

## Welcome to the autumn issue of the FWR Newsletter

In this issue we turn the spotlight on WFD and the catchment-based approach. As 2015 draws ever closer, and in preparation for the next cycle of River Basin Management Plans, Defra is looking towards stakeholder engagement becoming an essential part of the process of achieving WFD objectives in catchments across the country.

Clare Black from Cascade Consulting, the consultancy Defra have appointed to evaluate the pilot stage of the catchment-based approach, provides our lead article, explaining their work on this important new initiative. Related features include updates on the pilot catchments of the Ecclesbourne in Derbyshire, hosted by the Environment Agency, and the South Chilterns, hosted by FWR.

Loughborough University won second prize in an international competition to "reinvent the toilet" - this was held in August in Seattle and was organised by the Bill and Melinda Gates Foundation. Tim Evans explains the background to this challenge.

The Health Protection 2012 conference took place in September; Mike Waite went to the University of Warwick and reports back on the varied sessions he covered.

Neil Tytler looks back at the summer water festivals he attended in conditions which were decidedly not very summer-like!

On the back page, Caryll Stephen, FWR Chief Executive, gives details of our current activities.

For more information please have a look at our website [www.fwr.org](http://www.fwr.org)  
You can also contact us via email [office@fwr.org.uk](mailto:office@fwr.org.uk) or telephone (01628 891589)

**Maxine Forshaw - Editor**

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# EVALUATING THE CATCHMENT BASED APPROACH



**Clare Black**  
Environmental Scientist,  
Cascade Consulting

## THIS IS AN EXCITING TIME FOR PEOPLE INTERESTED IN RIVER CATCHMENT MANAGEMENT.

Improving ecosystems at the river catchment scale is at the heart of the Government's drive to improve the water environment, as set out in Defra's recent Water White Paper.

A shift in focus from larger river basins to the smaller catchment scale is widely recognised as a positive step towards achieving long-term improvements in the water environment and delivering our targets under the EU Water Framework Directive (WFD).

Central to this approach is the engagement of local stakeholders to establish common ownership of problems and their solutions, building partnerships to implement actions at the local level.

This supports the key messages from Defra's Natural Environment White Paper advocating the importance of, and benefits provided by, healthy aquatic systems – safe clean water supply,

flood protection, recreational opportunities and thriving wildlife – with the recognition that we all have an interest, and therefore a role, in protecting our waterbodies.

Defra is currently leading the development of this new approach to improving the water environment through catchment-level engagement and planning. The aim for this approach is to balance environmental, economic and social demands and align funding and actions within river catchments to bring about long-term improvements. The vision for this approach, to be rolled out across the country from April 2013, is for stakeholders in water management catchments

in England to develop jointly-owned catchment plans which will support the second cycle of River Basin Management Plans (2015 – 2021) to deliver the objectives under the WFD.

## TRANSLATING POLICY TO PRACTICE: THE CATCHMENT PILOTS

To develop an understanding of how the catchment-based approach could work in practice, a series of catchment-level partnerships is being developed through a pilot phase (May 2011 – December 2012) to test this new approach. Ten of these partnerships are hosted by the Environment Agency (EA) and 15 are being led by a range of stakeholders such as Rivers Trusts, Groundwork, water companies and



community groups. There are a further 41 catchment initiatives (including FWR's work in the South Chilterns) which are also in progress, though not currently part of the formal evaluation.

The 25 catchment groups taking part in the pilot phase of the catchment-based approach have been chosen to represent the range of circumstances likely to be encountered in taking forward this approach nationwide. The catchment pilots differ in many ways, from the context within which they work (e.g. catchment location and size, land use, history of engagement) to the structure and process of working (e.g. leadership, run time, key drivers for action). It is important that these differences are taken on board when trying to understand what works best, where and why, to tease out lessons for wider implementation of the catchment-based approach.

## LEARNING FROM EXPERIENCE: THE EVALUATION

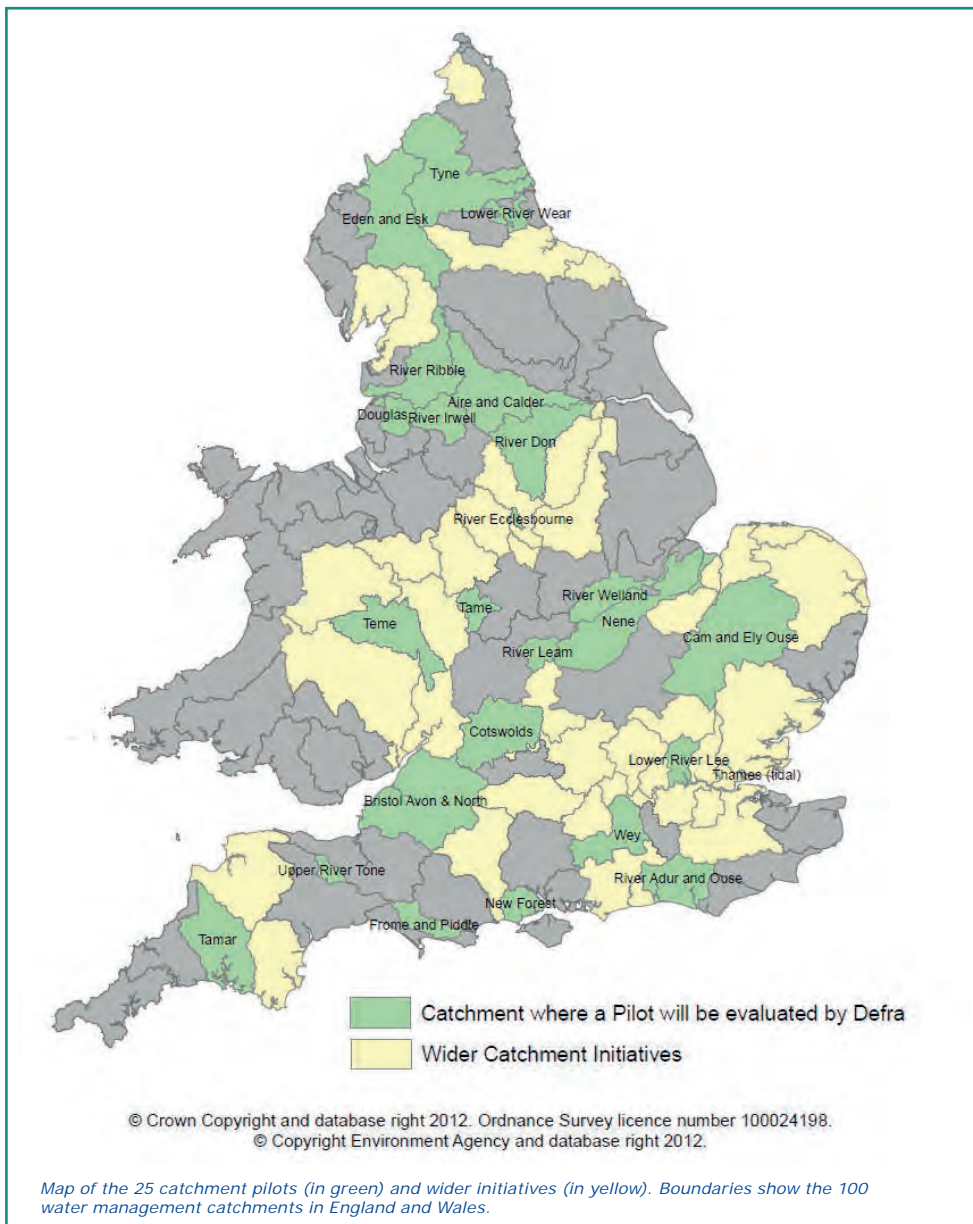
### The evaluation team

The Government's aim is that the 25 pilots will provide a means for stakeholders, including the EA, to learn together how to develop effective, partnership-based approaches for catchment improvement. In order to do so, Defra has commissioned a team of consultants to undertake an independent review of the 25 catchment pilots over the period December 2011 to March 2013. The consortium, led by Cascade Consulting and partnered by Collingwood Environmental Planning and YJRees Consulting, are working alongside government, stakeholders and communities to collate information provided by the pilots and gather views from all involved about what is working well and what could be done better.

### Our approach

An evaluation framework was developed by the team to identify principles for the evaluation, key research questions and sources of information. There are six main areas which the evaluation team has focussed on and which the monitoring tools and outputs are structured around:

1. Transparency and accountability – how the pilot is led, how roles and responsibilities are allocated and how information is made available;
2. Monitoring performance – timescales for different activities and how catchment pilots feel they are progressing against their own objectives;
3. Learning – the sharing and development of knowledge and understanding within each catchment pilot and identification of additional support requirements;
4. Benefits realisation – financial, environmental and social benefits, successes hoped for and those observed over the course of the pilot project;
5. Comparative analysis – assessment of what worked best in different types of



catchment pilots and review of progress between catchment pilots with different characteristics;

6. Value for money – costs in staff time and resources to pilot hosts, changes in cost effectiveness and added value in terms of improved ecosystem services.

### Surveys and interviews

Information for each of these focus areas has been gathered through a range of monitoring tools designed for different respondents at different stages of the catchment pilot process:

- **Baseline characterisation form:** after the evaluation project was launched in January 2012, each pilot host was sent a form to check and complete. This contained useful information on key catchment pilot characteristics to help understand where each pilot is starting from and to support comparative analysis.
- **Quarterly review form:** an online quarterly review survey was issued to the 25 pilot hosts in March, June and September

2012, with a fourth and final survey to be issued in December. These surveys have been the main source of information for the evaluation team on the work done by pilot hosts over the course of the project. The main findings from each survey have been written up as quarterly reports issued back to pilot hosts to provide an overview of progress made, issues raised and immediate lessons learned for review at the end of the pilot programme.

- **Participant survey forms:** an online participant survey was circulated to individuals actively involved in each catchment pilot in March 2012 to capture the experiences of a broader group of people involved in the process. This exercise will be repeated in December 2012 to review changes in participant views at a later stage of the pilot programme.
- **Direct monitoring:** in-depth monitoring as a series of interviews and observation of a catchment pilot event has been carried out for five catchment pilots, selected to represent the range of catchment pilots covered by



the evaluation (Bristol Avon and North Somerset Streams, Douglas, Ecclesbourne, Tidal Thames and Welland). An additional pilot, Bradford Beck, has been included in this process since October 2012 to broaden the range of catchment pilots being studied in detail. Furthermore, a series of telephone interviews will follow completion of the third quarterly review to discuss issues not fully captured by the online surveys with individual pilot hosts in more detail.

- **Learning event feedback forms:** these have been circulated at the end of each feedback event and the findings are included in the workshop record and used to inform the design of future events. Pilot hosts have also been provided with event feedback forms for their own events.

## Learning events

A core component of the evaluation project is to make the most of the opportunities for learning, both at the catchment pilot level and across the programme as a whole to inform wider roll-out. The evaluation team has been actively engaging with pilot hosts to identify areas where advice or support is needed and to organise workshops to address knowledge gaps, discuss case studies and best practice, and inform guidance on learning needs for wider roll-out.

Following a successful launch event in January 2012, attended by pilot hosts from around the country, a series of workshops was set up to support the work of pilot hosts and encourage an exchange of ideas between catchment pilots. Two national events and six regional events have been held to date, with one national event to follow. Feedback from these events has been very positive, with pilot hosts identifying and engaging with topics ranging from collaborative working and project management through to funding sources, using evidence and writing catchment plans. The next national learning event, to be held in November, will focus on celebrating achievements to date and learning how to assess and present benefits. This has already received a great deal of interest from the pilot hosts.

In addition to the direct learning gained from the learning events, many pilot hosts have commented on the value of these workshops for meeting others in a similar position (and the relief of knowing they are not the only ones facing particular problems!). This was particularly true for catchment pilots new to catchment-based ways of working and for catchment pilots led by stakeholders other than the EA, who did not necessarily have the same pre-existing support networks available.

## Starting to see the benefits

The catchment pilot hosts who have been involved in the evaluation to date have been enthusiastic and keen to see improvements in their area. Many catchment pilots are already realising significant benefits as a result of collaboration at the catchment scale, including:



*Discussion of the structure and content of existing catchment plans at a regional learning event helped pilot leads to consider how to write their own plans.*



*Catchment pilots have brought a wide range of partners together, including local residents and business, to try to solve problems in river catchments (image courtesy of the Welland Rivers Trust).*

- Engagement with, and commitment from, stakeholders from different backgrounds, including groups not worked with previously (e.g. water companies, the media, community groups and schools).
- Enhanced understanding of the catchments themselves, improved access to data held by different groups and better ways of using this information to get people on board and inform decision-making.
- Identification and agreement on a vision for improvement in the catchment and actions to bring this about (many are still in the early stages of this, which will ultimately lead to the development of a catchment plan).
- A better outlook for funding bids (e.g. Catchment Restoration Fund) and more efficient use of resources to begin delivering improvements on the ground.

## NEXT STEPS: THE BEST IS YET TO COME

Over the next five months, the evaluation team will continue engaging with and monitoring the 25 catchment pilots, as well as incorporating learning from the 41 further catchment initiatives not currently being evaluated. Between now and early next year, the team is developing a handbook

for catchment management which will translate the learning coming out of the pilot phase into useful guidance and reference materials for others looking to set up and run catchment-based initiatives from 2013. This will be used to inform the design of the Catchment Change Management Hub, an online resource currently being developed by Cascade Consulting and Lancaster University as a central interactive repository for people involved in catchment management.

The idea of a more holistic and localised approach to managing and improving the water environment for the benefit of people and wildlife has long been viewed as important – and this is now closer than ever to becoming a reality. To do so requires harnessing the enthusiasm that has been seen in the course of the evaluation in catchment partners across the country, enabling them to develop appropriate, local solutions to local catchment problems and to share their experiences with others to bring about sustainable and effective long-term improvements in the water environment.

Further information on the evaluation of the catchment-based approach can be found on our website <http://www.catchmentchange.net/pilot-catchments> or by emailing us at [catchmentpilots@cascadeconsulting.co.uk](mailto:catchmentpilots@cascadeconsulting.co.uk).



## South Chilterns Catchment Pilot Project

Maxine Forshaw and Neil Tytler

**T**HE GOVERNMENT'S CATCHMENT-BASED approach was announced on World Water Day, 22 March 2011. It is seen as the tool by which Integrated Catchment Management will be delivered. One of the fundamental ideas is to engage stakeholders via a more local catchment-based approach.

As Clare Black explains in her lead article, a total of 25 catchments were chosen as pilots which will be evaluated in terms of the different ways they approached and supported stakeholder engagement. A further 41 smaller pilot catchments have been awarded a small sum of 'seed corn' money from Defra to go ahead and initiate the catchment-based approach, reporting progress back to Cascade Consulting in January 2013, although these will not form part of the formal evaluation. FWR was pleased to be awarded one of these grants, to cover the South Chilterns area.

The project milestones identified by Defra involve engaging with stakeholders, exploring with them and agreeing the water quality and related issues in the catchment, defining what actions need to be taken to address the issues, and identifying whether stakeholders have the capability or capacity to deliver those actions to achieve WFD objectives. So as host, it is up to FWR to identify and engage with stakeholders, develop a shared understanding of issues in the project area and help initiate joint agreed actions.



*The Blue Pools, River Pang (photo courtesy of the Greenaway Collection)*

The South Chilterns project area covers the catchments of the Pang, Hughenden Stream, Wye and Lower Middle Thames (the latter covering the Ewelme Stream and Hamble Brook).

In terms of progress to date: we have attended meetings with the Environment Agency to gather information on existing issues which are preventing waterbodies from achieving good ecological status (GES); we have drawn up a list of possible stakeholders for each sub-catchment within our area and are grateful to Dick Greenaway (West Berkshire Countryside Society), Allen Beechey (Chiltern Chalk Stream Project) and the Environment Agency for their

valuable knowledge in helping us to compile this. We also attended a steering group meeting of the 'Revive the Wye' partnership project, making useful contact with stakeholders of this watercourse which runs through High Wycombe.

Our next step is to set up stakeholder meetings and, as our project area covers a variety of sub-catchments, it is likely that we will hold three separate meetings in order to engage our stakeholders successfully.

We will update you of our further progress in the next issue of the newsletter.

For further information please contact either Maxine Forshaw or Neil Tytler at [office@fwr.org.uk](mailto:office@fwr.org.uk)



*Ewelme Stream and watercress beds (both photos courtesy of Allen Beechey, Chilterns Chalk Streams Project)*



*Hughenden Stream, upstream of Hughenden Manor grounds*



*River Wye, downstream from Ryemead Way (photo courtesy of Allen Beechey, Chilterns Chalk Streams Project)*

## The Catchment Based Approach

from pilot to roll out: building on the lessons

Defra Conference, 17th October, Leeds

Neil Tytler

**I**N MARCH 2011 the Government announced that it wanted to see a fundamental change in the way in which the WFD and RBMP (River Basin Management Planning) process is delivered. Following the setting up of 25 pilot catchment projects a considerable amount of understanding is being gained on a Catchment Based Approach (CaBA) to deliver more integrated catchment management in all English catchments from 2013. Defra recently held a conference in Leeds to explore the key issues that need to be addressed on the proposal to roll out high-level catchment groups in each of the 100 English Water Management Catchments.

A full report on the conference together with links to the published outputs is planned for the next edition of the Newsletter.



## COLLABORATIVE WORKING AS A MEANS OF DELIVERING THE WFD

### the Ecclesbourne Catchment pilot

Tim Pickering explains:

**W**HEN I FIRST HEARD THAT Defra were thinking of setting up a number of pilots to evaluate collaborative working I jumped at the chance to be involved. I have long felt that the only way to manage something as complex as the environment is through collaboration. After some intense lobbying of colleagues I was offered the opportunity to co-ordinate the Ecclesbourne Catchment Pilot.

The River Ecclesbourne sits in a small but beautiful valley, just to the north of Derby. In Water Framework terms it is prevented from reaching Good Ecological Status because of phosphates. Silt and barriers to fish



Tim Pickering, Partnership Development Specialist, Environment Agency

movement are also perceived as threats. At 60 km<sup>2</sup> the catchment is one of the smallest of the Defra pilots, but being small conveys significant advantage in that the issues are easy to identify and the partners easy to interest, which allowed us to focus primarily on the task of collaborating.

Phosphates in the catchment were easily traced to waste water treatment, one works in particular, which was causing the bulk of the problem. Land management was also causing a smaller but still significant impact. Forward stepped the local water company and the National Farmers Union!

We then came up against our first issue, how to involve the public. Of course we could consult but on what? We had no plan. We approached the local wildlife trust, with a membership of 500 in the catchment, to ask if they would act as the public face of the collaboration under the Defra "Love Your River" banner. The process of raising public awareness began.

We had an excellent first workshop where ideas were thrown into the pot and, spurred on, we identified a series of specific work groups to look at phosphate reduction at the treatment works, a programme of farm liaison work, and a community engagement programme involving local schools and volunteer groups. One idea picked up by the County Council, a fourth partner in the venture, was the development of a middle distance footpath through the valley as a means of encouraging tourism and boosting the local economy. Will this reduce phosphates? No, but it does play a role in highlighting the value of the catchment and the ecosystem services it has the potential to provide, to all those who live and work there.

The biggest challenge has been that you need time to develop a collaborative group and ensure everyone is on board, time to steer the aims of the group so that partners have something that keeps them interested. It's not been plain sailing but slowly momentum is building. We will have a delivery plan by December 2012 and I can guarantee lessons have been learnt through building the group and developing the plan.

Will the plan be delivered? That will ultimately be down to those who come after me and the lessons learnt from all the pilots. I don't yet see this kind of approach as a panacea for catchment management but I wager, within a few years, as more come to understand what is required and what can be achieved, it will be!

For further details please contact:  
[tim.pickering@environment-agency.gov.uk](mailto:tim.pickering@environment-agency.gov.uk)



Ecclesbourne Collaborative Group – following the first workshop in September 2011

## UK & IRELAND LAKES NETWORK

### 3<sup>rd</sup> Annual Symposium

Lough Neagh, Northern Ireland  
 4 - 5 October 2012  
 John Pinder reports:

**T**his year's annual event combined an historic and natural history journey on Lough Neagh with the more formal proceedings hosted by the Lough Neagh Partnership and the Northern Ireland Assembly in their iconic Parliamentary Buildings, Stormont. The shorelines and islands of this, the UK's largest lake, hold a wealth of cultural heritage, interest and importance to its local communities of which they are justifiably proud. ... *continued page 6*



**Left to right back row:** Charles Monaghan - Manager Lough Neagh Partnership, John Pinder - Hon. Sec. to UKILN and Global Nature Fund advisory board member, Shane O'Neill - Chairman Lough Neagh Partnership, Udo Gattenloehner - CEO Global Nature Fund, Eimear Kearney - Marketing Manager Lough Neagh Partnership, Lord Shaftsbury, Gerry Darby - Board Director Lough Neagh partnership and UKILN trustee.

**Left to right seated:** Tony Dean - Chairman UKILN, Alex Attwood - Minister of the Environment NI Assembly.



Ecclesbourne – typical view of the catchment



... continued from page 5

The depth of this importance, right up to government level, was demonstrated by the reception given by the Minister for Culture of the Department of Culture, Arts and Leisure, Carál ní Chuilín that evening and her witnessing the creation of the UKILN (Charitable Trust).

Friday morning's formal scene setting, through the delivery of some six eclectic papers from UKILN members and the CEO of the Global Nature Fund, Udo Gattenloehner, provided the breadth of interest and values we ascribe to our lakes, from the policy setting to the detailed scientific understanding of lake dynamics.

The afternoon session, following previous years' formula, was set to showcase Lough Neagh, its issues and aspirations. Before discussions on key issues, personal views were given by four of Northern Ireland's MLAs (Member of Legislative Assembly) along with the government perspectives from the Minister of Agriculture and Rural Development, Michelle O'Neill, and the Minister of the Environment, Alex Attwood. This provided the highest possible perspective of how important the Lough is to the local economy, not just now, but for future generations. The public profile afforded to the symposium provided enormous gravitas to the work being done by local communities and

individuals and this was underlined in the presentation of 'awards of recognition' to individual 'movers and shakers' who had already made a difference to the lake's security, including our own Lough Neagh Partnership representative, Gerry Darby.

Clear messages came from the debate that all with lake interests had a part to play. From government policy through administrations, focus groups, NGOs, to locals and individuals. Whole watershed protection is a necessary part of the 'big plan' and coordination of actions is essential if the Lough is to not only be protected but also realise its community, heritage and economic potential.



Commercial sand dredging on Lough Neagh

Next year, the Environmental Protection Agency (EPA) in the Republic of Ireland has offered to host the 4th Annual Conference 2013 in Dublin.

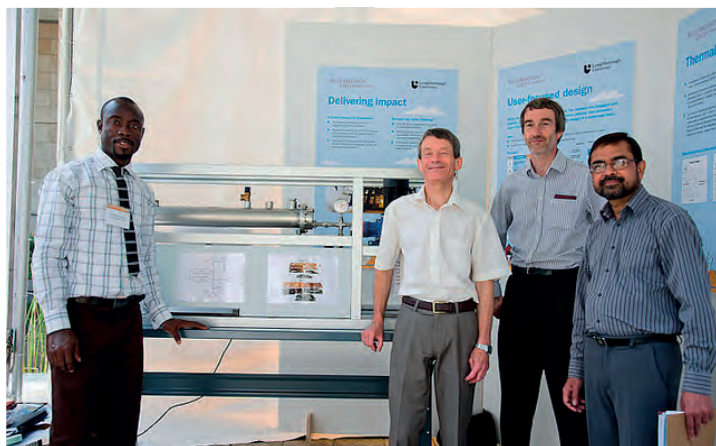
[http://www.ukandirelandlakes.org/default.asp?textpage=News\\_and\\_Events&maincat=ne](http://www.ukandirelandlakes.org/default.asp?textpage=News_and_Events&maincat=ne)

## Reinventing the Toilet

Tim Evans

FWR Wastewater Section Coordinator writes:

It is a commonplace that water supply and sanitation have done more for life expectancy than medicine but, globally, waterborne disease remains a killer.



The Loughborough team at the Seattle toilet fair. From left to right: Eric Denso-Boateng, Prof Andrew Wheatley, Prof Richard Holdich, Prof M Sohail Khan

Prof. Andrew Wheatley is a member of the Loughborough team and member of FWR's Wastewater Research & Industry Support Forum.



Tim Evans

**M**ILLENNIUM DEVELOPMENT GOAL 7 was "Ensure environmental sustainability" and fed down to Target 7C: "Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation".

In 2000, 2.5 billion people around the world didn't have access to modern sanitation; the number is now 2.6 bn. The proportion has decreased but the population has increased.

The United Nations estimates that disease caused by unsafe sanitation results in about half the hospitalizations in the developing world. About 1.5 million children die each year from diarrheal disease. The Bill and Melinda Gates Foundation decided that something radical was needed because it is not feasible that the infrastructure for wastewater collection and treatment that has served the developed world so well could be implemented in the developing world.

Just as developing countries have leapfrogged the fixed-phone infrastructure with mobile phones, was it possible to "reinvent the toilet"? The challenge from the Foundation was to submit proposals for "toilets that will be hygienic and sustainable, discharge no pollutants, generate energy, recover nutrients, only need a tiny amount of water and have a cost of operation of no more than US\$0.05 per person per day".

Eight research teams (from China, Switzerland, Britain, the Netherlands, Canada and California) won first round awards.

Loughborough University was the only one from the UK and chose to develop continuous thermal hydrocarbonisation, which kills pathogens, to create safe-to-handle material and uses power from heat generated during processing. The toilet is designed to work in both single-family and multi-user contexts. Prototypes were reviewed at the "Reinventing the Toilet" Fair in August 2012 in Seattle. Caltech won Gold and Loughborough won Silver in the toilet Olympics – a fantastic achievement.

[http://www.lboro.ac.uk/service/publicity/news-releases/2012/153\\_reinvent\\_toilet.html](http://www.lboro.ac.uk/service/publicity/news-releases/2012/153_reinvent_toilet.html)

<http://www.npr.org/blogs/health/2012/08/15/158874028/bill-gates-crowns-toilet-innovators-at-sanitation-fair>





Mike Waite

**O**VER 1100 DELEGATES ATTENDED the two-day meeting which had five concurrent tracks of topics. Mike Waite attended the Water and Public Health sessions on 12 September when 12 short presentations were made.

The first session was devoted to Private Water Supplies (PWS) and began with a presentation by Professor Jeni Colbourne on implementation of the Private Water Supplies

Regulations 2009 by DWI, referring to the setting up of a national register of all PWS, which currently shows over 85,000 such supplies in the UK, and publication of annual reports starting with 2010. She described the roles of DWI and Local Authorities and outlined progress to date.

# HEALTH PROTECTION 2012

UNIVERSITY OF WARWICK, 11-12 September 2012

Mike Waite, FWR Water Supply Coordinator



Tracey Wood (HPA) then described the production of an algorithm for Health Protection Units (HPU) to help in management of drinking water inquiries and incidents. The algorithm sets out lines of communication between all parties involved.

Frances Pollit referred to the HPA's 25 Health Protection Units and the 433 Local Authorities they support. LAs have encountered a number of exceedences for chemical parameters and have sought HPU advice. Detailed toxicological advice has been prepared to assist HPUs with giving this advice. She outlined the background to the advice for copper and manganese as examples.

Rebecca Close (HPA) finished the session with a description of a pilot study in East Cornwall of arsenic in PWS. She outlined the principles of Environmental Public Health Tracking (EPHT). The study looked at local geology and analysed 325 samples from 258 households with PWS for 64 parameters.

Thirty per cent of households exceeded the limit for one or more parameters with 6% having arsenic levels above the permitted level of 10 µ/litre with a highest level of 435 µ/litre.

The second session began with a disturbing paper by Brian Smyth (NI Public Health Agency) on outbreaks of *Pseudomonas aeruginosa* affecting a number of neonatal units in Northern Ireland. The source of infection was taps and a major programme of tap replacement was undertaken along with issue of advice on steps to take to minimise risk of infection, including not using tap water for baby washing. Sensor operated taps were no less prone to harbour the organism and all taps were reported as being WRAS approved.

Stacey Wyke-Sanders (HPA) outlined the production of the UK Recovery Handbook for Chemical Incidents, which was based on a similar handbook for radiation incidents. It includes a six-step

decision framework to guide the recovery process.

Gabriella Rundblat (Kings College London) then gave a paper on a thought-provoking study of public beliefs and risk perceptions. The study used a postal questionnaire and looked at the US and UK, focussing on London and East Anglia in the UK with 1000 questionnaires which yielded 321 responses. In the UK less than half the respondents thought that tap water or bottled water were tested enough and 41% said they worried about their tap water sometimes or often. Media reports cause unnecessary alarm. It is clear that the public still needs educating about water supplies when respondents said that the top three contaminants needing to be removing were lead, battery acid and pharmaceuticals. Derek Hammond (HPA) concluded the session with a paper on removal of chemicals by jug filters.

The final session covered topical water problems and began with

a paper by Laura Mitchem (HPA) on management of cyanobacteria incidents in recreational waters. She described health problems associated with cyanobacterial blooms and explained that blooms can be very localised and of short duration but can cause health problems through dermal exposure, ingestion or inhalation. The HPA has produced a guidance document on the Management of Cyanobacteria in Inland Recreational Waters with a traffic light classification of risk. For intermediate numbers of cyanobacteria some recreational activities may be acceptable.

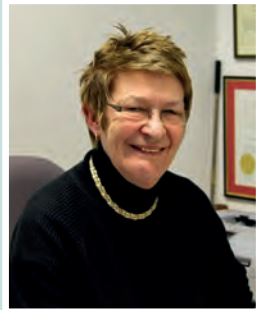
Lucy McCann (HPA) gave a presentation on surveillance in the flood crisis in Thailand in 2011. HPA were invited by the Thai Ministry of Public Health to review health surveillance outcomes when routine health surveillance systems were disrupted by the flooding. Event recording was carried out in shelters set up for displaced persons and identified incidents were investigated. There was no significant increase in infectious disease although cases of electrocution were significantly higher.

Gordon Nicholls (HPA) talked about infections related to swimming pools and referred to 86 pool-related outbreaks between 1988 and 2012. These were seasonal but mainly due to cryptosporidium. He stressed the need for UV to deal with oocysts as chlorine is ineffective.

William Welfare (HPA) closed proceedings with a paper on sewers and culverts as pathways for vapour exposure. He described incidents in which solvent vapours and chemical odours derived from sewers or culverts had been encountered in properties. These could be due to accidental or deliberate discharges to sewers or watercourses or even resins used for culvert repairs. The source of the odours could be further than 0.5 miles from the complaint of odour.



## An update on the activities of the FWR



**Caryll Stephen**

*Chief Executive of the Foundation for Water Research*

With summer gone and autumn now with us, FWR is anticipating a busy time leading up to Christmas. We have been fortunate to receive a number of reports for inclusion in this Newsletter and, as always, we are very grateful to all those who have contributed. We have just about completed a busy exhibition tour and have made many new contacts. As you will have seen we are progressing well with hosting the South Chilterns Pilot Catchment Project and our Water Supply and Wastewater sections have been out and about. We are planning to update more of our Reviews of Common Knowledge (ROCKS) and Guides, and are continuing to assist in the update of the Urban Pollution Management (UPM) Manual which is due out shortly.



On the administration side we were so sorry to have to say goodbye to our Newsletter Editor, *Ivana Wilson*, who retired in the summer. Ivana enthusiastically progressed the Newsletter from its initial four-page publication to its current eight pages. Ivana is also a keen photographer so despite retiring we are hoping to occasionally be able to 'tap into' those skills.



We are, however, very fortunate to have *Maxine Forshaw* now to pick up where Ivana left off. Maxine, as you will have seen from the last Newsletter, had joined us to help develop Defra's pilot catchment based approach project and has now taken on this additional duty.

Our next Newsletter is not expected now until the beginning of January and I should therefore like to take this opportunity to thank all our readers for their continuing support and to wish all a Very Happy Christmas.

## Neil's Summer Festival Action!

Neil Tytler

Since the last Newsletter, FWR have attended two public festival events and two trade exhibitions to raise awareness of our work.



*Hampshire Water Festival - here comes summer....*



*....but the crowds still arrived.*

### Hampshire Water Festival

For a second year FWR exhibited at the Hampshire Water Festival at Havant in July. The event was supported by a large number of organisations, including Portsmouth Water and Southern Water, and was well attended despite the atrocious weather and strong competition from other events over the same weekend, namely the South-sea Food Festival and the Portsmouth leg of the Olympic Torch relay.



*Newbury Waterways Festival*

### Newbury Waterways Festival

This year was the first time FWR have exhibited at the Newbury Waterways Festival held also in July at Victoria Park, adjacent to the Kennet and Avon Canal. The weather was much kinder this time and large numbers of people came to the event. There was considerable interest in the work of FWR and in the information we provide on all aspects relating to water and the water environment. Many questions were asked, relating to a wide variety of topics, and by the end of the day all our leaflets had been handed out.



*Maidstone*

### Water, Sewerage and Waste Exhibitions

This year FWR are supporting four different Water, Sewerage and Waste (WSW) exhibitions to promote our work in different areas of the country. The first, in September, was at Maidstone and the second, in October, was at Peterborough. The next two will be at Bradford and Newcastle and both will take place in November. These trade exhibitions attract a large number of professional people who operate on the fringes of the water industry (surveyors, architects, local authority personnel, farmers, etc.) who frequently have a particular problem for which they are seeking an answer; they find FWR's independent and unbiased advice, together with our publications, extremely useful to help them develop their own knowledge and expertise.