

# Delivering Healthy Water: Building the Science - Policy Interface to Protect Bathing Water Quality

Grant No. NE/I022191/1  
Final Report

## Summary

The Delivering Healthy Water (DHW) project had the aim of establishing a UK Working Group to provide a mechanism for the exchange of knowledge, experience and evidence among academic, regulatory and public stakeholders with respect to emerging molecular quantification tools for microbial parameters in EU regulated waters. It did this through the creation on an information rich website and associated social media, via a workshop series with invited international experts (WS1 – needs of the science user communities; WS2 – role of science providers; and WS3 – economic impacts of technology transition) and through a public engagement event. The working group produced a series of publically accessible briefing papers and a decision making framework. These guidance documents provide a key accompaniment to debates surrounding the suitability of emerging technologies for assessing water quality at designated bathing waters.

## Successes

1. A UK Working Group comprised of leading experts in the field, policy makers, regulators and campaign organisations was established and continues to provide a network for discussion and information sharing;
2. DHW ran three workshops in London and Stirling with international experts spanning the fields of bathing water regulation and water quality assessment through to environmental economics and molecular biology;
3. 37 experts, from across 23 organisations in Europe and the US participated in the workshop series and a wider global audience contributed to workshop 3 via an on-line survey;
4. The main DHW dissemination tool was the website [www.deliveringhealthywater.net](http://www.deliveringhealthywater.net) which provided information on events and a portal for the emerging outputs, technical reports, briefing papers, project presentations and the DHW decision-making framework (DMF);
5. The DHW Briefing Papers and DMF, available for download, provide key, easy-to-use guideline documents to support EU decision making with regard to potential transitions in bathing water quality assessment procedures;
6. David Oliver, Richard Quilliam, Andy Cummins and Jonathan Porter discussed bathing water quality and beach signage information with an audience of 60 café-goers at the Phoenix Bar in Exeter as part of a public engagement event. Exeter was chosen as the venue given its longstanding hosting of café Scientifique events and because over a quarter of bathing waters in England are located in the South West. The evening provided a chance to share information and research findings to members of the public. It also served as an opportunity to capture the views of those interested in the subject area and answer questions on bathing water quality and information.

## Outputs: Website

Website: [www.deliveringhealthywater.net](http://www.deliveringhealthywater.net)

Twitter feed: @dhw\_ac\_uk

## Outputs: Technical Reports

Oliver, D. M., Van Niekerk, M. A., Kay, D., Heathwaite, A. L., Quilliam, R. S., Connolly, E., Cummins, A., McPhail, C., Rahman, A., Porter, J., Thairs, T. and Hanley, N. (2012). Delivering Healthy Water: building the science-policy interface to protect bathing water quality / Report from workshop 1 <http://www.deliveringhealthywater.net/wp-content/uploads/2012/08/Workshop-1-report.pdf>

Oliver, D. M., Van Niekerk, M. A., Kay, D., Heathwaite, A. L., Quilliam, R. S., Connolly, E., Cummins, A., McPhail, C., Rahman, A., Porter, J., Thairs, T. and Hanley, N. (2012). Delivering Healthy Water: building the science-policy interface to protect bathing water quality / Report from workshop 2 <http://www.deliveringhealthywater.net/wp-content/uploads/2012/08/Workshop-2-report.pdf>

Oliver, D. M., Van Niekerk, M. A., Kay, D., Heathwaite, A. L., Quilliam, R. S., Connolly, E., Cummins, A., McPhail, C., Rahman, A., Porter, J., Thairs, T. and Hanley, N. (2013). Delivering Healthy Water: building the science-policy interface to protect bathing water quality / Report from workshop 3 [http://www.deliveringhealthywater.net/wp-content/uploads/2013/03/Workshop\\_3\\_report\\_v6.pdf](http://www.deliveringhealthywater.net/wp-content/uploads/2013/03/Workshop_3_report_v6.pdf)

## Outputs: Briefing Papers and Guidance Documents

Oliver, D. M., Van Niekerk, M. A., Kay, D., Heathwaite, A. L., Quilliam, R. S., Connolly, E., Cummins, A., McPhail, C., Rahman, A., Porter, J., Thairs, T. and Hanley, N. Delivering Healthy Water Briefing Paper 1: Science, Regulation & Policy [http://www.deliveringhealthywater.net/wp-content/uploads/2013/05/DHW-Briefing-Paper-1\\_High-res.pdf](http://www.deliveringhealthywater.net/wp-content/uploads/2013/05/DHW-Briefing-Paper-1_High-res.pdf)

Oliver, D. M., Van Niekerk, M. A., Kay, D., Heathwaite, A. L., Quilliam, R. S., Connolly, E., Cummins, A., McPhail, C., Rahman, A., Porter, J., Thairs, T. and Hanley, N. Delivering Healthy Water Briefing Paper 2: Economics & Stakeholder Information [http://www.deliveringhealthywater.net/wp-content/uploads/2013/05/DHW-Briefing-Paper-2-High\\_res.pdf](http://www.deliveringhealthywater.net/wp-content/uploads/2013/05/DHW-Briefing-Paper-2-High_res.pdf)

Oliver, D. M., Van Niekerk, M. A., Kay, D., Heathwaite, A. L., Quilliam, R. S., Connolly, E., Cummins, A., McPhail, C., Rahman, A., Porter, J., Thairs, T. and Hanley, N. Delivering Healthy Water: Decision Making Framework <http://www.deliveringhealthywater.net/wp-content/uploads/2013/05/DMF.pdf>

**Outputs: Conferences / events**

Mel van Niekerk: Delivering Healthy Water: Building the Science-Policy Interface to Protect Bathing Water Quality (Presentation of the Project at the Sensors for Water Interest Group Workshop entitled "Bathing Waters: current and future environmental requirements", April 2012).

David Oliver: Evaluating Emerging Technologies for Management & Control of Diffuse Microbial Pollution at Bathing Waters (Presentation of the project at the 6th International Perspective on Water & the Environment Conference, Izmir, Turkey, January 2013).

David Oliver, Richard Quilliam, Andy Cummins & Jonathan Porter: Testing the Waters: understanding microbial pollution at the beach (Public engagement event via the Café Scientifique forum - held in Exeter on evening of 4th February at the Phoenix bar. The DHW team ran a public engagement event via the Café Scientifique forum in February 2013).

David Kay: Bathing Water science – what we know, new developments and challenges for the future (Presentation at the Joint Agency Bathing Waters Conference, Southport, March 2013).

David Oliver: Evaluating Emerging Technologies for Management & Control of Microbial Pollution at Bathing Waters (Presentation of the project at the Joint Agency Bathing Waters Conference, Southport, March 2013)