



<b>Title of Capacity Development Workshop:</b>	<b>Practical surface water management in low resource situations</b>
<b>Contact details</b>	
Name of proposing organization/s	<b>Arup, WEDC</b>
<b>Practical requirements</b>	
<b>Timing.</b>	Monday Half day morning
<b>Minimum/ Maximum number of participants</b>	35
<b>Facilities preferred:</b>	Cafe style (i.e. chairs around small tables seating approx. 4-6 people) with a projector/ability to plug in laptop via hdmi, and (ideally) easy access to outside space.  Coffee break during the session.
<b>Staff details</b>	

<p><b>Names, qualifications and brief description of experience of staff delivering the workshop.</b></p>	<p>Brian Reed (WEDC), Loughborough University        CEng MICE MCIWEM CEnv CWEM FHEA        Post graduate Diploma in Environmental Management        MSc Water Resources Systems Engineering.        BSc Engineering        Brian is a Chartered Engineer, Chartered Environmentalist and educator with over 25 years engineering and international development work experience, responsible for technical, management and environmental aspects of water resources, water supply, treatment and environmental sanitation design and, policy formation, project evaluation, training and research, including research into effective training.</p> <p>Inigo Ruiz-Apilanez (Arup)        CEng MICE        MSc Civil Engineering        Inigo is a Senior Civil Engineer with over 10 years' expertise in water management and urban infrastructure and currently works with a variety of NGOs delivering solutions to WASH challenges. Through working with a range of organisations he frequently delivers workshops and training sessions to a variety of audiences across the development and humanitarian sector.</p> <p>Eleanor Earl        GMICE        MEng Civil and Environmental Engineering        Eleanor has worked on a variety of water infrastructure projects from policy documents and outline design through to detailed design, construction and monitoring, frequently facilitating workshops and training events.</p>
<p><b>Course details</b></p>	
<p><b>Aims:</b></p>	<p>This training looks at improved surface water management in low/poor resource situations. The course will use a newly developed toolkit funded by the Humanitarian Innovation Fund and developed by Arup, CIRIA, EPG, Illman Young and WEDC. The training will focus on camps for displaced people but also has application to informal settlements globally.</p>
<p><b>Intended audience:</b></p>	<p>Participants should have an interest in resolving surface water management issues both in retrofit and new sites and knowledge/interest in water engineering.</p> <p>All levels welcome.</p>



<p><b>Intended Learning Outcomes/Objectives:</b></p>	<ol style="list-style-type: none"> <li>1. Knowledge and understanding of techniques that can be used to manage surface water in low resource contexts.</li> <li>2. Improved understanding of surface water sources and their management in both in the short and long-term.</li> <li>3. Gain an understanding of how risk management can be applied to surface water to help select appropriate techniques to improve the situation.</li> <li>4. Understanding of how to practically apply surface water management techniques and components to sites using the toolkit provided.</li> </ol>
<p><b>Format and Content of Workshop</b></p>	<ol style="list-style-type: none"> <li>1. Introduction to context</li> <li>2. Understanding risk - group activity</li> <li>3. Practical group activity outside</li> <li>10-10.30 Break</li> <li>4. Introduction to the how to apply the toolkit to a practical situation and pick appropriate techniques</li> <li>5. Group exercise</li> <li>6. Group discussion</li> <li>7. Summary of session</li> </ol>
<p><b>Materials to be circulated in advance or after the workshop.</b></p>	<ul style="list-style-type: none"> <li>- Explanation of task/context</li> <li>- Draft toolkit document</li> </ul>
<p><b>Means of assessment and feedback to students:</b></p>	<ul style="list-style-type: none"> <li>- Feedback on the group exercise given during and after the course by the trainers.</li> </ul>
<p><b>Mechanism and means of course evaluation:</b></p>	<ul style="list-style-type: none"> <li>- Feedback on the group task, a short survey and post-course interviews.</li> </ul>