| 13.00-14.00 | Lunch/ Exhibition  |                             |                     |

#### **14.00-15.40 Session 3: Understanding Inflow and Infiltration.** **Chair: Ed Bramley, Yorkshire Water Services**

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|-------------|--|-------------------------------------|-------------------------|
| Paper 8     | Innovation in the Monitoring, Modelling & Management of Inflow and Infiltration. | Jonathan Cutting<br>Kieran Williams | Mouchel<br>EM-Solutions |
| Paper 9     | Identifying & Addressing Groundwater Infiltration to Sewers                      | Richard Andrews<br>Graham Purvis    | MWH<br>Southern Water   |
| Paper 10    | Improved Modelling of Infiltration Flows   | Martin Osborne                      | Mouchel                 |
| 15.15–15.40 | <i>Awarding of the annual 'WaPUG' Prize – UDG AGM</i>                            | Elliot Gill                         | CH2M Hill               |
| 15.40-16.15 | Coffee/Exhibition  |                                     |                         |

**16.15 - 17.45****Workshops**

## Workshop 1

The Future of Flow Surveys.....

Chair: Jonathan Cutting, Mouchel

Planning a Flow Survey,  
 Comparison of Monitoring Standards  
 in the UK, USA & Australia/New Zealand,

Martin Allitt, RAA Ltd  
 Peter Stephens & Charles Wilson  
 Mott MacDonald

## Workshop 2

Understanding Uncertainty in Urban Drainage Modelling

Chair: Simon Tait, University of Sheffield

Quantifying Uncertainty in Integrated  
 Catchment Modelling  
 Uncertainty Propagation in Urban Drainage  
 Modelling: a tool for environmental decision  
 making

Ambuj Sriwastava & Simon Tait  
 University of Sheffield  
 Arturo Torres, Luxembourg Inst  
 of Science & Technology

## Workshop 3

Urban Drainage Modelling &amp; Asset Management

Chair: James Hale, RPS

Catchment Area Analysis for DSEAR Risk  
 Predicting Outcomes-PondSim Consequence  
 Modelling & Sewer Rehabilitation  
 Use of Pressure Logging to Understand &  
 Improve Rising Main Performance

Mofazzal Syed, Pick Everard  
 Calum Duncan, RPS  
 Geoff Ball & Andrew Warren, Severn Trent  
 Glyn Addicott, Hydraulic Analysis Ltd

19.15

Seats for Conference Dinner -

21.30

Local Evening

**Friday 11th November**

08.45- 09.15

Registration and Coffee

**09.15-11.00****Session 4: Optimising Model Use.****Chair: Adam Cambridge, Atkins**

Paper 11

Toronto Wet Weather Flow Project – The challenge of interceptors, tunnels &amp; infoworks

Claire Watson

Black &amp; Veatch

Paper 12

Early Warning System Applications at Thames Water

Pascal Lang

Thames Water

Paper 13

CENTAUR: Real Time Flow Control System for Flood Risk Reduction

Will Shepherd,  
Sonja OstojinSheffield Uni  
EM-Solutions

Paper 14

Smart Real-time Control of Water Systems

Lisbeth Birch  
Pederson

DHI, Denmark

11.00-11.30

Coffee/Exhibition

**11.30 – 13:00****Session 5: Insights from Around the UK.****(15 minute mini papers)****Chair: James Hale, RPS Group**

Paper 15

Modelling 3D Structures – Filey, North Yorkshire

Rachael Albrighton

RAA Ltd

Paper 16

The Challenge of Source Apportionment on the Largest Coastal Investigation in Wales' History

Richard Brown

Arup

Paper 17

Rapid Assessment Models for Section 16 Assessments

Fergus Graham  
Iain McLachlan

RPS

Paper 18	Together we can be Sustainable.	Gwen Rhodes Martin Kennedy	MWH NWG
Paper 19	Integrating Water & Wastewater Planning	Geoff Keam	Atkins
13.00-14.00	Lunch		
<b>14.00 - 15.40</b>	<b>Session 6          Modelling Case Studies.</b>		
	<b>Chair:                  Phil Hulme, Environment Agency</b>		
Paper 20	Using an Integrated Hydraulic Model to Identify Residual Surface Water Flood Risks alongside the Leeds Flood Alleviation Scheme	Llew Hancock Paul Davies	Arup
Paper 21	TwoD (Runoff) or not TwoD (Runoff)-That is the question	Martin Allitt	RAA Ltd
Paper 22	How to Build the Biggest Hydraulic Model in the World	Alastair Hall Charlotte Hunt	RPS
Paper 23	CSO Discharge Tracking & Trending – United States Experience	Srini Vallabhaneni	MWH Global
15.40	Presentation of the Adam Dean Award		
15.45-16.00	Closing comments Presentation of the Best Presentation Prize		