

## Speakers Biographies

### **Andrew Dixon – Renewable Energy Specialist Dwr Cymru Welsh Water**

I have a long-held interest in the environment which was cultivated by my high school's Geography Department and growing up in rural Norfolk. I went on to study at the University of East Anglia acquiring a breadth of knowledge across a wide range of environmental issues and achieving a Masters degree in Environmental Assessment and Management. Following my MSc I then completed an internship working for a small renewable energy consultancy firm. This was followed by my relocation to South Wales to fill a vacancy for a Renewable Energy Specialist in Dwr Cymru Welsh Water's Energy Department. My position in Welsh Water covers Solar PV, Hydro-electric, Biogas CHP, Wind and Renewable Heating technologies. Day-to-day I liaise with OfGEM on legislative compliance, monitor performance and identify further opportunities to optimise our generating assets and Increase our generation portfolio.

### **Cllr Bob Derbyshire – Cardiff Council**

Born in Manchester in 1949, married with 2 children and 5 grandchildren. Joined the Civil service and moved to London in 1971. Transferred to Cardiff in 1981 and became involved in local politics and environmental issues. Elected as a Cardiff Councillor in 1999 and served for 9 years during that time became Chair of Planning and was the Council representative on the predecessor to the Severn Estuary Partnership. Re-elected to the Council in 2012 and became Chair of Environmental Scrutiny. Elected Cardiff Bio Diversity Champion and Chair of the Cardiff Bio Diversity Partnership in 2013. In March 2014 appointed to be the cabinet member for Environment with responsibility for Waste, Parks, the Harbour and Regulatory Services.

### **Christine Marsh – Associated British Ports**

Christine Marsh has a degree in Marine Geography from Cardiff University and has a broad range of experience across the marine environmental sector, in particular the ports industry.

Christine has spent 7 years working in the ports industry as environmental manager for the Port of Dover and now with Associated British Ports. ABP is the UK's leading port operator, handling a vast array of cargo, supporting 84,000 jobs and contributing £5.6 billion to the economy every year. Currently based in Cardiff, Christine provides environmental advice and representation for

the 21 ports across the ABP group, in particular the 13 ports along the west coast of England, South Wales and South West Scotland.

ABP have been directed to report to DEFRA on our adaptation to climate change. Assessments have taken place using specialists and the latest science to better understand and assess the climate change risks to the business.

Christine worked for the Severn Estuary Partnership as a partnership officer and ASERA implementation officer. During a two year contract Christine worked with ASERA to review and revise the Management Scheme for the Severn Estuary European Marine Site, and collate data for the first State of the Severn Report. Christine also used her experience of working in the ports sector to assist the Bristol Channel Standing Environment Group with the formulation of their Counter-Pollution Plan.

### **David Hall – Cardiff Harbour Authority**

I am an environmental scientist with 18 years experience, originally with the Environment Agency, and more recently as an Environment Officer with Cardiff Harbour Authority. I have a BSc in Biochemistry & Microbiology, and Masters degrees in Applied Hydrobiology and Environmental Conservation Management.

Cardiff Harbour Authority is part of Cardiff Council, and is responsible for the management of the large urban regeneration project centred around Cardiff Bay in South Wales. Being here since the establishment of the organisation, when estuarine mudflats were flooded to make a freshwater lake, I've overseen the creation of a new environment and had to deal with all the associated problems that came with this.

My role specifically encompasses public health, planning and conservation issues, and I am based within a team covering all aspects of environmental management in Cardiff Bay.

### **Emerald Siggery – Plymouth Coastal Observatory**

Emerald has a BSc in Marine Geography from Cardiff University and has worked as a Coastal Process Scientist at the South West Regional Coastal Monitoring Programme since the beginning of the Programme in 2007. She is based at the Plymouth Coastal Observatory, where she is currently the Coastal Process Team Leader.

The South West Regional Coastal Monitoring Programme is part of a national network of Coastal Monitoring Programmes. The Programme collects a variety of different types of data

which is then made freely available to all interested parties via our website. The Programme carries out data analysis, produces reports and works closely with Local Authorities, the Environment Agency and other stakeholders to provide a standard, repeatable and cost effective method of monitoring the South West coast.

### **George Ashworth – Chair of the Severn Estuary Partnership Management Group**

George Ashworth has chaired the SEP Management Group since 1998. Following a Geography BA (Hons) degree from Southampton University, he undertook an MSc in Urban and Regional Planning from Strathclyde University and became a Member of the Royal Town Planning Institute (RTPI) in 1978. He has been Head of Planning and Regeneration in Monmouthshire County Council since its formation in 1996 and has always recognised the significance of the Estuary to planning interests around its shore; not least because of climate change and renewable energy concerns. He has promoted such interests in relation to the Wales Spatial Plan and South East Wales Strategic Planning Group, of which he is a past chair.

### **Ian Hall - Head of School, School Earth and Ocean Sciences, Cardiff University**

Professor of palaeoceanography and palaeoclimatology, and is Head of School, School Earth and Ocean Sciences, Cardiff University. He has a degree in chemical oceanography and a PhD in marine biogeochemistry (Southampton/Institute of Oceanographic Sciences). He has >20 years experience in the generation of innovative high-resolution palaeoceanographic and climate reconstructions. This involves the development, application and integrated analysis of sedimentary (e.g. sortable silt current speed proxy), isotopic (oxygen and carbon) and geochemical proxies (e.g. Pa/Th, Mg/Ca trace-element palaeothermometry). Current projects include: ocean change in the North Atlantic during the Late Holocene (annual to multi-decadal timescales), ice-ocean linkages and abrupt climate change during the last glacial, and the role of Agulhas Leakage in climate variability of the Pleistocene. The latter project includes an IODP leg (SAFARI-702) scheduled for drilling in 2016. He is a director of the Climate Change Consortium of Wales (C3W, <http://c3wales.org/>), chair of the NERC BOSCORF SC and member of the executive committee of the 'International Marine Process Reconstruction Study' (IMPRESS/IMAGESII) programme.

Specific areas of expertise: 1) applications of palaeoclimate proxy reconstruction; 2) marine sedimentology; 3) past ocean circulation; 4) Late Pleistocene and Holocene climate variability.

## **Johnny Gowdy – Regen SW**

Johnny is a director at Regen SW and leads their work in the marine energy and offshore wind sector, including the programme management of the South West Marine Energy Park. Regen SW is an independent centre of expertise providing support for the renewable energy sector and helping innovative companies to grow their business in this competitive market. Johnny's background is in management consultancy. He was a partner within the energy practice of the global consultancy firm Accenture and has a wide range of business and commercial experience working extensively in the oil and gas and energy sectors both in the UK and overseas.

As a keen diver, Johnny is committed to the conservation of the marine environment. He also believes that offshore energy can provide part of the solution to address the challenges of climate change and energy security, as well as providing future jobs for the UK's marine and engineering industries.

The Severn Estuary and the wider Bristol Channel has the potential to generate significant renewable energy to help the UK meet the global challenges of climate change, energy security and environmental degradation. This can only be achieved however with regional stakeholder support and if a strategic approach is taken which balances the requirements of energy, environment and the economy

## **Louise Pennington MA (Cantab), C.WEM, MCIWEM - Senior Coastal Advisor, Natural Resources Wales**

Louise has a Geography degree from Jesus College, University of Cambridge, and ten years experience of flood risk management work within the private and public sector in England and Wales. She is a Chartered Water and Environmental Manager (C.WEM) and was Chair of the CIWEM East Anglia Branch committee in 2008/09.

Louise moved to Wales in late 2009 to work as the Project Co-ordinator of the Wales Coastal Monitoring Centre, before joining Environment Agency Wales in late 2012 as a Senior Coastal Advisor within the Flood Risk Strategy team. Her continued role with Natural Resources Wales requires active engagement with coastal stakeholders and colleagues to support delivery of Welsh Government's National Flood and Coastal Erosion Risk Management Strategy and Shoreline Management Plans.

Louise used her experience to inform Natural Resources Wales' Review of recent Coastal Flooding in Wales and is now leading development of a Delivery Plan to progress the Review's 47 Recommendations.

### **Mark Shorrock – Tidal Lagoon Swansea Bay**

Mark is a successful UK renewable energy innovator who has been working in the renewable energy industry since 2002.

Mark began work on a series of tidal lagoon power plants in early 2011, commencing with the 320MW Swansea Bay tidal lagoon where work to date has focussed on removing all key risks of the project in the areas of environment, build cost, turbines, grid, land, planning and local stakeholders. A planning application seeking a Development Consent Order was submitted on the 7 February 2014 and has since been accepted for consideration.

Tidal Lagoon Power intends to build a series of lagoons around the UK coastline and create an export industry. The scoping of four further tidal lagoon sites is underway with power on planned for the fourth by 2023. The five lagoons would have an installed capacity of 10GW and would meet 10% of the UK's energy needs.

### **Martin Quaile – Chair, Severn Estuary Partnership**

Born in Lancashire and moved to Bristol where he went to school and studied Architecture at Bristol University. His architectural career took him to West Africa, New Zealand, Vanuatu in the South Pacific and Hong Kong and after 30 years he returned to the UK, to take life at a more leisurely pace in the Forest of Dean.

Martin's interests in the environment started in Nigeria where the orientation of buildings, the control of sunlight and ventilation, all affected the human comfort zone and these studies proved useful 10 years later in Vanuatu. However, the interests have grown to building design and the environment whilst in Hong Kong and on his return to the UK broadened again to an interest in matters such as flooding, contaminated land, foreshore management, waste to energy, climate change impacts and carbon emissions.

And so the interest develops.

### **Mel Nicholls Biography – Marine Management Organisation**

Mel Nicholls has worked for the Marine Management Organisation as Senior Marine Planner since 2012. He is responsible for plan production, stakeholder engagement and liaison with the devolved administrations. Trained as an ecologist, but now a planner, policy analyst and manager by experience, coastal and marine matters have been to the fore of much of his professional work. Before joining the MMO Mel managed the Northumberland Coast Area of

Outstanding Natural Beauty. He also spent 14 years working in New Zealand central and local government planning for national parks and reserves. Five years in community development in Zimbabwe and three in the North of England with the Oxfam UK Poverty Programme developed a passion for participatory planning. He lives with his family in Northumberland which has some of the most stunning coastline in the UK.

### **Merryn Thomas – Cardiff University**

Merryn is a research associate in the Understanding Risk Group in the School of Psychology at Cardiff University, and is affiliated with the Tyndall Centre and Climate Change Consortium of Wales. Her research is multi-disciplinary, focusing on public perceptions of environmental risks. For her PhD, Merryn used a mixed-methods approach to explore public and expert perceptions of sea-level change on the Severn Estuary. A three-phase methodology was adopted, which included in-depth semi-structured interviews and a wider online survey of people living around the estuary. Before her PhD, Merryn studied for a Bachelors in Geography at Oxford and a Masters in the Science of Natural Hazards at Bristol, where she focused mainly on flood modelling. She is currently working on a project that uses qualitative methods to explore public perceptions of shale gas development in the UK and USA.

### **Nigel Knee - Head of External Affairs, Nuclear New Build, EDF Energy**

Nigel Knee is responsible for nuclear policy and external affairs within EDF Energy's nuclear new build team. EDF Energy is planning the construction of four new nuclear reactors in the UK, capable of supplying the electricity needs of 10 million homes. He was part of the team that prepared the planning application for Hinkley Point C, a major new nuclear power station proposed for the Hinkley Point site on the Somerset coast.

Nigel trained as a metallurgist at Cambridge University, has a doctorate for mechanical engineering research from the University of Bristol, and is a chartered engineer. He has over 30 years' experience in the power industry, starting out in engineering and research for the Central Electricity Generating Board. He has also worked on safety assessment, research programme management and diverse commercial issues including the privatisation of British Energy, electricity trading strategy, business planning, market regulation and business development.

### **Paula Whitfield – Welsh Government**

Born in Bangor, Gwynedd in 1953, Paula was educated in Llandudno, and gained a joint honours degree in Librarianship and English from the University of Wales, Aberystwyth.

Before joining the Civil Service Paula taught Welsh to beginners as well as A level English and courses on 20th Century English literature.

Paula's career in the civil service has included working in the Government's Law library in Cardiff and on developing the policy on various initiatives such as agri-environment schemes, and the significant 2005 reforms of Europe's Common Agriculture Policy and how the reforms were to be implemented in Wales. Paula has worked closely with Westminster Government and EU officials in Brussels on aspects of policy making. More recently her work has centered on developing strategic policy on food.

Paula joined the Marine Planning team earlier in the summer and is working on the development of the Welsh National Marine Plan.

### **Shelley Vince - Partnership Officer, Severn Estuary Partnership**

Shelley Vince joined the Severn Estuary Partnership in February 2014 as the Partnership Officer. She is responsible developing the work of the Partnership, providing support to various pan-estuary groups as well as completing the ASERA study of land and water-based recreation for the Severn Estuary European Marine Site.

Shelley is a Marine Scientist with a degree in Marine Biology and Oceanography and a Masters in Marine Resource Management. She has over seven years' experience of working in the sector, which has mostly focused geographically on Wales and the west coast of England. Her previous work focused on assessing the potential risk and impacts of human activities on the Marine Environment by advising Natural Resources Wales and the Marine Management Organisation on Marine Licence applications covering a range of activities including offshore wind farms, tidal energy developments and marine aggregate extraction.

### **Dr Steve Fletcher – Director, Centre for Marine and Coastal Policy Research, Plymouth University**

Dr Steve Fletcher is Director of the Centre for Marine and Coastal Policy Research at Plymouth University where he leads a group of researchers delivering multiple projects at the interface of marine science and policy. He has personal expertise in marine ecosystem services assessment,

marine policy analysis, and applied coastal and marine governance. He has extensive experience of coastal partnerships through his chairmanship of the Hamble Estuary Partnership, and close involvement with the Solent Forum, Dorset Coast Forum, and currently the Devon Maritime Forum. He co-leads the VALMER project (2012-2015; €4.7m) which is testing the application of marine ecosystem service assessment to marine planning in the Western English Channel, and the PEGASEAS project (2013-14; €1.2m) which will generate evidence-based advice to marine policy at the national and European scale, including the Maritime Spatial Planning Directive. For more information: email: [steve.fletcher@plymouth.ac.uk](mailto:steve.fletcher@plymouth.ac.uk) or via twitter: @drs Fletcher.

**Professor Terry Marsden - Director of Sustainable Places Research Institute (PLACE), Cardiff University**

Terry Marsden is Director of Cardiff University's Sustainable Places Research Institute (PLACE) and Professor of Environmental Policy and Planning in the School of Planning and Geography. He was Co-Director of the UK Economic and Social Research Council's Research Centre for Business Relationships, Accountability, Sustainability and Society (BRASS) at Cardiff University for 12 years and he is also Dean of the University Graduate College.

With more than 25 years experience working in the field of sustainability, Professor Marsden has a broad range of research and policy advisory experience based around the themes of international rural development, sustainability, sustainable land management and the rural environment. As Director of PLACE he is involved in funded projects concerning: constructing sustainable communities, food security and food networks in rural areas, the multi-level governance of the rural environment, and the theory and practice of sustainable place-making.

He is a Member of the Royal Town Planning Institute, Fellow of the Royal Society of Arts, The Royal Institution of Chartered Surveyors, the Learned Society of Wales, and Academician of the Social Sciences.

Professor Marsden's research expertise is in theoretical and empirical studies in rural development, agro-food studies, sustainable development and planning, policy development and rural governance.

**Tim McGrath – Wildfowl & Wetlands Trust**

Tim joined the Wildfowl & Wetlands Trust in Feb 2009 with over 20 years experience of working both with the Wildlife Trusts and Rural Development Service. As Head of Nature Reserves at



Avon Wildlife Trust he lead a 50 strong team delivering biodiversity and visitor access benefits across some of the most wildlife-rich sites across the county.

As an experienced naturalist with a long-time interest in ornithology and botany Tim now project manages Habitat Creation work across all of WWT's UK sites. However since 2010 he has been their full time lead on the Environment Agency's Steart Coastal Management Project, one of the largest wetland habitat creation schemes in the UK. Following breach Tim will next turn his attention to coordinating the transition from construction site to nature reserve as WWT Steart Marshes becomes the first example of a landscape scale Working Wetland, having wide-ranging benefits for both people and wildlife.