

Index of all the previous conference presentations since 1982 can be viewed in the following table:

Year	Programme
2021	<p>Catchment Science and Management – The Role of Geoscience and Groundwater</p> <ul style="list-style-type: none"> • A Framework for Integrated Land and Landscape Management (FILLM), a systems-based approach to environmental management - Gretta McCarron (An Fóram Uisce) • Nature-based Catchment Management – opportunities to restore our waters whilst also achieving multiple benefits. - Patrick Morrissey (EPA) • Marl lakes on karstic limestone bedrock – a special Irish habitat? – Cilian Roden (Roden Ecology) • The scientific evidence-base underpinning the 3rd Cycle River Basin Management Plan - Marie Archbold (EPA) • The Agricultural Catchments Programme: a decade of agro-environmental studies - Per-Erik Mellander (Teagasc) • Local Catchment Assessment: From Deskstudy to Referral - Eoin McAleer (LAWPRO) • CatchmentCARE: Community actions for resilient ecosystems - Caoimhe Hickey (GSI) • Investigating the role of groundwater in catchment functioning in the Eddleston research catchment, Scotland - Alan McDonald (BGS) • Blanket bogs and streamflow – the under-appreciated role of groundwater - Ray Flynn (QUB) • Characterisation of flows in a western karst terrain, using combined hydrological and hydrogeological methods - Suzanne Tynan (Tynan Environmental) • The Recast of the Drinking Water Directive – Challenges and opportunities for protecting our sources - Lorraine Gaston (Irish Water) • Determining mitigation actions using the pollutant transfer continuum - Patrick McCabe (NFGWS) • Novel catchment modelling methods to support Irish Waters lead mitigation programme - Gerry Baker (ARUP) • Challenges and opportunities for catchment management in a karst environment – insights from a work in progress in the Rathcroghan Uplands, Co. Roscommon - Coran Kelly (Tobin Consulting Engineers)
2020	<p>Characterisation and Management of Groundwater in Limestones</p> <ul style="list-style-type: none"> • Irish Limestone Aquifers – Taly Hunter Williams (GSI) • An Introduction to the Irish Aquifer Properties Manual – Coran Kelly (Tobin Consulting Engineers) • The Contribution of Limestones in Ireland to our Natural Capital – Catherine Farrell (TCD) • Conceptual models for Northern Ireland's Cretaceous and Carboniferous Limestone Aquifers – Paul Wilson (GSNI) • GSI's Regional Assessments of Groundwater Resources: A Case Study from the Boyne Catchment, with a Focus on Limestones – Robbie Meehan (Consultant, GSI) • Are Abstractions Significant Pressures on our Water Resources? – Janka Nitsche (EPA) • Development of a Hydrogeological Conceptual Model for the Water Rock Urban Expansion Area in East Cork – Deirdre Larkin (Atkins) • National Water Resources Plan – The Future of Our Water Supplies – Miriam Grant (Irish Water) • A Framework for Drinking Water Source Protection – Barry Deane (NFGWS) • WFD Groundwater Status: The Whole Truth and Nothing but the Truth? – Philip Maher (EPA) • Practical Issues when Drilling Boreholes in Irish Limestones – David Ball (Consultant)

	<ul style="list-style-type: none"> • Hidden Limestone Landscapes – Geophysical Surveys across the Irish Carboniferous - Peter O'Connor (APEX Geophysics Ltd.) • Basement Construction in Dublin and Interaction with the Underlying Calp Limestone - Maurice Ryan (Byrne Looby) • Characterisation of a TCE Source Area in Fractured Limestone to Improve the CSM and Development of an Appropriate Remedial Strategy - Sean Needham (Geosyntec)
2019	<p>Groundwater: droughts, floods and climate change</p> <ul style="list-style-type: none"> • 'Managing Water Resources in the Context of Climate Extremes' – Bridget Scanlon (University of Texas, USA) • 'Regional Climate Model Projections for Ireland' – Paul Nolan (ICHEC) • 'Methods and Models to Quantify Climate-driven Changes in Groundwater Resources' – Matt Ascott (BGS) • 'Impact of climate variability on groundwater recharge to Irish bedrock aquifers' – Elia Cantoni (TCD/iCrag) • 'Irish droughts: Past and future perspectives' – Conor Murphy (NUIM) • 'Hydrogeological Response to the 2018 Drought in Ireland' – Philip Maher (EPA) • 'The Summer of 2018 – a Group Water Schemes perspective' – Joe Gallagher (NFGWS) • 'Irish Water's Response to the 2018 Drought as Co-ordinated by the Drought Action Team, and an overview of the demand-side and supply-side actions undertaken during the June to September period' – Tom Cuddy (Irish Water) • 'Groundwater Assets Supply-side Actions during the 2018 Drought' – Malcolm Doak (Irish Water) • 'Realignment of wellfield operations and well rehabilitation needs at the Bennetsbridge Public Water Supply' – Henning Moe (CDM Smith) • 'The Role of G1 Borehole Design in the operation and maintenance of a resilient groundwater supply' – Gerry Baker (ARUP) • 'Supply-Side Actions at the Portlaoise Public Water Supply Wellfield' – Deirdre Larkin (Atkins) • 'Climate Change – are we going to do something about it?' – Vincent Fitzsimons (SEPA, UK) • 'Groundwater Flooding in Ireland: New Methods for Flood Monitoring and Mapping' – Rebecca Bradford (GSI) • 'The importance of groundwater response times for understanding climate change impacts on groundwater systems' – Mark Cuthbert (Cardiff University, UK) • 'The impact of the 2015/2016 El Niño on rural water security in Ethiopia' – Rachel Bell (BGS, UK) • 'Water Resource Assessment, e-flows and abstraction management' – Conor Quinlan (EPA) • 'Groundwater storage and transmission in Irish Aquifers – Implications for yield sustainability' – Taly Hunter Williams (GSI) • 'The vulnerability of peatland ecosystems to a changing climate and increases in the frequency and severity of droughts' – Shane Regan (NPWS) • An interactive workshop outlining the use and benefits of open-source QGIS for hydrogeologists – Shane Carey (GSI)

2018	<p>Groundwater Matters: science and practice</p> <ul style="list-style-type: none"> • 'The Citizen Hydroscientist – benefits and challenges for hydrogeology' – Geoff Parkin (Newcastle University) • 'Satellite Flood Mapping: new approaches for monitoring and mapping groundwater flooding in Ireland' – Ted McCormack (Geological Survey of Ireland (GSI)) • 'Modelling Groundwater Flooding: A unique challenge requiring a novel solution: a case study of South' – Patrick Morrissey (University of Dublin Trinity College) • 'Water Tracing: Lifting the lid in the Neale, the Mayo Deel and the Rathcroghan uplands' – Coran Kelly (GSI & Tobin Consulting Engineers) • 'A habitats & EIA Directive perspective on hydrological/hydrogeological assessment – are there any simple answers?' – Patrick Roberts and Michael Watson (McCarthy Keville O'Sullivan Ltd.) • 'Waulsortian Limestone: Geology and Hydrogeology' – John Murray (National University of Ireland Galway (NUIG) & iCRAG) • 'Structural Controls on Groundwater Flow – From field studies through to 3D modelling' – John Walsh (University College Dublin (UCD)) • 'Quantitative analysis of Cenozoic faults and fractures and their impact on groundwater flow in Irish bedrock aquifers' – J.P. Moore (UCD) • 'Geophysical Investigation of Structural Groundwater Pathways' – Yvonne O'Connell (Apex Geoservices) • FloodRisk2WellWater: a socio-hydro(geol)logical approach to combining science and practice for mitigating flood-trigger groundwater contamination' – Luisa Andrade (UCD) • 'Chemical analysis of groundwater focusing on potential arsenic contamination of drinking water supply boreholes in Chikwawa, Malawi' – Laura McGrath (ARUP) • 'Agro-chemicals in Irish Groundwaters: Preliminary findings of anthelmintic drug occurrence in Irish karst and fractured aquifers' – Damien Mooney (iCRAG, Trinity College Dublin, Teagasc) • 'Karst "Open Heart Surgery" time series analysis methods and visualisation' – Lea Duran • 'Engineered streambeds for water quality enhancement in urban streams' – John McCray (Colorado School of Mines) • 'The remediation of the east tip on Haulbowline Island' – Cormac Ó Súilleabháin (Cork County Council) • 'Planning and development within a karst dominated landscape in County Monaghan: Case studies and experiences' – John Paul McEntee (Monaghan County Council) • 'Groundwater nitrate attenuation versus dissolved gas production: A hierarchy of scale' – Eoin McAleer (RPS) • Pesticides and metabolites in groundwater' – Sarah-Louise McManus (TCD) • 'Groundwater as a source and pathway for antibiotic-resistant infection in the Republic of Ireland' – Jean O'Dwyer (University College Cork (UCC)) • 'Cryptosporidium in Irish waters: risk, prevalence and intervention' – Julie-Anne
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	<p>Naughton (Dublin Institute of Technology (DIT))</p> <ul style="list-style-type: none"> • 'Effective and efficient pump systems' – John Calder (Dura Pump UK) • 'A proposed classification of water supply boreholes in Ireland based on treatment requirements' – David Ball (Independent Hydrogeologist)
2017	<p>Developments in Irish Hydrogeology in a Changing Water Services and Planning Environment</p> <ul style="list-style-type: none"> • 'Change Thoughts, Change Destiny' – Donal Daly (Environmental Protection Agency) • 'Sustainable groundwater resource planning and management' – Mike Packman (Southern Water) • 'National Water Resources Plan' – Angela Ryan (Irish Water) • 'Know your ZOCs from your SPAs – Groundwater Source Protection terminology and usage' – Taly Hunter-Williams (Geological Survey of Ireland) • 'Water Quality – "Prevention or Cure" a Local Authority perspective' – Michael O'Hara (Laois County Council) • 'Towards energy-efficient water wells through optimization of well hydraulics' – Georg Houben (Federal Institute for Geosciences and Natural Resources) • 'Understanding pathways transferring nutrients to streams – implications for water quality management strategies' – Jenny Deakin (Environmental Protection Agency) • 'What are the main sources of nutrient inputs to Ireland's aquatic environment? Results from the SLAM framework' – Eva Mockler (University College Dublin) • 'The influence of hydrogeological setting on nitrate fate and transport in Irish and British aquifers and the implications for catchment management' – Alison Orr (ARUP) • 'The application of quantitative trace techniques to assess diffuse metal contamination from the former Avoca mine site' – Patrick Barrett (CDM Smith) • 'Implementing guidance on the authorisation of discharges to groundwater – experience from one Local Authority' – Emmet Conboy (Meath County Council) • 'Socio-hydrogeology: bridging the gap between science and society to better address aquifer contamination' – Viviana Re (University of Pavia) • 'Development of a focused Integrated Catchment Management toolkit for use in secondary schools' – Grainne Barron (National University of Ireland Galway) • 'A sensitivity analysis in relation to climate change impacts on groundwater recharge to Irish Fractured-bedrock aquifers' – Elia Cantoni (Trinity College Dublin/ ICRAAG) • 'Dye tracing groundwater in the Rathcroghan Uplands, Co. Roscommon' – Natalie Duncan (Independent Geoscientist) • 'Reactivation of karst springs after regional mine dewatering in the Tata area, Hungary' – Attila Kovács (Geological and Geophysical Institute of Hungary) • 'Monitoring, mapping and modelling groundwater floods in Ireland' – Owen Naughton (Geological Survey of Ireland) • 'How understanding hydrogeology can reduce risks on large linear infrastructure projects' – Catherine Buckley (ARUP)

	<ul style="list-style-type: none"> • 'Space-borne interferometric synthetic aperture radar (InSAR) for detecting geo-risks relate to hydrogeology' – Alessandro Novellino (British Geological Survey) • 'Arsenic contamination of drinking water in Ireland: A spatial analysis of occurrence and potential risk' – Ellen McGrory (National University of Ireland Galway) • 'Drinking water supply sources & dissolved organic carbon: Irish groundwater versus surface water' – Pamela Bartley (Hydro-G) • 'Identifying sources of natural organic matter (NOM) and trihalomethanes (THMs): Case study from a groundwater spring in a karst region in the west of Ireland' – Connie O'Driscoll (Ryan Hanley) • 'The Dingle Toe: strategic use of groundwater to reduce water treatment efforts, while improving well installations at the same time' – Malcolm Doak (Irish Water) • 'Groundwater dissolved organic carbon (DOC) and human health risk: Some issues to consider' – Shane Regan (Trinity College Dublin)
2016	<p>Sustaining Ireland's Water Future: The Role of Groundwater</p> <ul style="list-style-type: none"> • 'Sustainability of groundwater resources: conceptual evolution, opportunities and challenges – John M. Sharp (The University of Texas) • 'Field Studies of Chlorinated Plume Behaviour in Sedimentary Rock: from Source to Discharge Zones' – Beth Parker (University of Guelph) • 'Groundwater in Irish society: 40 years of IAH Irish Group and 45 years of modern hydrogeology' – David M. Ball (Hydrogeologist) • 'Looking to the future: opportunities and challenges in hydrogeology education and training' – Bruce Misstear (University of Dublin Trinity College and Vice President of IAH) • 'Progress in implementation of the Water Framework Directive in Ireland' – Donal Daly (Environmental Protection Agency) • 'Water Framework and Groundwater Directive implementation: A UK perspective' – Rob Ward (British Geological Survey) • 'SEVESO III and assessing risk to the water environment' – Teri Hayes (AWN Consulting) • 'Hydrogeological Characterisation and Catchment Management at Fardrum and Roosky Turlough SAC. County Fermanagh, Northern Ireland' – Les Brown (Arup) • 'Natural attenuation of chlorinated solvents in the hyporheic zone: Insights from a multi-scale field investigation on a gaining lowland river in the UK' – John Weatherill (Geosyntec Consulting) • 'Provenance, pathways and geothermal potential of Irish thermal springs: a multidisciplinary investigation' – Sarah Blake (Dublin Institute for Advanced Studies) • 'The impact of domestic wastewater effluent on private wells: An evaluation of contamination fingerprinting techniques' – Christopher Fennell (University of Dublin Trinity College) • 'Changes in groundwater storage under future climate change' – Kevin Hiscock (University of East Anglia) • 'Making the red one green – renewable heat from abandoned flooded mines' –

	<p>David Banks (Holymoor Consulting Ltd. and University of Glasgow)</p> <ul style="list-style-type: none"> • 'Zooming in with Groundwater 3D: Focused GSI investigations in priority areas' – Sophie O'Connor (Geological Survey of Ireland) • 'Getting the buggers to listen – some observations of the trials, tribulations and success in delivering (and using) relevant scientific research' – Bob Harris (University of Sheffield) • "It may be excreta to you, but it's my bread and butter" – research into onsite wastewater treatment' – Laurence Gill (University of Dublin Trinity College) • 'Groundwater research in coastal catchments: new results, new challenges' – Colin Brown (National University of Ireland, Galway)
2015	<p>Integrated Hydrogeology: Contemporary Principles, Policy and Practice</p> <ul style="list-style-type: none"> • 'An integrated whole system approach to the subsurface: the future for hydrogeology and hydrogeologists' – Denis Peach (British Geological Survey and Imperial College London) • 'Hydrophilanthropy Gone Awry - How people promoting clean water availability, sanitation, and hygiene (wash) can actually injure communities' – David Kreamer (University of Nevada and Vice President for North America, International Association of Hydrogeologists) • 'The future of groundwater in the National Water Supply' – Angela Ryan (Irish Water) • 'Poor drinking water quality in private wells: the effectiveness of a communication strategy' – Margaret Keegan (Environmental Protection Agency) • 'Overview of recently published Guidance for EPA Licensees for reporting compliance with the Groundwater Regulations 2010' – Pól Ó Seasnáin (Environmental Protection Agency) • 'Legal protection for ecologically significant groundwaters under EU Law' – Owen McIntyre (University College Cork) • 'Defining hydrological damage in Groundwater Dependent Terrestrial Ecosystems' – Paul Johnston (Trinity College Dublin) • 'The Floods Directive and National CFRAM programme: Assessment of groundwater flood risk' – Mark Adamson (Office of Public Works) • 'Soils of Ireland: the Irish Soil Information System' – Iolanda Simo (Teagasc) • 'The IAH Early Career Hydrogeologists' Network – What role can early career hydrogeologists play as groundwater advocates?' – Gillian Hurding (IAH Early Career Hydrogeology Network) • 'The Irish Centre for Research in Applied Geosciences (iCRAG) – a major new investment in research by SFI and industry' – John Walsh (iCRAG, University College Dublin) • 'Using GIS and natural tracers to evaluate groundwater discharge to lakes' – Jean Wilson (Trinity College Dublin) • 'KARSYS approach – an explicit conceptual 3D model for karst hydrogeology' – Jonathan Vouillamoz (Swiss Institute for Speleology and Karst Studies, Switzerland) • 'The capabilities of modern geophysical borehole logging equipment and its

	<p>integration with geological logs and surface geophysics’ – Fridtjov Ruden/Balazs Rigler (RudenAS)</p> <ul style="list-style-type: none"> • ‘Recent developments in surface geophysical surveying relevant to groundwater exploration and protection’ – Peter O’Connor/ Shane O’Rourke (Apex Geoservices) • Hydro-structural characterisation of catchments using multi-scale geophysical techniques’ – Rachel Cassidy (Agri-Food and Biosciences Institute)
2014	<p>Water Resource Management: The role of hydrogeology</p> <ul style="list-style-type: none"> • ‘Experience of well drilling and testing in karst’ – Neven Kresic (AMEC Environment & Infrastructure, Inc., USA) • ‘How to construct a water supply borehole in Ireland’ – David Ball • ‘The geochemistry of European bottled waters’ – Kevin Cullen (Verde Environmental Group) • Water quality in Irish karst aquifers’ – Catherine Coxon (Trinity College Dublin) • ‘Coastal lagoons and their watersheds as GWDE: A case study in the southwest coast of Portugal’ – Antonio Chambel (University of Evora) • ‘Assessing significant damage to selected Irish GWDTE types as part of groundwater body classification under EU Water Framework Directive’ – Sarah Kimberley • ‘Ecohydrological methods for the investigation of significant damage at GWDTE’ – Gareth Farr (BGS) • ‘Guidance on the authorisation of direct discharges to groundwater’ – Pat Byrne & Matt Craig (Environmental Protection Agency) • ‘Groundwater flooding in Irish karst groundwater flow systems’ – Owen Naughton (Trinity College Dublin) • ‘New method for groundwater monitoring at mine sites’ – Simon Sholl (Schlumberger Water Services) • ‘Exploration drilling – Guidance on discharge to groundwater’ – Billy O’Keeffe (Exploration and Mining Division, Department of Energy, Communications and Natural Resources) • ‘Rural borewell scheme exploratory drilling providing qualitative and quantitative hydrogeological information in Northern Ireland’ – Conor Lydon (White Young Green) • ‘Source protection for Group Water Schemes – working with local communities’ – Monica Lee (Geological Survey of Ireland/National Federation of Group Water Schemes) • ‘Difficulties in maintaining post-treatment quality in public water supplies’ – Martin Lavelle (Galway County Council) • ‘Groundwater as a source of public water supply: technical problems with existing sources and drilling solutions sought’ – Pamela Bartley (Hydro-G)
2013	<p>Groundwater and Catchment Management</p> <ul style="list-style-type: none"> • ‘The Catchment Based Approach’ Bob Harris (Defra and University of Sheffield) • ‘A healthy catchment initiative for Ireland – making integrated catchment management happen’ – Donal Daly (Environmental Protection Agency)

	<ul style="list-style-type: none"> • 'Is catchment management feasible for improving quality of public groundwater supplies?' – Stephen Buss (ESI Ltd.) • 'Groundwater modelling tools used in catchment management.' – Mark Whiteman (Environment Agency) • 'Phosphorus attenuation potential along the nutrient transfer continuum in a karst spring zone of contribution' – Per-Erik Mellander (Teagasc) • 'Developing groundwater conceptual models for the UK demonstration test catchments' – Melinda Lewis (British Geological Survey) • 'Hydrogeological pathways in two contrasting catchments – implications for management' – Jenny Deakin (Trinity College Dublin) • "...and then it goes to the sea": The ecological approach to understanding coastal catchments – Tiernan Henry (National University of Ireland Galway) • 'Pathways Catchment Management Tool – investigating critical source areas with hydro(geo)logical knowledge' – Eva Mockler (University College Dublin) • 'Programme of Measures' – Phil Jordan (University of Ulster) • 'Trend reversal of nitrate concentrations in groundwater' – Lærke Thorling (Geological Survey of Denmark and Greenland) • 'Catchment Management – A Local Authority Approach' – Anne Goggin (Limerick County Council) • 'Groundwater Safeguard Zones in England' – Tim Besien (Environment Agency) • 'Water Quality and Source Protection – A Local Authority Approach' – Bernie O'Flaherty (Monaghan County Council)
2012	<p>Groundwater: Recent Developments in Discharge & Dewatering</p> <ul style="list-style-type: none"> • 'Shale Gas and Groundwater Protection – The Regulatory Balance' - Tony Marsland, Independent Consultant (former Groundwater Policy Manager, UK Environment Agency) • 'Managing the Environmental Risk Associated with Shale Gas Hydraulic Fracturing using a DFN Approach' – Mark Cottrell (Golder Associates) • 'Shale Gas Fracking in Ireland' – Gareth LI Jones (Conodate) & Davide Gallazzi, (Northwest Environmental) • 'EPA Regulation of Mining Operations: The Story so Far' – Pól Ó Seasnáin (EPA) • 'Quantifying the Hydrogeological Impacts of a Mining Operation as part of an EIA' – Kevin Cullen, Consultant • 'Groundwater Issues in the Tynagh Mine area' – Tiernan Henry (NUIG) • 'The Extractive Waste Regulations: EPA Guidance to Local Authorities' – Duncan Laurence, (Duncan Laurence Environmental Ltd.) • Regulation of Quarries: Understanding Section 261A of the Planning Acts' – Brendan Slattery (Arthur Cox & Assoc) • 'Environmental Implications of Quarry Legislation' – Sean Moran (OCM) • 'Authorising Discharges to Groundwater: Issues & Technical Assessments' – Donal Daly (EPA) & Henning Moe (CDM Smith) • 'Progression in Groundwater Protection and Management: A Local Authority Perspective' – Brendan Cooney (Wexford County Council) • 'Graveyards & Groundwater' – Catherine Buckley (Arup)

	<ul style="list-style-type: none"> • 'Projected Agricultural Changes, Implications for Groundwater Quality and New Mitigation Measures' – Karl Richards (Teagasc)
2011	<p>Evolving Hydrogeology</p> <ul style="list-style-type: none"> • 'The role of the International Association of Hydrogeologists (IAH) in the Evolution of Hydrogeology and Water Management' - Willi Struckmeier (President IAH International) • 'Integrated groundwater and surface water modelling - benefits realisation' - Jan van Wonderen (Mott MacDonald) • 'Integrating surface and sub-surface water flow simulations for improved climate change impact assessments on the groundwater system' - Okke Batelaan (Free University, Brussels) • 'Groundwater flooding mechanisms' - Kieran O'Dwyer (J B Barry and Partners Ltd.) • 'Mapping groundwater flooding in the Republic of Ireland' - Rachel Hardisty (Mott MacDonald) • 'EPA Code of Practice for Unregulated Waste Disposal Sites - Guidance for Investigations' - Jim Moriarty (EPA) • 'The new EPA code of practice matrices for scoping site investigations and assessing groundwater risk' - Darragh Musgrave (WYG) • 'Chlorinated hydrocarbons – different remedial options and regulatory approaches' - Olivia Hall (Regenesis) and Kevin Forde (URS) • 'Groundwater remediation of chlorinated ethenes – implementation of a pilot study in an Irish context' - Eleanor Burke (Malone O'Regan) • 'Enforcement of Contaminated Land and Groundwater: The road ahead' - Kevin Motherway (EPA) • 'An international view on mine dewatering' - Paul Heaney (RPS Aquaterra) • 'Geothermal energy utilisation - an international perspective' - Riccardo Pasquali (GeoServ) • 'Geothermal developments in Ireland' - Gareth Ll. Jones (Conodate, Geothermal Assoc. Ireland) • 'Groundwater nutrient patterns in two intensive agricultural catchments' - Per-Erik Mellander (Teagasc) • 'Reducing abstraction pressure on groundwater sources: the lessons of universal metering in the Group Water Scheme sector' - Barry Deane (National Federation of Group Water Schemes)
2010	<p>Groundwater in the Hydrological Cycle - Pressures and Protection</p> <ul style="list-style-type: none"> • 'Groundwater Recharge: Influence of Glacial Tills on Resource Assessment and Groundwater Protection in Ireland' - Bruce Misstear (Trinity College Dublin) and Dr. Les Brown (SLR Consulting) • 'Groundwater Flow in Karst Systems' - Dr. David Drew (Trinity College Dublin) • 'Groundwater Flow Regimes in Irish Poorly Productive Aquifers' - Dr. Jean-Christophe Comte (Queens University, Belfast) • 'Groundwater Supply Development in Sand & Gravel Aquifers' - Gerry Baker (WYG Ireland)

	<ul style="list-style-type: none"> • 'Surface Water - Groundwater Interactions' - Dr. Geoff Parkin (University of Newcastle) • 'Groundwater Dependent Ecosystems' - Dr. Geert van Wirdum (Deltares Subsurface and Groundwater Systems) • 'Multiple Flooding Mechanisms in Ennis Town and Environs' - Mary Burke (Clare County Council) • 'Agriculture Landspreading & Set-back Distances' - Donal Daly (Environmental Protection Agency) • 'The Assessment and Prioritisation of Point Sources of Groundwater Contamination in Ireland' - Dr. Marcus Ford (Ford Consulting Group) • 'Groundwater Impacts from Mining: Irish Case Studies' - Geoff Beale (Schlumberger Water Services UK Ltd) • 'Environmental Liability Directive Implications for Groundwater' - Kevin Motherway (Environmental Protection Agency) • 'Legal Perspective on Groundwater Protection' - Deborah Spence (Arthur Cox) • 'Delineating Source Protection Zones and Zones of Contribution for Monitoring Points' - Coran Kelly (Tobin Consulting Engineers) • 'EPA Guidance on Protecting Groundwater Supplies' - Margaret Keegan (Environmental Protection Agency) • 'Impacts of Climate Change on Rainfall, River Discharge and Sea Level Rise' - Dr. Tido Semmler (Met Éireann) • 'What will the Impacts of Climate Change be for Groundwater Systems in Ireland?' - David Ball • 'Implications of Climate Change on Groundwater Resources' - Dr. Kevin Hiscock (University of East Anglia)
2009	<p>Groundwater: A New Framework</p> <ul style="list-style-type: none"> • The New Groundwater Regulations 2009 - Dr. Colin Byrne, Water Inspectorate, Department of Environment, Heritage and Local Government. • Chemical and Quantitative Status of Groundwater Bodies: A measure of the present; a signpost to the future - Donal Daly & Matthew Craig, Hydrometric & Groundwater Section, EPA. • Practical implementation by Local Authorities of the WFD with respect to Groundwater - Ray Spain (SERBD, Carlow County Council), Grace Glasgow & Kieran Fay (RPS Consulting Engineers). • The Water Framework Directive and the Groundwater Information Renaissance - Natalya Hunter Williams (GSI), Donal Daly (EPA), Matthew Craig (EPA), Monica Lee (GSI). • Technical Guidance Towards Groundwater Abstraction Licensing in Ireland - Henning Moe (CDM) • Status Classification of Groundwater Bodies Containing Closed Mine Sites for the Water Framework Directive - Eibhlín Doyle & Gerry Stanley (GSI) • Spring into Action - Spring and Streamflow Monitoring to Meet Water Framework Directive and Related Hydrometric Requirements - Stewart Child, Hydro-Logic

	<ul style="list-style-type: none"> • Groundwater Classification – How Does It Influence Regulation at a Site Scale? Vincent Fitzsimons & Malcolm Roberts (SEPA) • Large Scale Discharges to Groundwater: Risk Mapping & Framework for Site Assessments - Paddy Kavanagh, Tommy Bree & Rose Walsh (ESBI & WRBD) • The new “Code of Practice Wastewater Treatment & Disposal Systems Serving Single Houses” - Margaret Keegan, EPA. • Some Aspects of the Hydrogeology of the Carboniferous Limestone in Ireland - Dr. David Drew, Trinity College Dublin • Origin, transport & monitoring of particles and microbial contaminants in karst aquifer systems - Dr. Nico Goldscheider, University of Neuchâtel, Switzerland • Groundwater Dependent Terrestrial Ecosystems <ul style="list-style-type: none"> • 1: Hydrology & Hydrogeology of Turloughs: How Turloughs Fill & Drain - Presented by Paul Johnston, Trinity College Dublin • 2: Turlough Water Quality and Implications for Groundwater Management. - Presented by Dr. Catherine Coxon, Trinity College Dublin • Protecting the Source: Challenges for Communities in Groundwater Zones - Brian MacDonald, National Federation of Groundwater Schemes • Determining the Sustainable Yield of Groundwater Supplies - Gerry Baker, WYG Ireland • Has Groundwater a Role In Supplying Dublin's Water Needs? - Kevin T. Cullen, Consultant
2008	<p>Groundwater: A Resource at Risk?</p> <ul style="list-style-type: none"> • Ecohydrology & Groundwater Dependent Terrestrial Ecosystems - Prof Okke Batelaan, University of Brussels • Legal Issues on Groundwater and Sustainability in Ireland - Dr Yvonne Scannell, Department of Law, TCD & Arthur Cox Solicitors • Legal Aspects peculiar to Groundwater Development Dr Peter Howsam, Reader in Water & Environmental Law, Cranfield University • Groundwater Supply: Local Authority Experience Kieran Madden, Senior Engineer, Water Services, Roscommon County Council • Tracking the Source of Faecal Contamination of Water Prof. Martin Cormican, Professor of Clinical Microbiology, and Siobhan Dorai-Raj, Environmental Change Institute, NUI Galway • Microbial Communities in Groundwater and their Potential use for Biomonitoring Dr Nico Goldscheider, University of Neuchâtel Switzerland • An Overview To Human Health Risk Assessment Tools And Application To Assessing Chronic Risks To Human Health From Contaminated Shallow Water Yolande Macklin, Atkins (UK) • Remediating Environmental Damage under the Environmental Liability Directive: a competent authority strategy Johnathan Derham, Environmental Protection Agency • The use of ‘Magic Numbers’ in the assessment of contaminated land in Ireland Kevin Cleary, White Young Green • Enhanced bioremediation and chemical oxidation of chlorinated organic

	<p>compounds in groundwater Sean Moran, O'Callaghan Moran & Associates, and Dr. Tevfik Arguden, Eric Nichols</p> <ul style="list-style-type: none"> • Construction Dewatering for Basements in Gravels Dr Toby Roberts, WJ Groundwater Ltd. • The Symbiotic Relationship between Groundwater and Geotechnical Engineering Gordon Clarke, QUB • Groundwater Impacts from Engineering Projects Martin Preene, Golder Associates (UK) • The Importance of Understanding Recharge When Considering Groundwater Risk Assessment Shane Herlihy, RPS • Planning, Development & Hydrogeology Mary Cunneen, Senior Inspector, An Bórd Pleanála, David Ball, Hydrogeologist
2007	<p>Groundwater: Opportunities and Pressures</p> <ul style="list-style-type: none"> • "From Wrong to Right – the development of Groundwater Resource Assessment Methodologies in England and Wales" Steve Fletcher, Environment Agency of England and Wales. • "Recharge Areas at Local and Regional Scales – examples from Minnesota, USA" Delin, G.N., Healy, R.W., Lorenz, D.L., and Nimmo, J.R., U.S. Geological Survey. • "The Water Abstraction and Impoundment (Licensing) Regulations (Northern Ireland)" Peter Close, Environment and Heritage Service, Northern Ireland • "Understanding Groundwater Flow Systems for Local Water Supplies in Ireland" David Ball, Consultant, Dublin • "Groundwater Resource Assessment for Public Water Supply Schemes in the Midlands of Ireland" Richard Church, Principal Consultant, Entec UK Ltd • "East Meath, South Louth and Drogheda Water Improvement Scheme: Investigation of Groundwater Potential" Mark Conroy, Associate Director, TOBIN Consulting Engineers • "Cryptosporidium Risk Assessment – Square Pegs and Round Holes" Karen-Lee Ibbotson, White Young Green. • "Microbial Contamination of Aquifers in Ireland: Identification of Vulnerability Factors and development of detection protocols for key pathogens" Bhreathnach, N. C., Richards, K & O'Flaherty, V. • "Quantitative Risk Assessment - the importance of knowing your site " Rob Glavin, RPS Group • "Geothermal Resources in Ireland – applications for hydrogeology" Roisin Goodman, CSA Group. • "Thermogeological assessment of open loop well doublet schemes – an analytical approach" David Banks, University of Newcastle & Holymoore Consultancy, Chesterfield, UK • "Underground Thermal Energy Storage in the Netherlands" Loeki Vos, Furgo Ingenieursbureau B.V., Netherlands • "Mineral Workings – consideration of the impact on the water environment" Peter McConvey, Geological Survey of Northern Ireland • "Agricultural Pressure – farm and national scale case studies" Monica Lee,

	<p>Geological Survey of Ireland and Pamela Bartley, Hydro-G</p> <ul style="list-style-type: none"> • “A national assessment of groundwater abstraction pressures” Henning Moe, CDM and Donal Daly, Environmental Protection Agency
2006	<p>“It doesn’t just go away, you know...” SUDS and Groundwater Monitoring</p> <ul style="list-style-type: none"> • “SUDS - the Current US Perspective: Integrated Storm Water Management in New Development Areas” Robert Pitt, Cudworth Professor of Urban Water Systems, Department of Civil, Construction, and Environmental Engineering, University of Alabama, USA. • “The Draft EU Directive on the Protection of Groundwater Against Pollution: a Summary and an Assessment of the Likely Implications” Donal Daly, Geological Survey of Ireland, Matthew Craig, Environmental Protection Agency, Garrett Kilroy, EPA Research Fellow, Trinity College, Dublin. • “A UK and European Perspective of Sustainable Urban Drainage (SUDS) with Particular Reference to Infiltration Systems and Groundwater Pollution” J. Bryan Ellis, Professor, Urban Pollution Research Centre, Middlesex University, UK. • “Proven and Practical Methods of Groundwater Recharge in Built-up Areas in the USA” Gary Mercer, Senior Water Resources Engineer, Camp Dresser McKee, Boston, USA. • “SUDS – Principles and Drivers” Pádraig Doyle, Principal Engineer, Dublin City Council. • “Groundwater Issues Arising from Sustainable Urban Drainage Policies” Fionnuala Collins, Senior Hydrogeologist, RPS Group Ltd., Dublin. • “Road runoff in Ireland – Implications for groundwater and management in a SUD System” Paul Johnston and Michael Bruen, Senior Lecturers, Trinity College, Dublin and University College, Dublin • “Constructed Wetlands – Hydraulic Design – Sustainable Drainage & Treatment Systems” Pamela Bartley, Bartley & ó Súilleabháin Environmental Engineering, Galway, Paul Johnston & Laurence Gill, Trinity College, Dublin. • “Groundwater Monitoring: the Importance of Setting Clear Monitoring Objectives Based on an Appreciation of the Hydrogeology” Bruce Misstear, Senior Lecturer, Dept. Civil and Environmental Engineering, Trinity College, Dublin, David Banks, Holymoor Consultancy, Chesterfield, UK. • “Groundwater Monitoring and Sampling: New Research and the Importance of Borehole Construction” Peter Dumble, MD/Principal Hydrogeologist, Waterra (UK) Ltd, UK • “Managing Large Datasets” David McLorinan, Senior Hydrogeologist, White Young Green Ltd., Belfast • “Defining baseline quality for nitrogen compounds in groundwater flow systems” Mike Edmunds, Professor, Oxford Centre for Water Research, Oxford University (OUCE), UK. • “Screening Methodology for the Water Framework Directive Water Quality Monitoring Network” Matthew Craig, Environmental Protection Agency, Dublin, Henning Moe, CDM Ireland Ltd., Dublin, Natalya Hunter Williams, Geological Survey of Ireland, Dublin.

	<ul style="list-style-type: none"> • “Establishing Natural Background Levels for Groundwater in Ireland” Gerry Baker, Donal Crean and Sean Moran, O'Callaghan Moran & Associates, Cork. • “Detailed and Integrated Monitoring of the Positive and Negative Impacts of Large Scale Water Abstractions and Treated Waste Water Discharges on Habitats and Ecosystems” Paul Ashley, Environment Manager, Mott MacDonald Consulting Engineers, Cambridge, UK
2005	<p>Groundwater In Ireland ~ 25th Anniversary Conference</p> <ul style="list-style-type: none"> • Perspective 1 - The State and Research Institution Perspective – “Groundwater in Ireland – Hydrology with Attitude” -Paul Johnston, Lecturer, Trinity College Dublin • Perspective 2 - Groundwater Consultant’s Perspective “Professional Hydrogeologists - A lot done - more to do.” - Teri Hayes, Manager, White Young Green Ireland • Perspective 3 – External Perspective - “Rock type versus Fractures” – current understanding of Irish Aquifers -Vincent Fitzsimons, Hydrogeologist, presently in Scottish Environmental Protection Agency, and previously with Geological Survey of Ireland (GSI). • Hydrogeology in Ireland in 2005: "There is more, but is it better" - comparison of classical techniques and analysis, with recent developments -Eugene Daly, Eugene Daly Associates • Fracture flow and preferential groundwater flow paths in hard rocks. Illustrations from Precambrian and lower Palaeozoic strata in Wales -Nick Robins, British Geological Survey. • The Tydavnet aquifer in Co Monaghan: The only bedrock aquifer in Ireland under significant stress from pumping? -Bruce Misstear (TCD), Les Brown (TCD) and Taly Hunter Williams (GSI). • Changing precipitation scenarios: Preliminary implications for groundwater flow systems and planning- John Sweeney, NUI Maynooth • Modern groundwater equipment – examples of use and results in pumping tests, monitoring salt-water intrusion and dynamics of karst limestone 'plumbing' systems. -Michael Gill (Komex), David Ball, Patrick Laffly (TMS Environment Ltd.) • Lapps Quay Development, Cork.- A case study in de-watering and instrumentation -Gary Holmes, WJ Groundwater Ltd., UK • Latest techniques in tracing the movement of water through limestone aquifers - David Drew, Trinity College Dublin • A new approach for analysing test pumping data in heterogeneous aquifers – implications for quarrying -Paul Younger, Newcastle University • Advances in forensic identification of petroleum related releases into the environment using source specific markers -Ken Scally, ALcontrol Geochem • Groundwater and current public health issues -Eileen Loughman, Eastern Health Board / Kildare County Council • Quantifying and understanding the extent of microbiological pollution in urban groundwater systems- Aidan Cronin, Robens Institute, University of Surrey • Advances in geophysics – time lapse resistivity imaging – location and movement

	<p>of landfill plumes- Paul Gibson, NUI Maynooth.</p> <ul style="list-style-type: none"> • Evaluating the impacts of groundwater abstraction on surface water features - Michael Streetly, Environmental Simulation International • River Basin Districts – Overview of scope and results from all components of the work - Grace Glasgow, Kirk McClure Morton • Physical characterisation and risk characterisation of river basin districts: groundwater aspects -Donal Daly, Geological Survey of Ireland. • Groundwater monitoring for implementation of the Water Framework Directive; initial results and assessment- Sean Moran and Gerry Baker, O'Callaghan Moran Associates. • River Basin Districts - The Future - monitoring, classification and programme of measures - Pat Duggan, Department of Environment and Local Government
2004	<p>Groundwater Challenges Of The National Development Plan</p> <ul style="list-style-type: none"> • The National Development Plan and Spatial Strategy; Current requirements and future challenges for the Groundwater Community. Niall Cussen DEHLG • Hydrogeology and the future of Irish Planning. Conor Skehan DIT • An Bord Pleanála: Proposed infrastructure developments; the requirements and expectations of the Board that would assist in an effective implementation of the NDP. Brian Hunt, deputy chairperson of An Bord Pleanála • A County Engineer's perspective of groundwater issues the planning process and development of infrastructure. Billy Moore until recently County Engineer, 12:35 Panel Discussion Monaghan • An Taisce and Environmental NGO perspectives; current problems with groundwater information and future improvements to avert public misunderstanding. Tony Lowes, (Former Head of Natural Environment Group of An Taisce, Coordinator of Friends of the Irish Environment) • The Developer's Perspective with regard to power generation and the hydrogeology of upland areas. Brendan Layden, Arigna Fuels • Source Protection Strategies for Group Water Schemes. Maurice J. O'Connell, M.J. O'Connell & Co. • Developing Groundwater Supplies in Rural Areas. Liam Clear, TJ O'Connor • The role of the Geological Survey of Ireland in supporting water resource development. Geoff Wright GSI • Groundwater challenges in waste management. Ted Nealon, A1 Waste • Contaminated Land and Risk Assessment: the basics. Malcolm Doak and Jonathon Derham, EPA • Brown fields and Urban Sustainability. Dr. Niamh Moore, Dept. of Geography, UCD • Assessing the risks, costs and benefits of managing/redeveloping contaminated sites. Simon Firth, Rob Bracken, Jane Dottridge, Komex • Groundwater challenges for the National Roads Authority (NRA). Michael Egan, NRA • Potential impacts of road infrastructure on groundwater and sensitive environments – lessons learnt from developments to date. Jim Ryan, Duchas

	<ul style="list-style-type: none"> Case study of groundwater challenges of road construction in a karst environment. Anita Furey (Tobin Consulting Engineers) and Alistair Moseley (Hyder Consulting)
2003	<p>Groundwater – its stakeholders</p> <ul style="list-style-type: none"> Protecting Groundwater in US Communities -The Groundwater Guardian Programme - Susan Seacrest, President. Groundwater Foundation Nebraska USA The City Of New York Water Supply System - Watershed Management - Richard I. Coombe, Chair & CEO, Watershed Agriculture Council. New York. Three Rivers Project - Boyne, Liffey, & Suir - Water Quality Monitoring and Management- Suzanne Dempsey, MCOS Oral Hearings and Groundwater Aspects - Dara Lynott Senior Inspector, EPA Site Suitability Assessments for On-Site Wastewater Management : Relevance of a Multi-Disciplinary Training Course - Donal Daly, GSI Groundwater Group Schemes: Past Present & Future Problems - Pat Harrington, Executive Engineer. Carlow Co. Co Groundwater Issues and the. Farmer's Perspective - Matt Dempsey, Editor, Irish Farmers Journal The Economic and Environmental Importance of Ground Water - Education programs that work for citizens, communities and decision-makers - Andrew Stone (Executive Director) American Ground Water Trust, New Hampshire, USA Groundwater Teaching in Ireland & UK - Bruce Misstear, Dept. Civil Engineering, TCD Professional Registration & CPD - Kevin Cullen. IGI and White Young Green. The Role of Hydrogeologists in Africa - Cecil Shine, Director Minex Environmental. The Role of Hydrogeologists in Reducing Poverty in Sub-Saharan Africa - Alan MacDonald, Senior Hydrogeologist, British Geological Survey, Edinburgh. Concern Projects in Africa - Niall Roche. Health Support Manager & Env. Health Adviser. Concern Worldwide Groundwater and Water Resources Development in Uganda- an African Perspective Callist Tindimugaya, Principal Hydrogeologist, Ministry of Water Lands & Environment, Uganda Water, Sanitation and Health.in Uganda - important Changes for Donors, Government Agencies, Communities and the Private Sector - Jacinta Barrins, Dept. Hydrology, NUI Galway (& formerly of Norconsult Norway, Ireland Aid). Water Projects & Issues in the Developing World - David Ball, Consultant Hydrogeologist. The Role of Hydrogeology in the Rebuilding of Afghanistan - David Banks, Hydrogeological Consultant, Holymoore Consultancy, Derbyshire, UK.
2002	<p>Groundwater Quality: Current Issues & Concerns</p> <ul style="list-style-type: none"> Water Framework Directive -An Overview of Groundwater Aspects - Donal Daly, Geological Survey of Ireland and WFD Groundwater Working Group. The Water Quality of Groundwater - Chapter 5 Water Quality in Ireland 1998-

	<p>2000, EPA Margaret Keegan, Environmental Protection Agency, Wexford; Becci Cantrell Environmental Protection Agency, Wexford; M. MacCartaigh, Environmental Protection Agency; Dublin; Paul Toner, Environmental Protection Agency, Dublin.</p> <ul style="list-style-type: none"> • Nitrate Vulnerable Zones - Latest Developments - Pat Duggan, Dept. of Environment and Local Government. • The Drinking Water Regulations 2000 - Outline of Requirements - Richard Foley, Environment Unit, Enterprise Ireland. • Groundwater Quality - A Question of Perspective - Kieran O'Dwyer, White Young Green Ireland Ltd. • Current Knowledge on Groundwater Microbial Pathogens and Their Control - Hydrogeology Journal (2000) 8:29-40 - Bruce MacIer, US Environmental Protection Agency, Region 9, San Francisco, USA; Jon Merkle, US Environmental Protection Agency, Region 9, San Francisco, USA. • Group Water Scheme Bacteria Problems - A Local Authority Perspective - Ray Spain, Offaly Co. Co. • Groundwater Quality - Sampling and Analysis - Peter Webster, Environmental Protection Agency, Cork. • In-Situ Bioremediation of High Nitrate Chalk Aquifers - Paul Godbold, WRc PLC, UK • Problems with Iron and Manganese - Jer Keohane, Geotechnical and Environmental Services, Carlow. • The Use of Monitored Natural Attenuation as a Cost-effective Technique for Groundwater Restoration - David Lerner, Steven Thornton, Ruth Davison, Groundwater Protection and Restoration Group, University of Sheffield, UK. • Case Studies in Monitored Natural Attenuation - Alistair Wyness and Richard Bewley, URS Corporation, Manchester, UK. • Permeable Reactive Barriers - Alan Thomas, ERM, Oxford, UK.
2001	<p>Gravel Aquifers: Investigation, Development & Protection</p> <ul style="list-style-type: none"> • A Review of Gravel Aquifers in Ireland - Geoff Wright, Geological Survey of Ireland. • International Perspectives on Gravel Exploitation - Charles Jones, Principal Hydrogeologist, Mott MacDonald, Cambridge, UK. • Production Well Operation in Gravel - Kees van Beek, Senior Geohydrochemist, Netherlands Waterworks Testing and Research Institute. • Gravel Exploration Using Geophysics - Peter O'Connor PGeo, APEX Geoservices Ltd. • Remedial Options for a Diesel-Contaminated, Confined Gravel Aquifer - Graham Webb, Manager Soil & Groundwater (Ireland), URS Dames & Moore. • The Role of Sand and Gravel Deposits in Vulnerability Assessment and Mapping - Donal Daly, Geological Survey of Ireland. • Source Protection Issues – Scotland - Charles Jones, Principal Hydrogeologist, Mott MacDonald, Cambridge. • Gravel Aquifers - Integration of Groundwater Development and Source

	<p>Protection - Kieran O'Dwyer, KT Cullen & Co. Ltd.</p> <ul style="list-style-type: none"> • The Curragh Aquifer - Current Conceptual Understanding and Numerical Modelling - Teri Hayes, Kevin Cullen, Stuart Sutton, and John Fahe1iy. KT Cullen & Co. Ltd. and Entec (UK) Ltd. • KTK Landfill - Investigations, Leachate Management and Groundwater Monitoring - Mark Heesom, KTK Landfi11 Ltd. and Geoff Parker, ERMLtd. • Contamination & Remediation in Gravels - Sir John Rogerson's Quay Gasworks Dublin - Mark Adamson, Parkman Environment. • Gravels and Planning: Rural Blessing and Urban Problem - David Ball, Consultant Hydrogeologist.
2000	<p>Groundwater& The Law: Directives, Standards, & Regulations</p> <ul style="list-style-type: none"> • EU Water Framework Directive - James Hunt, UK Environment Agency • The EU Water Framework Directive in Ireland - David Moore, Department of the Environment & Local Government • Implementing Groundwater Aspects of the Nitrates Directive - Vincent Fitzsimons, Hydrogeologist, Geological Survey of Ireland • Groundwater Jurisdiction: A Canadian Perspective - Ken Howard, University of Toronto, Ontario • Groundwater Issues in Planning - Padraig Thornton, An Bord Pleanàla • Planning & Groundwater Supply - Fergus Coyle, Monaghan County Council • Groundwater in the Courts or Common Logic vs. Hydrogeological Concepts - Kevin Cullen P.Geo., K.T. Cullen & Co. Ltd. • The Need for a National Well Standard and Suggested Content - David M. Ball, Consultant Hydrogeologist • Groundwater & India - Kalpana Unadkat, Ashurst, Morris, Crisp, London • Groundwater Quality Standards in the Netherlands: Derivation & Application -J. P.A. Lijzen & F. A. Swartjes, National Institute for Public Health & Environment • Groundwater Quality Standards in Germany - Lutz Haamann, Degussa-Hlils AG • Contaminated Land: Groundwater Quality Standards in the UK - Barry Smith, British Geological Survey • Proposed Groundwater Quality Standards for Ireland - M. Keegan, G. O'Leary, and G. Carty, Environmental Protection Agency • Groundwater & the Law: A Consultant's Perspective - Eugene Daly, E. Daly & Associates • Groundwater & the Law: An Overall Environmental Perspective - Yvonne Scannell, Arthur Cox & Associates • Groundwater & the Law: An Historical Perspective - Peter Bennett, Hydrogeological & Environmental Services Ltd.
1999	<p>Surface Water and Groundwater: A combined Resource</p> <ul style="list-style-type: none"> • Groundwater and Surface Water Relationships in the USA - Dr. P. Patrick Leahy, United States Geological Survey. • Groundwater Resource Management in England & Wales: A Quest for Sustainable Development. - Dr. David Burgess, UK Environment Agency. • Integrated Surface Water and Groundwater Modelling - Peter Rippon, Mott

	<p>MacDonald Ltd.</p> <ul style="list-style-type: none"> • Nitrates in County Offaly - Des Page & Jack Keyes, Offaly County Council. • Groundwater & Surface Water: Exploiting a Combined Resource - Bruce Misstear, Dept. of Civil, Structural & Environmental Engineering, Trinity College Dublin. • Water Quality Management Planning - Andy Fanning, Environmental Protection Agency. • Catchment Monitoring & Management Systems - Ciaran O'Keefe, Dr. Colin Byrne & Ray Earle, The Three Rivers Project. • Influent Rivers: A Pollution Threat to Spring Water Supplies - Steve Hobbs & Andrew Moag, Aspinwall & Co. • Drainage, Runoff, and Vulnerability Maps - Monica Lee, Trinity College & the Geological Survey of Ireland. • Groundwater & Surface Water Relationships in Karst Terrain - Dr. Catherine Coxon & Dr. David Drew, Trinity College Dublin. • The Contribution of Groundwater Phosphorus to Surface Water Eutrophication - Garrett Kilroy, Trinity College Dublin. • Water Strategy for Kildare: The Consultants' Report - Teri Hayes, K.T. Cullen & Co. & Tommy Farrell, Nicholas O'Dwyer & Partners. • Isotopes as a measure of Surface Water Infiltration: A Case Study in Northern Ireland - Ciara McConville, Doran & Partners, and Dr. R. Kalin Queen's University Belfast.
1998	<p>Hydrogeology and Waste Management</p> <ul style="list-style-type: none"> • A Conceptual Design for Sustainable Landfill - Nick Walker, Cleanaway Limited. • Dealing with Uncertainty in the Assessment of Groundwater Impacts from Landfills: The LandSim Model - David H. Hall, Golder Associates (UK) Limited. • Integrated Pollution Control. Licensed Industrial Activities - Waste Management - Jonathan Derham & Becci Cantrell, Environmental Protection Agency. • Hydrogeology of Magheramourne Quarry and Northern Ireland Landfill Legislation - Peter Bennett, Hydrogeological & Environmental Services Limited. • Landfills: Assessing and Managing the Long Term Risk and Liabilities - Geoff Parker, K.T. Cullen & Co. Limited. • Licensing of Waste Recovery and Disposal Activities - Gerry Carty, Environmental Protection Agency. • Landspreading of Organic Wastes and Groundwater Protection - Donal Daly, Vera Power, & Margaret Keegan, Environmental Protection Agency. • Landspreading of Organic Wastes: Selected Case Studies - Richard Church, Minerex Environmental Limited. • Waste Management Strategy for the Dublin Region - P. J. Rudden, M. C. O'Sullivan & Co. Limited. • Water and Environmental Health - The Wider Dimensions - Anne Deacon. South Eastern Health Board. • Constructed Wetlands for Wastewater Management - Ciaran J. Costello, Maxpro Engineering. • Septic Tank Systems: Recent Advances - Hubert Henry, Bord na Mona.

	<ul style="list-style-type: none"> • Mining Waste and the Groundwater Environment - James Dodds, Steffen, Robertson and Kirsten (UK) Limited. • Flow Modelling in the Karst Terrain of South Galway - Paul Johnston, Department of Civil, Structural & Environmental. Engineering, Trinity College.
1997	<p>Soil and Groundwater Contamination and Remediation</p> <ul style="list-style-type: none"> • The Soil System Viewed as an Active Element in the Clean-up and Control of Contaminated Land - Michael Loxham, Grondmechanica Delft, DG environmental Ltd & Queen Mary and Westfield College of the University of London • The Protection of Groundwater Quality in the UK : Present Controls and Future Issues - RC Harris, Environment Agency, UK • Non-Aqueous Phase Liquids : Investigation and Remediation - Paul Johnston and Bruce Misstear, Department of Civil, Structural and Environmental Engineering, Trinity College Dublin • Practical Site Investigation of Contaminated Land & Groundwater - Jerome Keohane, Geotechnical and Environmental Services Limited • Groundwater Monitoring - Fact or Fiction - Teri Hayes, Kevin Cullen & Co. Ltd. • Making Remediation Work - Practical Design Considerations - Andrew Moag, Aspinwall and Company Ltd • The Hydrogeology of Avoca Mines - Donal O Súilleabháin, B.J. Murphy & Associates; Bruce Misstear, Trinity College Dublin; Geoff Wright, Geological Survey of Ireland; Pat O Connor, Geological Survey of Ireland • Pulverised Fuel Ash : Its Composition and Weathering - SJ Pow, ESB International • Geophysics or Drilling - Which Should Come First in a Contaminated Land Investigation - Richard Church, Minerex Environmental Ltd. • European Union Initiatives for Assessment and Action on Contaminated Land - Matt Crowe, Environmental Protection Agency • Risk Based Decision Making at Chemical Release Sites : Soil and Groundwater Pathway - Marcus Ford, Dames & Moore, Ireland • Solutions to Leaking Home Heating Oil Systems - Shane M. Bennet, Contaminant Hydrogeologist • Groundwater in the South Munster Region - Geoff Wright, Geological Survey of Ireland • COSIMA - Contaminated Sites Management Support Systems - Maura Minogue and John Flynn, Cork Corporation
1996	<p>Water Wells: Drilling, Design, Construction, Operation and Maintenance</p> <ul style="list-style-type: none"> • A Review of Groundwater Development in Ireland - Kieran O'Dwyer, K.T. Cullen & Co. • Design and Construction of Water Wells in Ireland - David Ball, Hydrogeologist • Water Wells - Monitoring, Maintenance and Rehabilitation - Peter Howsam, Water Management Department, Silsoe College, Cranfield University • Estimating the Reliable Outputs of Water Wells - Bruce Misstear, Trinity College Dublin; Sarah Beeson and Jan van Wonderen, Groundwater Development Consultants Ltd. • Location and Development of Major New Limestone Aquifer in Co. Cork - Brian P.

	<p>Connor, Consultant Hydrogeologist, Brian P. Connor & Associates Ltd.</p> <ul style="list-style-type: none"> • Assessment of the Potential of Developing a Groundwater Source at Ardmore, Co. Waterford - Jer Keohane, Geotechnical and Environmental Services Ltd. • Roscommon Central Regional Water Supply Scheme, Development of the Ballinagard Aquifer - Conor McCarthy, Senior Engineer, Jennings O'Donovan and Partners • Casings and Screens - Thomas Fogarty, Fogarty Drilling Ltd. • Achieving Groundwater Protection - Aidan Briody, Briody's Aquadril Services • Case History: Gravel Aquifer Investigations in the Glen Swift Valley, Letterkenny, Co. Donegal - Cecil Shine, Minerex Environmental Ltd. • An Introduction to the Hydrofracturing of Water Wells - Des Meehan, Des Meehan & Co. Ltd., Waterwell Drilling and Hydrofracturing Contractors • Protection of Public Groundwater Sources - Donal Daly and Jenny Deakin, Geological Survey of Ireland • Groundwater Conditions of the Limestones of Eastern Co. Galway - David Drew, Geography Department, Trinity College Dublin • Well Performance Tests - Their Use in Borehole Management - Shane O'Neill, Trinity College Dublin • Water Wells: Contracts and Specifications - Eugene Daly, Eugene Daly Associates
1995	<p>The Role of Groundwater in Sustainable Development</p> <ul style="list-style-type: none"> • Our Geological Heritage is Worth Sustaining - Peader McArdle, Geological Survey of Ireland • Integrating Environment and Development - the Use of Pricing and Other Incentives to Achieve Efficient Use of Environmental Assets - Frank Convery, Environmental Institute, UCD • The Principal Characteristics of the Flow Regime in Irish Aquifers - Eugene Daly, Eugene Daly Associates • Groundwater Protection in Ireland : A Policy for the Future - Donal Daly, Geological Survey of Ireland • The Role of Modelling in Groundwater Source Protection - Paul Johnston, Dept. of Civil and Environmental Engineering, TCD • EPA Landfill Manuals - Gerry Carty, Environmental Protection Agency • The Engineering of Landfill - Jonathan Derham, M.C.O'Sullivan & Co. • Landfill Studies : The Role of the Hydrogeologist - Suzanne O'Sullivan, Consultant Hydrogeologist • Trace Organics in Irish Groundwaters - Shane Bennet, KT. Cullen & Co. Ltd. • Landspreading of Animal Wastes - Billy Moore, Tipperary (SR) Co. Co. • Occurrence and Distribution of Groundwater in Northern Ireland - Nick Robins, British Geological Survey • Implications of Sewer Development on Groundwater Quality - Bruce Misstear, Dept. of Civil and Environmental Engineering, TCD and Phillip Bishop, Mott MacDonald Group • Sustainable Groundwater Sources - David Ball, Consultant Hydrogeologist

1994	Water Pollution – Law, Practice and Planning <ul style="list-style-type: none"> • Law & Water Pollution - Dr. Y. Scannell, Trinity College, Dublin • Civil Liability for Groundwater Pollution. The Cambridge Water Company Case - B. Misstear, Groundwater Development Consultants • Case Histories & Experiences • Water Pollution & Planning - J.Reid, Reid Associates • Laboratory Consistency - C. Concannon, Environmental Protection Agency • Mallow Energy Park – P. Walsh, Cork Co. Co. • Natural impurities in Groundwater – K. Cullen, K.T. Cullen & Co. • Carbon Dating Groundwater – D. Ball Consultant • Bottled Waters and Public Awareness – D. Byrne, Bottled Water Association
1993	Basin Management and Information Technology an Aid to Regional Planning <ul style="list-style-type: none"> • Regional Groundwater Monitoring - J. Boswinkel, Institute of Applied Geoscience, Holland • Groundwater Monitoring in N. Ireland - P. Bennett, H.E.S. Ltd. • Catchment Monitoring & Management - G.A. Burrow, National Rivers Authority • Ardnacrusha & Management of the Shannon Catchment - A. Shaw, Electricity Supply Board • Data Acquisition - S. McCarthy, Hyperion Energy Systems • Data Processing & Manipulation - T. Joyce, Office of Public Works • Computer Modelling - Dr. R. Kachroo, University of Dar Es Salaam • Hydrogeology of Dolomite Aquifers of South East Ireland - E. Daly, Geological Survey of Ireland • Large Scale Pumping Tests - K. O'Dwyer, K.T. Cullen & Co. Ltd. • Groundwater Development in N. Cork - Pat Walsh, Cork County Council • Groundwater Legislation - Owen Boyle, Dept. of Environment • Grey & Black List Substances - T. O'Flaherty, EOLAS • Geographical Information Systems - D. Moore, NGIS Ltd.
1992	Groundwater and Regional Water Supply <ul style="list-style-type: none"> • Overview of Status of Regional Water Supplies in Ireland - Gerry Galvin, Nicholas O'Dwyer & Ptnrs • Current large ground water abstractions, their status and potential in economic terms - Don O'Sullivan, Wexford Co, Co. • Overview of groundwater resources in Ireland - Bob Aldwell, Geological Survey of Ireland • Indirect methods : Remote sensing and Geophysics - Ger Keohane Fuego – McClelland • Well Testing - Kieran O' Dwyer, K.T. Cullen & Co. • Modelling - Aquifer Vulnerability; Well Head Protection; Management of Resources - Colin Smith, Consultant Hydrogeologist. (U.K.) • Interaction of large groundwater abstractions, legislation, treatment and economics - Dave Cooke, Thames Water Utilities • Assessment of Water Balance for Regional Water Resources - David Ball

	<ul style="list-style-type: none"> • Case study of assessment of water resource of an Irish river catchment - Dr, Tommy Bree, E.S.B. International • Overview of groundwater in relation to statutory regulations - Dr, P,J, Flanagan, Environment Research Unit • Microbiology of groundwater - Dr, Ronnie Russell, Trinity College, Dublin • Results of recent trihalomethane study of public water supplies - Ciaran O'Donnell, Environment Research Unit • Interpretation of a typical water analysis - Richard Foley, Eolas • Trade talk on the treatment of Iron and Manganese - Michael Boole, Halpin and Heyward
1991	<p>Groundwater Aspects of Environmental Impact Assessments</p> <ul style="list-style-type: none"> • Current EIA Legislation in Ireland - Pat Timpson, Director Water and Waste Institute • EIA's and Groundwater - Dr. Catherine Coxon, Env. Sciences Unit, TCD. • Agriculture, Groundwater and EIA - Dr. Richard Thorn, Dept. of Env. Sci., Sligo RTC. • Industry, Groundwater and EIA - Kevin Cullen, Hydrogeological Consultant. • Waste Disposal, Groundwater and EIA - Shane O'Neill, ERA/Maptech Ltd. • Mining, Quarrying, Groundwater and EIA – Eugene Daly, GSI • EJA's and Groundwater - The US Experience - Dr. Ron Hoffer, Office of Groundwater Protection US Environmental Protection Agency • Wellhead Protection in the US - Dr. Ron Hoffer, Office of Groundwater Protection US Environmental Protection Agency • Aquifer Protection in Europe – Bob Aldwell, GSI • Groundwater Protection in Ireland – Donal Daly, GSI • Aquifer Protection in Co. Wexford – Gerry Forde, Wexford Co. Co.
1990	<p>Climate Extremes and Their Effect on Water Resources</p> <ul style="list-style-type: none"> • Short term prospects for global climate and their implications for Irish regional precipitation yields' - Dr. John Sweeney, Dept. of Geog., St. Patrick's College, Maynooth. • Climatic extremes and the Irish Climate – The Meteorological Service • River flows – John Martin, OPW • River water quality - Martin McGarrigle, ERU • The likely effects of significant climatic changes on the flow regime in the principal Irish aquifers – Eugene Daly, GSI • Floods, drought and groundwater quality – Dr. Richard Thorn, Sligo RTC • Flood warning and prevention in Co. Kilkenny – OPW • Drought and water resources the sub-Saharan experience – David Ball, ERA/Maptech • Climatic extremes and agriculture – Tom Keane, The Meteorological Service • The Local Authority experience – Wexford Co. Co. and Westmeath Co. Co. • Climatic extremes and the ESB - Electricity Supply Board. • Floods and low flows - the U.K. experience - Rick Brassington, National Rivers

	Authority, NW Region.
1989	Groundwater Chemistry and Groundwater For the Bottled Water and Agriculture Industries <ul style="list-style-type: none"> • Natural chemistry of groundwater - Eugene Daly G.S.I. • Variations in groundwater quality - Richard Thorn Sligo R.T.C. • Groundwater monitoring - Catherine Coxon T.C.D. • Approaches to aquifer protection - Donal Daly G. S. I. • Standards and certification for bottled waters – Richard Foley EOLAS • The bottled water boom - Timothy Green Co-author of The Good Water Guide • Geology and chemistry of various bottled waters – Peter Bennett, Stephen Peel & Eugene Daly • Bottled water - the Irish experience – Brian Duffy (Glenpatrick), Geoff Read (Ballygowan) • Water quality for farmed salmonids – Gerard Morgan UCC • A discussion of groundwater sources for fish farming – Kevin Cullen Consultant Hydrogeologist • Fish farming in Ireland - An overview - Pat Timpson Sligo R.T.C./fish farmer • The business of aquaculture – Liam Kielthy National Development Corporation
1988	The Future of Groundwater Development in Ireland <ul style="list-style-type: none"> • The Future of Groundwater Development - Mr Glyn Jones, University College, London • Groundwater for Public Supply - Mr P Callery Wexford County Engineer • Groundwater for Group Schemes - Mr T Geraghty, Department of the Environment • Aquifers of the Future: (1) The Mid-Kildare Gravels - Mr G Wright, Geological Survey of Ireland • (2) The Kiltorcan Sandstone - Mr E Daly, Geological Survey of Ireland • The Future of Well-Drilling - Mr B Dunne - Driller, Dromiskin, Dundalk • New Uses for Groundwater – fish farming, irrigation, bottling, energy - Mr K Cullen, Consultant Hydrogeologist • Environmental Impact Assessment: The Directive - Mr G Walker, AFF • Environmental Impact Assessment – Mr. D Kelly, IIRS • Environmental Impact Assessment: Tara Mines - A Case Study - Mr B Dallas, Enviroplan Services Ltd • Hydrogeology & Environmental Impact Assessment of a Proposed Large Open Cast Mine at Ballymoney - Mr D Finlayson, Hydrotechnica, Shrewsbury
1987	7th Annual Groundwater Seminar <ul style="list-style-type: none"> • Policy for Aquifer Protection Dr. A. Skinner (Severn-Trent Water Authority) • Aquifer Protection Policy in Ireland Case Study (1) Mr. M. Hand (P.H.McCarthy, Son & Ptrs) • Case Study (2) Mr. K. Cullen, (Consultant) • Septic Tanks and Groundwater – D. Daly, GSI • Septic Tanks & Public Health – A Deacon, SE Health Board

	<ul style="list-style-type: none"> • Septic Tanks and Groundwater -Some Recent Irish Research – R Thorn, Sligo R.T.C. • The Assessment of Groundwater Resources - Mr. G. Wright (Geological Survey) • Groundwater Investigations in Sandstone Aquifers in N. Cork – Mr. P. Walsh , (Cork Co. Council) • Groundwater Investigations – Mr. K. O' Dwyer, K,T,Cullen & Co. • Groundwater Development Overseas
1986	Hydrogeology and Management of Landfill Sites <ul style="list-style-type: none"> • Legislation and Waste Management - Mr. O. Boyle, Dept. of the Environment • Toxic Wastes and Groundwater Contamination - Dr. S. Ragone, U.S. Geological Survey • Landfill Sites and the Environment - Mr. D. Daly, GSI • The Ballyogan Site, Co. Dublin - Mr. M. Lorrigan, Dublin County Council • The Collon Site, Co. Louth - Mr. D. O'Neill, Louth County Council and Mr. J. Lucas, Aspinwall & Co. • The Disposal of Industrial Wastes - Dr. E. McMahon, I.I.R.S. • Landfill Assessment Practices - Ns. B. Naughton, An Foras Forbartha • The Kilcullen Site, Co. Kildare - Mr. D. O'Connor, Kildare County Council • The Portlaoise Site, Co. Laois - Mr. S. Peel, Minerex Limited • A Lined Site in Southern England - Mr. K. Knox, Cleanway Limited • An Estuary Site in Belfast – Mr. P. Bennett, GSNI
1985	Irish Groundwater has Come of Age <ul style="list-style-type: none"> • E.E.C. Guidelines For Potable Water – Mr. D. O'Hegarty • Groundwater Treatment – Mr. A. Bowen • Groundwater Development at Portlaoise – Mr. E. Creed • Hydrogeology of Portlaoise Limestone Aquifer – Mr. K.T. Cullen • Portlaoise Well Drilling and Test Pumping Programme – Mr. K O'Dwyer • Lagan Valley Groundwater Development Project – Mr. J. Finlay • Geology of Lagan Valley - Mr. P. Bennett • Geology of The Clonaslee Sandstone Aquifer - Mr. E. Daly • Groundwater Development - An Engineer I s View – Mr. M. Hand
1984	Groundwater Development in Ireland <ul style="list-style-type: none"> • Groundwater Development in Northern Ireland By Philip G Holland, Dept. Env. NI • Groundwater Resources Of Northern Ireland By J RP Bennett, Geological Survey of Northern Ireland (GSNI) • A New Aquifer Map Of Ireland G.R. Wright, Geological Survey of Ireland • An Approach To Ground Water Development In County Meath, F. Burke • Health Aspects Of Ground Water Quality - F. Hill. Dublin Region Public Analyst • Groundwater Development At Kinvarra – K.T. Cullen • Groundwater Investigation and Development at Money point Electricity Generating Station, Co. Clare - Minerex Limited • Future Of Groundwater In Ireland by David J. Burdon • Geothermal Resources Of Ireland - Paper by C.R. Aldwell

1983	Cost Factors in Groundwater Development <ul style="list-style-type: none"> • Well Design Options – Mr. Jeremy. Randal, UOP Johnson Wellscreens Ltd. • Pumping Costs - E. Creed, Nicholas O'Dwyer & Partners • Pumping tests & their uses - Dr. Lewis Clark, Water Research Centre • Optimising groundwater development - Dr. Lewis Clark • Sanitary Protection for wells - Mr. Bill Jungmann, UOP Johnson Well screens Ltd. • Pump selection, installation & maintenance - Tom Ruddy, Electrical & Pump Services Ltd. • Groundwater-source heat pumps - their potential in Ireland - John Walls, Energy Management Contractors Ltd.
1982	Groundwater Development in Limestone Aquifers <ul style="list-style-type: none"> • Irish Limestones - Dt. G. D, Sevastopulo, Trinity College Dublin • Irish Limestone Aquifers - C.R. Aldwell, Geological Survey Of Ireland • Limestones as Aquifers - H. M. Townsend, U.S.A. • Cable-tool Drilling in Limestones - W. Jungmann, UOP Johnson Wellscreens (Ireland) Limited. • Drilling Methods - Rotary and Down-the-Hole Hammer systems - H. M. Townsend. • Drilling problems: Circulation, Verticality, etc.; Well Development - H. M. Townsend. • Borehole Logging - H.. M. Townsend. • Borehole Logging Demonstration - E. P. Daly, Geological Survey Of Ireland. • Sanitary Protection for Water Wells - H. M, Townsend, • Economic Considerations for Drilling Contractors - H. M. Townsend.