2025 National SuDS Standards

Engineering Advisory Note

What has Changed

DEFRA's 2015 Non-Statutory Technical Standards mainly focused on the technical management of surface water runoff – primarily peak flow rates and volumes – to reduce flood risk. They omitted considerations such as water quality, biodiversity, amenity value, and maintenance planning.

The updated 2025 National Standards for Sustainable Drainage Systems now have a greater emphasis on issues such as flood risk management at source, reducing pollution and improving water quality. There are 7 standards to follow, and it is expected that a surface water drainage system will include a range of features contributing to the delivery of several, if not all, of the standards.

If there are any circumstances or constraints that mean it is not possible to deliver one or more of the standards (such as the type or size of a development), then the opportunity to meet the standard should be maximised and justification be developed in consultation with the approving body.

Standard		Summary
1.	Runoff Destinations	Runoff should be discharged in accordance with a defined hierarchy of 'destinations', with evidence needed to justify use of lower priority destinations. Rainwater reuse and infiltration are prioritised.
2.	Management of Everyday Rainfall (Interception)	The first 5mm of most rainfall events (80% in summer, 50% in winter) is required to be retained on-site through source control measures and not result in runoff from the site.
3.	Management of Extreme Rainfall and Flooding	Specifies updated requirements for inclusion of urban creep, exceedance routes, ground investigation standards and climate change allowances.
4.	Water Quality	Robust water quality risk assessments and a clear SuDS management trains are required, appropriate to the pollution hazard and sensitivity of the receiving waters.
5.	Amenity	SuDS should be used to create multi-functional landscapes that enhance landscape character, health, education, and placemaking.
6.	Biodiversity	Drainage systems must maximise benefits to habitat creation, Biodiversity Net Gain (BNG), and Local Nature Recovery Strategies (LNRS).
7.	Design of Drainage for Construction, Operation, Maintenance, Decommissioning and Structural Integrity	SuDS features should emphasise whole-life design, access, inspection, and resilience.

Key Technical Expectations for Designers

- **Runoff Destination Evidence:** A strict discharge hierarchy is now mandatory. Developers must demonstrate that more sustainable options (like rainwater reuse and infiltration) have been maximised before defaulting to piped drainage or combined sewers.
- **Rainfall Interception:** For most sites, designs must retain at least 5mm of rainfall on-site through source control. This must prevent runoff in 80% of summer and 50% of winter events, using features like bioretention areas, permeable paving, green roofs, and rain gardens.
- **Deep-Bore Soakaways**: These are no longer considered compliant with the SuDS approach and must only be used in exceptional circumstances with regulator agreement.
- **Urban Creep and Climate Change:** Designs must incorporate allowances for future impermeable surfaces (10% urban creep for residential plots) and use the latest upper-end climate change guidance to size systems for 30-year and 100-year events.
- **Ground Investigation Standards**: Infiltration systems require confirmation of suitable soils, with minimum 1 metre separation from the likely highest groundwater level. Factors of safety are specified according to site sensitivity and drainage function. A minimum infiltration rate of around 1x10-6m/s and 24-hour drain-down criteria are now formalised.
- **Flow and Volume Control:** Discharges must be limited to greenfield runoff rates and volumes for both 1 in 1-year and 1 in 100-year events. Where greenfield equivalence cannot be achieved, relaxation up to 5x greenfield rates may be considered for brownfield redevelopment, subject to justification.
- **Exceedance Management:** Sites must be designed with designated exceedance routes to safely convey surface water from events beyond the design standard (greater than 1% AEP). Temporary flooding must be shallow, slow-flowing and low hazard.
- **System Resilience and Maintenance:** SuDS must be designed to be accessed and maintained safely throughout their life. Proposals must include a detailed management and maintenance plan with inspection frequencies, sediment removal strategies, post-flood rehabilitation steps, and clarity over ownership.
- **SuDS Train and Water Quality Assessment:** Pollution hazard assessments must inform feature selection. Source, site, and regional treatment measures should be used in combination. Proprietary devices (e.g. vortex separators) must be evidenced, especially for high-risk uses such as industrial yards or large car parks.







Full list of the 2025 National SuDS Standards: https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds