

October 22 & 23, 2008 Croke Park, Dublin

**the 2nd national summit**

# water matter

**Working towards a sustainable future for Ireland's water needs**

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# introduction

October 22 & 23 2008,  
Croke Park Conference Centre, Dublin

## The 2nd National Summit

# Water

## Working towards a sustainable future for Ireland's water needs...

### Why attend?

Water is without doubt the biggest challenge of the 21st century. At a time when the water industry is experiencing unprecedented challenges and the question of infrastructure development looms large on the horizon, the National Water Summit is set to become this year's most topical industry event, with a programme focused firmly on usage **reform, quality and conservation** and **effective water management**. Innovation is vital and the National Water Summit will be canvassing some of the latest strategies for meeting demand and sourcing and securing water supply.

### About the conference

2008 has seen significant developments happening for one of Ireland's most important natural resources. One of the main challenges that Ireland faces over the next decade is to achieve 'good water status' for all waters by 2015 as set out in the Water Framework Directive (WFD). The industry is also facing the challenges beset from the profound impact of climate change which has been felt more than ever over the past 12 months. The water services investment programme comprises of some 955 projects with a capital value of 5.8 billion. The importance of the success and timely delivery of these initiatives is vital in order to meet the needs of our growing population and increasing commercial demands.

The 2nd National Water Summit will once again provide a forum for the entire water industry to debate the future direction of the sector. Following the success of our inaugural event, the 2nd annual National Water Summit will bring together Ireland's leading water experts who will meet to debate industry reforms, current challenges and opportunities, and other initiatives – critical for the sustainability of the water industry.

**Meet and network with the people shaping the future of the Irish water industry...**

### Who should attend

- Local Authority Managers
- Local Authority Engineers
- Heads of Water Services/Supply
- General Managers (Asset Mgt, Planning, Maintenance, Recycling, Wastewater Mgt)
- Project Directors/Managers
- Procurement Managers
- Infrastructure Managers
- Planning Officials
- Technical Managers
- Large Water Users
- Consultants
- Finance & Legal Managers

### Core subjects to be tackled include:

- Climate change and the required paradigm shifts in water management
- The carbon critical design agenda
- Water policy and water usage reform – strategic priorities
- New directives and standards – tools for the trade
- The water framework directive – the way forward
- Charging
- Water conservation
- Assessing the cryptosporidium risk – panel debate
- Security of supply
- Major capital water projects update
- Flexible approaches to infrastructure delivery
- Charging / water demand on schemes before and after charging
- Private schemes
- River basin management plans
- Relationship between septic tanks / wastewater treatment systems and water pollution
- Waste water management strategies
- Water/wastewater treatment

### Sample list of companies in attendance at the 2007 Water Summit

Trinity College, USGS Georgia Water Science Ctr, Department of the Environment, EPS, Northern Ireland Water, ESAI, A&L Goodbody Solicitors, South Western River Basin District, Celtic Water Management UK, KPMG, Scottish Water, Earth Tech Ireland, IFA, National University of Ireland, Bord na Móna Environmental Ltd, Muin Associates, Cavan County Council, Anord Control Systems Ltd, Tobin Consulting, Cork County Council, South Tipperary County Council, Sligo County Council, Severn Trent Services International, Fingal County Council, Limerick County Council, Parsons Brinckerhoff Ireland, Sisk Construction, Treatment Systems Services Ltd, McCann Fitzgerald, Wicklow County Council, Galway County Council, Shay Murtagh, Forfas, HRD Technologies

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WATER MATTERS

# keynote speakers



## **Dr Ike van der Putte, Director, RPS**

Dr Ike van der Putte is Director of External Relations and International Environmental Affairs with RPS in the Netherlands. RPS is an international consultancy providing advice on the responsible development of natural resources, land and property, the management of the environment and the health and safety of people. Dr van der Putte is a member of the Sustainable Development Task Force of the International Federation of Consulting Engineers (FIDIC) and former chairman of the environment committees of FIDIC and the European Federation of Consulting Engineers (EFCA). He is the main author of the FIDIC business guideline for environment and co-author of the FIDIC guidelines on sustainable development and project sustainability management. In the Netherlands he is chairman of the committee on natural disaster reduction and mitigation of the Netherlands Association of Consulting Engineers (ONRI) and advisory board member of the International Conference Centre (Amsterdam RAI – Aquaterra) on sustainable development in delta areas. He is currently chairman of the board of the UNEP Sustainable Buildings and Construction Initiative (UNEP/SBCI) and member of its Benchmarking and Climate Change Think Tanks.

## **Dr Colin Fricker, CRF Consulting**

Dr Colin Fricker has 30 years experience in environmental microbiology, much of it working directly with the water industry. He received his PhD from University of Reading 1987. Fricker was awarded the WH Pierce prize for "outstanding contributions to microbiology 1986". He was former Head of Microbiology, Thames Water, UK, and now runs an international consulting company covering many aspects of water quality. Dr Fricker is heavily involved in the development of methods for the detection of cryptosporidium in water. He was scientific adviser to the Royal Commission investigating the Sydney Water Crisis in 1998 and works extensively in North and South America, South Africa, Australia and New Zealand.



## **Professor John Anthony Allan**

Professor John Anthony Allan heads the Water Research Group at King's College London/SOAS. He specialises in the analysis of water resources in semi-arid regions and on the role of global systems in ameliorating local and regional water deficits. His original background was in hydrological and environmental sciences. Professor Allan now focuses on the social and political because they explain why people manage water as they do. In the past decade has provided advice to governments in the Middle East region [Jordan, Egypt, Libya, Palestine] and agencies [World Bank, FAO, UNDP, DFID, Netherlands MFA, Swedish MFA] and especially in the Middle East on water policy and water policy reform. Professor Allan most recent book is entitled *The Middle East water question: hydro-politics and the global economy*. The KCL/SOAS Water Research Group has had a major influence on strategic thinking on water resources by drawing attention to the non-water sector solutions that very effectively address water deficits – namely trade and socio-economic development. Their other research and consultancy focuses on water policy reform, on financing investment in water infrastructure and international relations over transboundary waters. He was awarded the Stockholm Water Prize in August 2008.



## **Tony Iles, MSc, BSc, Associate Director, Atkins**

A G Iles, associate director, Atkins Water & Environment, MSc, BSc and is an associate director within Atkins Environmental Sustainability team. Tony has over 30 year's practical experience of environmental assessment and management and is currently on the Carbon Critical Design leadership team at Atkins. He has recently completed a secondment to BERR where he assisted in writing the UK Strategy for Sustainable Construction. He is currently on part-time secondment to the Construction Industry Council where he is Chair of the Carbon Working Group. The role of this group is to work with the professional bodies and the Strategic Forum for Construction in the delivery of low carbon design. Tony has been fundamentally involved with Carbon Critical Design change process within Atkins, including the design of internal training courses and providing leadership on strategic discussions with Atkins clients; aiming to change the design question to provide a focus on zero carbon design and construction.

**Day 1 - Wednesday, October 22, 2008**

**8:00 Registration and a light breakfast**

**8:45 Chairperson's opening remarks**

**Professor Yvonne Scannel, Law School, Trinity College Dublin, and Environmental Law Group, Arthur Cox, Solicitors**



## THE BIG PICTURE

**8:50 MINISTERIAL ADDRESS:**

**Michael Kitt, Minister of State, Department of Environment**

**9:10 INTERNATIONAL ADDRESS:**

### **Climate Change and required Paradigm Shifts in Water Management**

Climate change and sustainability require new thinking and approaches. In various sectors of water management paradigm shifts are already visible and new ones are still needed.

Illustrative examples in various fields will be provided, including:

- Flood risk management ("from fail safe to safe fail")
- Water resource management (conservation and recycling)
- Waste water treatment (centralised/decentralised)
- Urban infrastructure and buildings (water aspects and multi-functional use)

**Dr Ike van der Putte, Director, RPS**



**9:40 KEYNOTE ADDRESS: Carbon Critical Design**

The Carbon Critical Design Agenda addresses the question of how we move from a "sustainable design" environment to a fundamental re-think of the design process in the water sector and generally across the built environment.

Carbon Design Awareness; Processes and Tools; Exemplar projects

**Tony Iles, Associate Director, Atkins**



## WATER POLICY & WATER USAGE REFORM – STRATEGIC PRIORITIES

**10:10 OPENING DEPARTMENTAL ADDRESS: Legislation required to support the river basin management planning process**

Colin Byrne will provide an update on the legislative provisions made to give effect to the river basin planning process. He will also outline forthcoming legislation intended to give further effect to the Water Framework Directive.

**Dr. Colin Byrne, Water Inspector, Water Inspectorate, Department of Environment, Heritage and Local Government**



**10:30 Morning break & exhibition viewing**

**10:55 River Basin Management Plans**

We have all heard about them! So what's going to be in them? What will they mean for Local Authorities and all other water stakeholders? Will there be real change or will it just be cosmetic? Ray Spain will give an introduction to the River Basin Management Plans and attempt to provide answers to some of the questions above.

**Ray Spain, Project Co-ordinator, South Eastern River Basin Project, Carlow County Council**



**11:20 Implementation of the Drinking Water Regulations – Providing Safe and Secure Drinking Water**

- An overview of the EPAs
- Enforcement activities to date
- The remedial action list
- The new approach of the Drinking Water Safety Plan

**Darragh Page, Inspector, Office of Environmental Enforcement, EPA**



**11:40 Dublin Region Water Supply – Future Strategic Source Needs and Options**

- Dublin Region Water Demand to 2030 and beyond
- Measures to minimise usage and waste
- Measures to optimise local production
- Strategic options for new long term sources



- Key criteria for assessment of these options

- Current project status

**Jerry Grant, Managing Director, RPS**

**12:05 Water Resources: The Next 50 Years**

Water resource management across England and Wales is currently at the cusp of an important step change. For over a century they have relied upon predicting future demands for water and building new resources to meet those demands. The very real challenges of climate change adaptation, the carbon agenda and sustainable development mean that the UK is now making a genuine shifting towards managing water demands downwards rather than relying exclusively on creating ever more resources.

This presentation will explore a number of key issues including the emerging links between carbon and water; metering, the use of tariffs and the concerns associated with water affordability.

**Trevor Bishop, Head of Water Resource Management, The Environment Agency, UK**

**12:40 Lunch & Exhibition Viewing**

**1:55 Welcome back from the afternoon chair**

## NEW DIRECTIONS AND STANDARDS-TOOLS FOR THE TRADE

**2:00 Integration of environmental policies through the spatial planning process : the case for Strategic Environmental Assessment (SEA) and The Water Framework Directive (WFD)**

**Declan Egan, Associate, Fehily Timoney & Co**

**2:20 The Benefits for Accreditation / Certification in Public Services. Use of International Standards**

**Pat O'Brien, Irish National Accreditation Board**

**2:40 Management & Service Delivery ISO 24510:2008**

Activities related to drinking water and wastewater services, guidelines for the assessment and for the improvement of the service to users

**ISO 24511:2008**

Activities related to drinking water and wastewater services, guidelines for the management of wastewater utilities' and for the assessment of wastewater services

**ISO 24512:2008**

Activities related to drinking water and wastewater services, guidelines for the management of drinking water utilities' and for the assessment of drinking water

**Dr Shirley Gallagh**



**3:00 Afternoon Break & Exhibition Viewing**

**3:20 Energy Standard ISO 393: Carbon Agenda: Case Study - Savings to be made**

**Dr John Ryan, COO, Certification Europe**

**3:45 PANEL DISCUSSION: The Water Framework Directive – the way forward**

**Panellists will include leading industry figures including:**

**Jack Keyes, Cavan County Council**

**Thomas Ryan, IFA**

**Dr Colin Byrne, Water Inspector, Water Inspectorate, Department of Environment, Heritage and Local Government**

**Dr Paul Johnston, Trinity College, Dublin**

**4:30 Day 1 close**

**Day 2 - Thursday, October 23, 2008**

**8:00 Registration and a light breakfast**

**8:45 Welcome from Morning Chair**

**Kevin Murray, Director (Ireland, Water), ATKINS**



## WATER QUALITY

### 8:50 INTERNATIONAL OPENING ADDRESS:

#### Three weddings and avoiding two funerals: water, food, energy and climate change

Three weddings:

- water from (clean) energy
- (clean) energy from water and the biosphere
- international 'trade' in energy and water

Avoiding two funerals - avoiding the terminal impairment of the environmental services of:

- the atmosphere
- water environments

**Professor John Anthony Allen, Kings College London (winner of the 2008 Stockholm Water Prize)**



### 9:30 Benefits and pitfalls of Cryptosporidium risk assessments

**Dr Colin Fricker, Principal, CRF Consulting**

### 9:45 PANEL DISCUSSION: Assessing the Cryptosporidium Risk

**Panellists will include leading industry figures including:**

**Dr Malcolm Bell, Director, Technopath**

**Dr Colm Fricker, Principal, CRF Consulting**

**Mary O'Callaghan, NUI Galway**

**Dr Christopher Luke, Emergency medicine, CUH**

**Mr Paul Dansie, Atkins**

### 10:30 Morning break & exhibition viewing

### 10:55 Case Study: Western River Basin District - Galway Crisis

- What's in the Water Framework Directive to protect water supplies?
- The causes of the Cryptosporidium outbreak in Galway city water supply
- Western River Basin District draft River Basin Plan
- Could the Cryptosporidium incident occur again?

**Shane O'Neill, M.D., O'Neill Groundwater Engineering**



## DEMAND MANAGEMENT AND SERVICE DELIVERY

### 11:20 Water Troubles In Northern Ireland: The Recommendations of the Independent Review Panel

- The context of the review
  - Terms of references
  - Recommendations on costs and funding
  - Recommendations on management, governance and delivery
- Professor Paddy Hillyard, Queens University, Independent Water Review Panel**



### 11:45 Water Conservation and Demand Management in the Rural Group Water Scheme Sector

- Key drivers for demand management strategies
- Key components of a rural water demand management strategy
- Metering as a key component
- Impacts on water demand as a consequence of implementing demand management strategies

**Colm Brady, National Federation of Group Water Schemes**

### 12:10 Water Charging on Public Water Schemes

- Up to Date Position on Metering Project
- Water Charges – Schools
- Water Charges – Commercial Sector
- Water Charges – Farming Sector
- Benefits of Metering in all sectors from Local Authority point of view
- Advantages and Disadvantages from Consumer point of view.
- Challenges for future.

**Kathleen McTiernan, Rural Water Liaison Officer, Co Sligo**

### 12:40 Lunch & Exhibition Viewing



### 1:50 Welcome back from Afternoon Chair

**Dr Peter Brennan, EPS Consulting**

### 1:55 PANEL DISCUSSION: METERS OR MAGIC! Is effective water management possible without metering?

- What does the industry want from metering?
- What do we really need to measure?
- Challenges of implementing charging schemes

**Panellists will include leading industry figures including:**

**Sue Scott, ERSI**

**Sinéad O'Brien, SWAN Environmental NGO**

**Colm Brady, National Federation of Group Water Schemes**

**Kathleen McTiernan, Rural Water Liaison Officer, Co Sligo**

**Professor Paddy Hillyard, Queens University, Belfast**

**Independent Water Review Panel**

**Alan Garthy, Fingal County Council**

### 2:40 On-site wastewater treatment systems and water quality: A need for a better understanding

The National on-site wastewater treatment systems (OSWTS) study aims to identify the potential risk of OSWTS to surface water quality, owing to system malfunction, lack of maintenance or incorrect site location. A component of this project involves a study of the effect of OSWTS on surface water quality in the Milltown Lake Catchment in Co Monaghan and aims to address the general deficit of reliable and quantifiable data on the collective influences of OSWTS on a catchment wide basis.

**Dr Valerie McCarthy, Post-postdoctoral Researcher, National Centre for Freshwater Studies, Dundalk Institute of Technology, Dundalk**



### 3:10 Protecting our water from landfill leachate contamination

- What is landfill leachate?
- The nature of the problem
- Innovative treatment solutions
- Regulatory requirements
- A case study in action

**Edel Brennan, Operations Manager, Response Group**



### 3:30 Afternoon Break & Exhibition Viewing

## WASTE WATER MANAGEMENT STRATEGIES

### 3:50 Waste Water Discharge (Authorisation) Regulations, 2007 - the situation so far

- The context of the regulations
  - Progress on authorisations to date
  - The future scenario
  - Implications for water services authorities
- Breen Higgins, Inspector, Environmental Licensing Programme, Office of Climate, Licensing & Resource Use**

### 4:10 Planning for cost effective waste water management

- Approach to recycling
- Biological options
- Developing cost effective processes
- Capital expenditure
- Waste to energy recovery
- SUDS
- Treatment
- Monitoring
- Implementation of standards
- Climate change

**Alec Fleming, County Manager, Clare County Council**



### 4:30 Case Study: Cavan County Council: Bye-Law for Septic Tanks

**Jack Keyes, Cavan County Council**



### 4:50 Conference Close

# RPS

## Water

**RPS have over 40 years experience in water resources and water management. We are at the forefront of developing sustainable water resources and water infrastructure and are leading implementation of the Water Framework Directive in Ireland.**

We employ over 1,200 highly talented people in Dublin, Belfast, Cork, Galway, Limerick, Waterford, Sligo and Letterkenny, over 200 of whom are water specialists.

Internationally, RPS water specialists are experts in water management, flooding and urban drainage and also specialise in human health, toxicology and environmental management.

Planning and Urban Design



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# Ireland & Northern Ireland

**RPS**  
West Pier Business Campus,  
Dun Laoghaire,  
Co Dublin,  
Ireland.

**RPS**  
Elmwood House,  
74 Boucher Road,  
Belfast  
BT12 6RZ

**RPS**  
Innishmore,  
Ballincollig,  
Co Cork,  
Ireland

**RPS**  
Lyrr Building,  
IDA Business & Technology  
Park,  
Mervue, Galway,  
Ireland.

Tel: +353 1 4882900  
Fax: +353 1 2835676

Tel: +44 (0) 28 90667914  
Fax: +44 (0) 28 90668286

Tel: +353 21 4665900  
Fax: +353 21 4873742

Tel: +353 91 534100  
Fax: +353 91 534199

# RPS

RPS is Ireland's largest all-island multi-disciplinary consultancy. We provide services in Sustainability, Planning, Urban Design, Environment and the full range of engineering consultancy disciplines. In Ireland, RPS employs 1,200 professional and technical support personnel based in 12 offices at various locations in Dublin, Belfast, Cork, Galway, Limerick, Waterford and Letterkenny. Our main areas of business range from feasibility, planning, design, stakeholder services, procurement, and construction supervision of major public and private sector projects.

RPS has over 40 years experience in water resources and water service areas, we are at the forefront of developing sustainable water resources and physical infrastructure. Our specialist engineers and scientists are playing a leading role in implementing the EU Water Framework Directive and in developing sustainable best practice in water resource management. We are consultants for most of Ireland's River Basin District (RBD) projects, including the Shannon, Cork, South Eastern and Northern Ireland regions.

We also have a major track record in catchment flood risk management and assessment. Projects include the River Tolka Flood Relief Scheme and we are currently completing a major flood study for the River Dodder. We played a leading role in the Greater Dublin Strategic Drainage Study and are leading advisers on Sustainable Drainage studies.

Internationally, RPS water specialists are experts in water management, flooding and urban drainage and specialise in human health, toxicology and environmental management.

RPS provides project management and design/advisory services on projects across many disciplines. Current projects include the Limerick Shannon Tunnel, Ballymore Eustace Water Treatment Plant, Extension to Dublin Airport Terminal 1, Limerick city water treatment plant, Dell TSS Limerick, Galway-Ballinasloe Motorway and Corrib Onshore Pipeline in Co Mayo. We are also managing the Government's five-year Climate Change Awareness Campaign.

#### RPS Services Include:

- Source Identification & Abstraction
- Source Protection & Management
- Water / Wastewater Treatment
- Flooding & Climate Change
- Water Quality
- Sustainable Urban Drainage
- Coastal Processes
- Marine Engineering

# ATKINS

Atkins is the largest engineering consultancy in the UK and Ireland, the largest multidisciplinary consultancy in Europe and the third largest design team in the world ([www.atkinsireland.ie](http://www.atkinsireland.ie)).

Our staff include engineers, architects, surveyors, cost and project managers, planners, management consultants, geologists and experts in information technology, telecommunications and environmental management. The majority of our work is focused on the efficient operation of our clients' capital programmes. We:

**Plan** all aspects of our clients' projects, conducting studies covering technical, logistical, legal, environmental and financial considerations.

**Design systems**, processes, buildings and civil structures. We develop cutting edge solutions and combine them with tried and tested technologies to achieve an optimal result.

**Enable** complex programmes, delivering one-off projects and managing ongoing processes to reduce timescales, cost and disruption, allowing our clients to focus on their core operations.

Our Irish offices are in Dublin, Cork, Galway and Belfast  
[www.atkinsireland.ie](http://www.atkinsireland.ie)



Founded in 1998, Response is one of Ireland's most dynamic and innovative providers of water treatment services for both public and private sector clients. From drinking water to the treatment of waste water and industrial effluent, Response offers a range of turnkey solutions for municipal and industrial plants incorporating design, contract, operation and maintenance capability.

With a reputation for innovation in water management, Response played an instrumental role in upgrading the works at the Terryland water treatment plant in Co Galway in order to combat the Cryptosporidium outbreak.

An Irish-owned company, comprising 450 employees, the Response Group offices are located in Cork, Charleville, Carlow and Donegal, with an overseas operation in Scotland. The company is committed to growing the business internationally and has recently entered into a cooperation agreement with a Polish company to establish a footing in this particular market.

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# water matter

**Working towards a sustainable future for Ireland's water needs**

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- One day €440 + Vat €92.40 = €532.40
- Two days €680 + Vat €142.80 = €822.80

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- One day €480 + Vat €100.80 = €580.80
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If you do not wish to receive information on other events organised by iQuest and The Sunday Business Post please tick here

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