

# Climate Change, Water Management + the Construction Industry

CIC Yorkshire + Humber - Annual Conference 2013



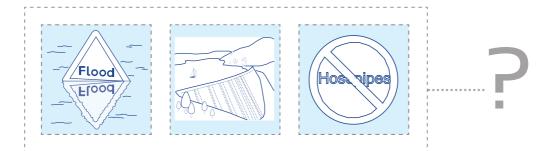
Yorkshire Water Conference Centre
Esholt Hall Estate,
Apperley Bridge

BD17 7QX



Construction Industry Council
Yorkshire & Humber





The World Health Organisation (WHO) states that in the past few decades there has been a distinct increase in the number of people affected by weather disasters such as flooding and drought. In Great Britain, this has been quite distinct, with drought and flood occurring within months of each other, and places that historically did not flood, now becoming water hot spots.

The media tells us that climate change appears to be the responsible party, and while global warming has been a contributing factor, is the manner in which we are constructing communities making the matter much worse? After all, we are not just talking about the inconvenience of having one's home or business under water, but also the health effects resulting from flood and drought – indeed this is the greatest risk.

Yet despite this, water security is low down the agenda compared to energy and carbon issues that have been more prominent themes over the past decade. It has taken until 2010 for water to be a considered a major enough topic to be considered by the annual World Economic Forum, who made it a major topic for the first time in 2010. In addition, the UN have declared 2013 as the 'International Year of Water Cooperation'.

It is with this background that the CIC Yorkshire and Humber chose to explore the issues of climate change, water management and the construction industry at this annual conference. We are well aware that we will never solve all the problems in one day and that we are only touching the tip of the iceberg, so to speak, but we hope that you will gain an insight into some of the challenges and solutions that face the industry.

Stefanie K Stead

Chair, CIC Yorkshire and Humber





# The CIC Yorkshire and Humber

The CIC Yorkshire and Humber provides a collective voice for the built environment within the region. We aim to do this by:

- Facilitating collaboration between construction professionals and other organisations across the region
- Sharing best construction practice
- Supporting those considering construction as a career
- Promoting and encouraging a sustainable construction industry

The Committee consists of representatives of all the major professional bodies and come from a variety of backgrounds. What we all have in common is enthusiasm to promote the construction industry across the diverse region of Yorkshire and Humber. Further details of the Committee are included in this booklet.

'Climate Change, Water Management and the Construction Industry' is our third regional conference, with previous topics covering 'Emerging from the Recession' (2011) including a key note speech from Paul Morrell, the then construction advisor to the Cabinet Office and 'The Urban Toybox' (2012) which formed part of the RIBA's national architecture festival.

For more information please visit our website:

www.constructionindustrycouncilyorkshireandhumber.co.uk

# The Yorkshire & Humber Annual Conference supports WaterAid

WaterAid's vision is of a world where everyone has access to safe water and sanitation.

Our mission is to transform lives by improving access to safe water, improved hygiene and sanitation in the world's poorest communities. These basic human rights underpin good health, education and livelihoods. Without safe water and sanitation there can be no sustainable development.

The water and sanitation crisis:

- ♦ 768 million people live without safe water.
- 2.5 billion people live without sanitation.



!!! !!! !!! !!

Lasmi Tarami, 11, at the WaterAid installed tap stand at her school in Lamidamar, Bardhya district, Nepal.

Find out more:

w: www.wateraid.org

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www.facebook.com/wateraid



# Programme

# Climate Questions - Julian Jones, Director of Water 21

The first UK SuDS system was built in 1990 to demonstrate the appropriate methodology, planning & regulatory metrics for the newly privatised water industry, which included catchment water balance, nutrient (soil carbon) cycling, public health standards and biodiversity gain analyses as important aspects of water infrastructure. However these planning and regulatory metrics are often still not applied despite evidence highlighting their importance.

# Water security, surplus and scarcity; the next big issue for property? - Colin Harrop, Director of Jones Lang LaSalle

The problems of water scarcity or surplus are global in nature, but some sectors face a greater risk than others. Dealing with the consequences of the effects of too little or too much water requires close local, regional or international cooperation, with credible solutions being best found through partnering with stakeholders, and even competitors.

#### Water in Transit - David Evans, Associate Director at Arup

Despite the recent occurrences of flooding in many areas of the UK over the past few years, others have often suffered drought, raising the question of whether surplus rainfall can be harvested and piped to areas where inadequate natural water storage facilities exist. In 1973 the government compiled a major report that advocated infrastructure to aid the trickle-down including building freshwater storage barrages, using canals, extending reservoirs and building new aqueducts and tunnels between river basins. However the privatisation of water in the 1980s has arguably resulted in this idea stalling, as well as a significant lack of investment. The Environment Agency is however re-considering the various options.

# Water and its impact on place-making and communities -

Sue Illman, president of the Landscape Institute

The importance of the landscape in responding to drainage and flooding issues cannot be underestimated and should be designed to withstand the fluctuations in rainfall, storage, and run off. The wider landscape also plays another important role. Standard responses to flooding include flood defences and raising accommodation above the potential water level on stilts or columns, which are often not integrated in the wider context, creating physical and visual barriers, isolated spaces and a distinct lack of identity. Unfortunately the role that landscape and urban design can play in the control of flooding is underestimated, and is often the first thing to be cut from the budget.

Lunch

# Incorporating Water Resource, Supply & Demand into Land Use Planning - Stephanie Walden, Land Use Manager at Yorkshire Water

Security of water supply to the general public is a measure of the resilience of water supplies against the risk of a deficit in the water available to meet essential human needs. The planning system is critical in assisting water companies to effectively plan for and provide the necessary infrastructure to service new development without detriment to existing properties or the environment. The efficient use of water, long term availability and quality is an important factor in sustainable development and should be reflected in the planning framework at both a national and local level.

## Water Management + BIM - John de Souza, Chair of BIM4Water, BIM Task Group

BIM4Water forms part of the BIM Task Group, which is supporting and helping deliver the objectives of the Government Construction Strategy, and the requirement to strengthen the public sector's capability in BIM implementation with the aim that all central government departments will be adopting, as a minimum, collaborative Level 2 BIM by 2016. There are considerable benefits for BIM adoption in the water sector including data drops, health and safety implications and the support of the Price Review process.

#### Rhubarb Rhubarb

The conference will finish off with a 'Petcha Kutcha' style event with a number of delegates speaking on the topic of 'Evaporation, Condensation, Precipitation, Construction'.

## Tours of the Water Works

There may be limited tours of the water treatment works subject to availability of transport and a maximum number of visitors that can be accommodated.









#### Julian Jones - Climate Questions

Julian is a water expert, providing technical project support and mentoring for students. Julian holds honorary posts at Cranfield Postgraduate Medical School and Gloucestershire NHS. He is also the Director of Water 21, a facilitating framework of water experts and community groups, who aim to assist with the global implementation of safe, economically viable and sustainable water management solutions. Water 21 promotes soft engineered, naturalistic, community led approaches that utilise grass roots and local knowledge.



# Colin Harrop - Water security, surplus and scarcity; the next big issue for property?

Colin is a Fellow of the Royal Institution of Chartered Surveyors (FRICS) and sits on the Yorkshire and the Humber Regional Board. He is also a Yorkshire Patron, and a media spokesman for RICS. He has appeared in many high profile publications commenting on a diverse range of issues and is currently appearing as an expert surveyor on BBC television.



#### David Evans - Water in Transit

David is a civil engineer leading Arup's water business in the west of the UK and is responsible for their services to Dwr Cymru Welsh Water and the Environment Agency in Wales. He has had a varied career with experience in the water sector spanning over 30 years and including projects in the UK, the Middle East, Africa and Asia. He describes himself on his LinkedIn profile as a 'value hunter with fresh, new ideas to create effective infrastructure'. He is a Fellow of the Institution of Civil Engineers and a Member of the Chartered Institution of Water and Environmental Management.



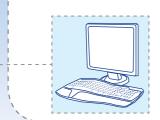
# Sue IIIman - Water and its impact on place-making and communities

Sue is President of the Landscape Institute and is the founder of landscape architecture practice Illman Young Landscape Design. She is particularly keen on the role of landscape in the mitigation of flooding and has expressed her dismay at delays to the implementation of the Flood and Water Management Act and the National Standard for SUDS, which seem not to have a chance of coming into force until April 2014 at the very earliest.



# Stephanie Walden - Incorporating Water Resource, Supply & Demand into Land Use Planning

Stephanie is Land Use Planning Manager at Yorkshire Water. Originally a geologist working in the mineral exploration industry, she has since worked in a variety of roles within YW including water quality and capital delivery but fell into planning in 1997 when asked to co-ordinate the company's environmental assessment work for construction of four large coastal waste water treatment works. Stephanie chaired the 'WaterAid in Yorkshire' fund raising committee for five years and through that work visited planners in Tanzania to advise on water infrastructure provision. She is now leading a new partnership with WaterAid Ethiopia and hopes to be visiting Ethiopia in November.



## John de Souza - Water Management + BIM

John is the Chair of BIM4Water which forms part of the government's BIM Task Group. The Building Information Modelling (BIM) Task Group are supporting and helping deliver the objectives of the Government Construction Strategy and the requirement to strengthen the public sector's capability in BIM implementation with the aim that all central government departments will be adopting, as a minimum, collaborative Level 2 BIM by 2016.













# CIC Yorkshire & Humber Committee Members

#### RIBA: Stefanie Stead - Chair

Stefanie is a Chartered Architect and leads the Education Team at Pearce Bottomley Architects. She sits on the RIBA Yorkshire Council and is a Regional Design Review Panelist for Yorkshire and Humber, and a judge for the York Design Awards 2012-2014, Construction Best Practice Awards 2012 and RIBA Yorkshire Awards 2011.

Stefanie.stead@pbarchitects.co.uk www.pbarchitects.co.uk

## CIOB: Colin France - Treasurer

Colin is a senior partner of Batty France and is a practising arbitrator, adjudicator and mediator. He is a member of the CIOB Professional Conduct Committee and has special responsibility for CPD Yorkshire Branch. Colin is Treasurer of Concourse, Chairman of City of Leeds YMCA and Property Secretary of the Methodist Church in Otley and Aireborough.

colin@battyfrance.co.uk www.battyfrance.co.uk

# Constructing Excellence Club: Peter Crosland

Peter is a Chartered Civil Engineer and a Chartered Water & Environmental Manager with over 30 years experience of working on a range of projects. He is the past chairman of the Yorkshire & Humber Constructing Excellence Club and currently sits on the Constructing Excellence Club steering group. Peter is the Managing Director of Tricorn Strategy, a civil engineering consultancy.

peter.crosland7@gmail.com

# CITB - ConstructionSkills: Steve Housden

Steve is the Sector Strategy Manager for the North of England with responsibility for Stakeholder engagement and development of the National Skills Academy for Construction projects. Steve also has over 20 years' experience in Careers Guidance; spent in a variety of roles from Careers Adviser to Strategic Development Manager.

steve.housden@cskills.org www.citb.co.uk

#### RICS: Rob Hindle - Vice-chair

Rob is a Fellow of the Royal Institute of Chartered Surveyors and has just starting his second term as Chairman of the RICS Yorkshire & Humber Regional board. He is co-founder and Director of White Hindle & Partners, Building & Project Consultants, with particular experience of MOD estates and civic buildings across the North of England.

rob@whplimited.co.uk www.whplimited.co.uk

# Regional BIM Hub: Tom Oulton – BIM Champion

Tom is the BIM Manager for East Riding of Yorkshire Council and is currently implementing the BIM regime to meet the Government Construction Strategy, and curating the council's approach to Soft Landings. Tom is BIM Champion and is involved in the BIM Task Group's BIM4LG – a dedicated resource tailored to assist Local Government Authorities adopt BIM.

Tom.Oulton@eastriding.gov.uk www.bimtaskgroup.org

#### ICE: Bob Bennett

Bob is a Chartered Civil Engineer and supports the ICE Region mentoring trainees linking in with universities, colleges and schools with a special interest in Apprenticeships. He is an ICE Reviewer for professional qualifications up to Chartered Civil Engineer level. Bob is a Chartered Member of the Institution of Occupational Safety and Health, and a Member of the Association for Project Safety.

bob.bennett@ice.org.uk www.ice.org.uk

## **Environment**: Graham Stead

Graham has worked in architecture, surveying, and engineering since 1969, forming the practice Graham L Stead Associates in 1981. He is a Fellow of the Association of Building Engineers, Corporate Member of the Society of Environmental Engineers, and Chartered Environmentalist with a particular interest in floods and the effects of the built environment on the ecology of watercourses.

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# Upcoming CIC Events (see www.cic.org.uk/events)

29th October 2013 – Happold Medal Lecture
30th October 2013 – 25th Anniversary Special - Advance II Event
31st October 2013 – CIC 25th Anniversary Scavenger Hunt

5th November 2013 – ecoSHOWCASE Leeds
5th November 2013 – BIM: Higher Education and Growth Seminar
6th November 2013 – 25th Anniversary Special – Economic & Policy Forum
7th November 2013 – CIC Gala Dinner
14th November 2013 – ABE 51st Annual Conference & Exhibition
26th 27th November 2013

26th-27th November 2013 - Education Estates 28th November 2013 - ecoSHOWCASE London

3rd December 2013 – ecoSHOWCASE Cardiff

# Building Control: Saira Is-Haq

Saira graduated from Leeds Metropolitan University under sponsorship by NHBC. Studying part time for a teaching qualification, Saira taught construction related modules to students at Leeds College of Building and worked closely on the judging panel with the Children's University sustainability programmes. She joined Assent Building Control in 2011 and is currently working towards becoming RICS qualified.

saira@assentbc.co.uk www.assentbc.co.uk

## RITP: Christine Taylor

Christine's background is in local government town planning. She has been involved in Structure Plans and Development Management for various local authorities. She is a member of the Regional Activities Committee of the Royal Town Planning Institute, and the Design Review Advisory Group. She is currently much involved in planning the regional events for the RTPI Centenary Year of 2014.

naywood@btinternet.com

# ICWCI: Tony Hickton

Tony is currently President of the Institute of Clerks of Works which he is very proud to hold as he is passionate about quality in construction. Over the last 20 years Tony has led his company to multiple award-winning status. His particular expertise in defect avoidance frequently involves undertaking forensic investigation within the industry and presenting on all aspects of quality management.

president@icwci.org www.icwci.org

#### CIAT: Nick Wilson

Nick has 43 years' experience working in the construction industry and is the treasurer for The Chartered Institute of Architectural Technologists (CIAT) Yorkshire and Humber. Nick is also a partner in P&N Design, who provide architectural services to private & commercial clients

wilson@pandndesign.co.uk

#### IstructE: Erol Erturan

Erol is a Chartered Civil and Structural Engineer and is an Apprenticeship Ambassador for the National Apprenticeship Scheme. Erol is the Managing Director of Adept Consulting Engineers, a civil and structural consulting engineering practice, which works using BIM technologies and has offices in Leeds and London.

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Construction Industry Council
Yorkshire & Humber









Yorkshire & Humber



The Construction Industry Council (CIC) is the representative forum for the professional bodies, research organisations and specialist trade and business associations for professional services providers in the construction industry. It provides a single voice for professionals in all sectors of the built environment through its collective membership of 500,000 individual professionals and 25,000 firms of construction consultants.

Established in 1988 with just five founder members, the CIC now occupies a key role within the UK construction industry, providing a single voice for professionals in all sectors of the built environment through its collective membership of 500,000 individual professionals and more than 25,000 firms of construction consultants.

The breadth and depth of its membership means that the CIC is the only single body able to speak with authority on the diverse issues connected with construction without being constrained by the self-interest of any particular sector of the industry.

#### Members of the CIC





















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#### Associates of the CIC

























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**Brochure produced by Sarah Foxwell Design** 





