

Effective water management in a changing climate: SuDS overview and update questions

Tuesday 02 December 2025

#	Question	Answer
1	Are the water companies encouraging and lobbying for new and retrofitted SuDs to reduce discharge from CSOs into watercourses?	Where there are CSOs they understand changes need to occur, so most water companies will address these when they are made aware of what, invariably, are localised problems.
2	What is the current thinking on planting trees within attenuation basins, especially those features which are for adoption?	Trees can be planted within SuDS, but it's not specifically done extensively. They are less likely to be planted in the base of any component but are more likely to be included to the side or within shallow banks.
3	In view of getting the ground tested, do you ask for a soakage testing in line with standards in accordance with BRE 365? Do you also ask for depth of ground water of a site at the sometime? What other ground/ soil tests do you ask for when designing for SuDs solutions?.	Yes, once you understand the nature of the soil and its capacity to receive drainage, then you can decide the nature of the test you wish to have undertaken. You can understand the nature of the soil by digging trial pits, looking at published soil profiles and then deciding the nature of the test that you feel need to be undertaken to clarify the situation. For many landscape architects this may seem too complicated, so working with colleagues who are hydrological or geotechnical engineers will ensure this is done correctly.
4	Where does the funding come from for long-term quality management & maintenance, given the strain on local authority budgets?	This is an issue, but when sites are adopted by a council, the developer will need to pay a commuted sum. However, generally where good quality SuDS have been delivered, the maintenance of the planting is often found to be moderately cheaper than conventional landscape planting (if properly done!)
	Please can you explain abbreviations used: LLFA functions (ref adopting body tier), % AEP, FEH methods etc?	LLFA – Lead Local Flood Authority, they are an adopting body, but most will be the local council. % AEP – Annual Exceedance Probability. In simple terms AEP is the probability that a rainfall or flood event of a given size will be exceeded in any single year. It is expressed as a percentage chance per year, not how often it will happen.

		FEH Methods – Flood Estimation Handbook Methods. It is the UK's standard methodology for estimating rainfall, runoff and flood flows. It is published and maintained by the Environment Agency and used nationwide by engineers, planners and flood risk authorities.
6	Hi Sue, Belinda, thanks so much for the presentation. What are the key policies and frameworks at local / regional / national levels that the new guidance should align with to facilitate delivery?	<p>National level</p> <ul style="list-style-type: none"> • National Planning Policy Framework (NPPF) – requires SuDS in major development and prioritises flood risk avoidance, climate resilience and multifunctional green infrastructure. • National Standards for Sustainable Drainage Systems (SuDS) – sets mandatory requirements for runoff, flood risk, water quality, amenity and biodiversity. • Flood and Water Management Act 2010 (Schedule 3) – provides the legislative framework for SuDS approval, adoption and long-term management. • Water Environment (Water Framework Directive) Regulations – requires developments to protect and improve surface and groundwater status. • Environment Act 2021 – introduces Biodiversity Net Gain (BNG) and strengthens nature recovery and water quality objectives. • 25 Year Environment Plan – promotes natural flood management, water efficiency and multifunctional landscapes. • Climate Change Act & National Adaptation Programme – requires infrastructure to be resilient to climate change and extreme rainfall. <p>Regional / catchment level</p> <ul style="list-style-type: none"> • River Basin Management Plans (RBMPs) – set objectives for water quality, hydromorphology and ecological status at catchment scale.

		<ul style="list-style-type: none"> • Flood Risk Management Plans (FRMPs) – define strategic flood risk priorities and measures for river basins. • Drainage and Wastewater Management Plans (DWMPs) – water company plans identifying where SuDS can reduce pressure on sewer networks. • Local Nature Recovery Strategies (LNRS) – identify priority habitats and opportunities for ecological connectivity. • Catchment Flood Management Plans / Surface Water Management Plans (SWMPs) – guide local flood mitigation and runoff control approaches. <p>Local level</p> <ul style="list-style-type: none"> • Local Plans and Supplementary Planning Documents (SPDs) – set site-specific SuDS expectations, design principles and policy requirements. • Local Flood Risk Management Strategies (LFRMS) – guide surface water and ordinary watercourse flood management. • Local SuDS Design Guidance – provides technical and design standards aligned to local conditions. • Green Infrastructure Strategies & Design Codes – support multifunctional SuDS, placemaking and landscape integration. • Biodiversity Net Gain Strategies & Local Ecological Evidence – ensure SuDS contribute to habitat creation and ecological resilience.
7	Is there a strict definition that differentiates swales from ditches as I understand it impacts on BNG considerations?	Yes, swales are shallow systems that allow water to flow slowly across their full extent allowing them (in part) to infiltrate water. Whereas a ditch is invariably a conveyance mechanism that collects water and discharges it to a local pond or watercourse. A swale is likely to be better for BNG as many include planted areas where a ditch is purely a water conveyance mechanism.