

A New Horizon in Water Resource Management Planning

Changes to the Water Resource Management Plan
Guideline: greater flexibility, or more complication?

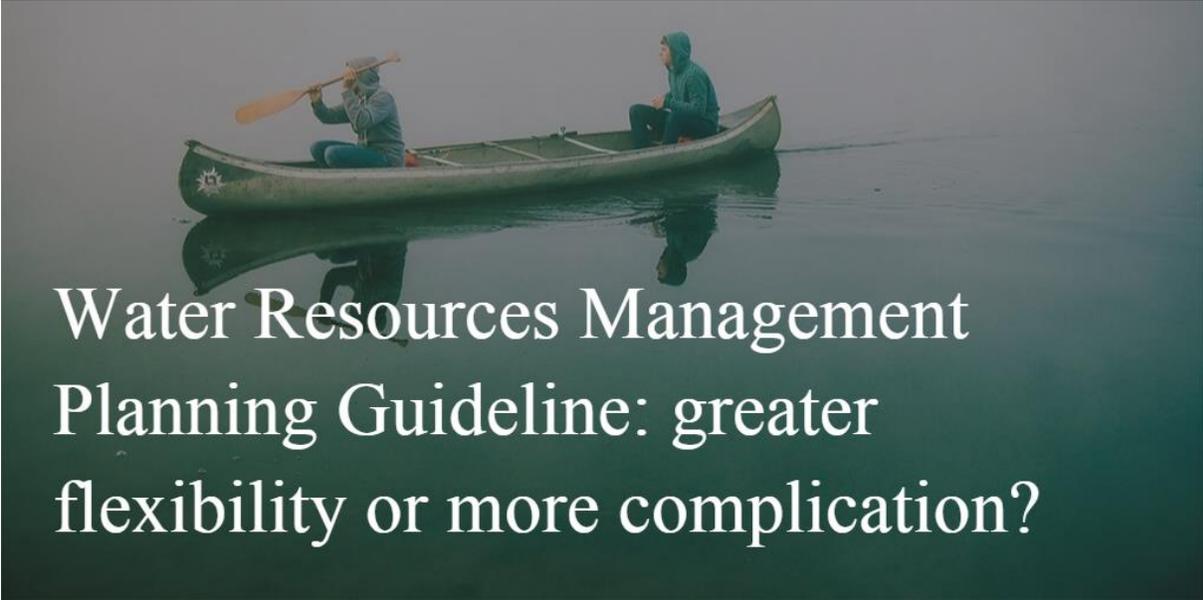


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Managing water in the UK is a juggling act. Devastating floods grab our attention and focus thoughts on how we can adapt to conditions plunging our communities under water. It seems strange but at the same time we must prepare against the chronic water supply shortages that a changing climate, growing population, and environmental objectives threaten. While flooding hits the front pages, the behind the scenes work to secure water supply in the long-term continues.

On that note Amec Foster Wheeler has responded to the Environment Agency on its proposed changes to the Water Resources Planning Guideline, the document which sets out the essence of how water companies are required to develop their long-term plans. The Environment Agency has slimmed down its guidance document, a step which reflects the Government's preference to regulate with less prescription. Our established water resource planners comment on how well the new guidance supports water companies to prepare robust plans at a time when so many priorities are changing and different approaches are up for grabs:



Water Resources Management
Planning Guideline: greater
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- Major shifts in climate that mean our traditional water resource and supply systems are operating less and less effectively mean that we need to re-think our whole approach to describing the problem and assessing the value of different types of solutions. The buzz word now is 'Resilience' but that is a concept that needs to be better understood. We firmly believe that flexibility to respond to abrupt problems from malicious attacks to flooding of water supply infrastructure should be recognised as a core aspect of a resilient system.
- While extreme flooding hits our communities with frightening frequency, more intense dry periods and extreme droughts are also expected to cause us problems. We recently produced a report for the Environment Agency, '[Performance of Water Supply Systems during Extreme Drought](#)' that water companies can use to test how much 'drought' stress their supply systems could withstand, whether they are vulnerable to rapid failure, progressive failure, or have a low risk of failure to extreme drought that could become the new normal.
- The Ofwat Resilience Task Force has suggested what we have been advocating for a long time: linking long-term water resource planning with wastewater asset planning, wider integrated water management, managing flood risk, drought protection, and water quality at the catchment scale. Fully embracing integrated planning offers many benefits in terms of the quality of outcomes and efficiencies in the planning processes. Now we're keen to support our clients respond to this in ways that are practical and cost-effective.
- We're very pleased to see that the planning approach has taken the leap to accepting that making decisions based on 'least-cost planning' may no longer be the best way to manage complex systems. However, the content of the new guideline remains rooted in implicit assumptions that companies will continue to plan in the traditional way, focussing on forecasting to narrow down the scope of the problem, rather than developing solutions that offer flexibility to respond to the inevitable uncertainties of the future.
- We look forward to helping our clients adjust to get the benefits of this new flexibility and as part of that we believe that water companies should be required to provide the rationale for their choice of decision-making approach (eg least-cost planning, robust decision making, real options appraisal etc) to help regulators and customers understand the underlying factors driving investment decisions, and ultimately customer bills.
- Nobody likes excessively long documents and slimmed down guidance initially seems like a good outcome. However, we are concerned that useful advice, such as clarifying proportionate planning activity in relation to scale and severity of potential water risks, has been removed, and detailed information on methodologies has been replaced with report references. Reliance on referencing UK Water Industry Research reports may compromise the understanding of stakeholders without access to them.