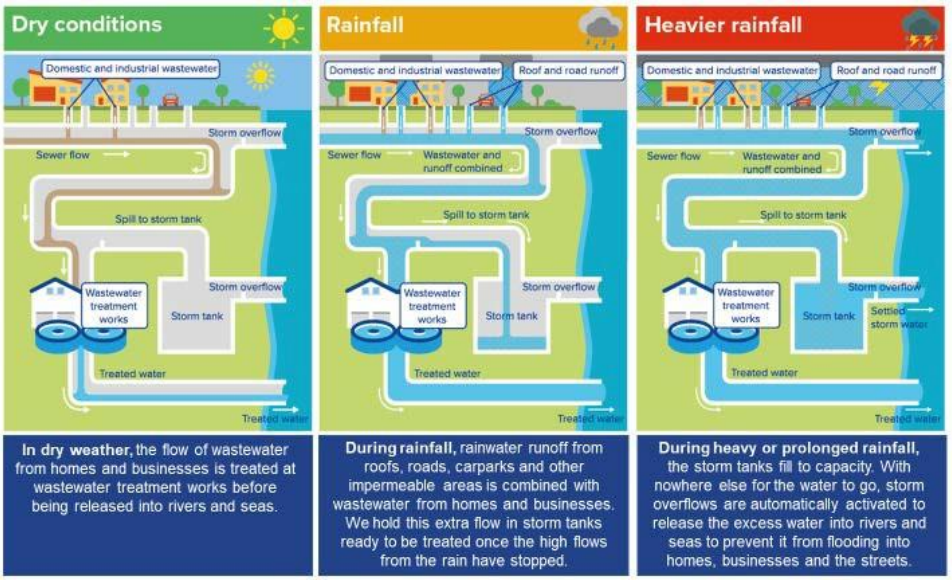
Outline Guidance
Sustainable Drainage Systems (SuDS)

In situations where surface water is being considered for discharge to our network, we require the below hierarchy for surface water to be followed which is reflected in part H3 of the Building Regulations. Whilst reuse does not strictly form part of this hierarchy, we would encourage the consideration of reuse for new developments.

We support the use of SuDS as part of the approach set out in section H3 of the Governments Building Regulations 2010 for the drainage of surface water and supports the 4 pillars approach to SuDS design.

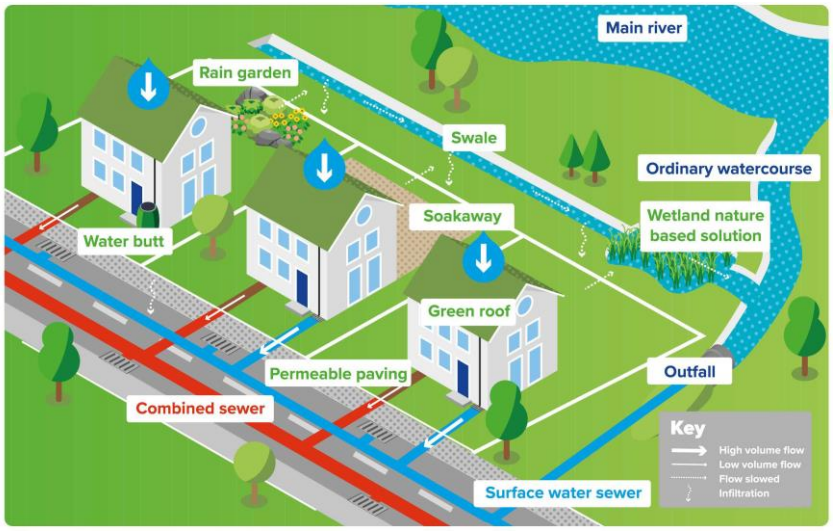
Reuse	Infiltration	Watercourse	Storm sewer	Combined sewer
Consider	*Consider*	*Consider*	*Consider*	*Consider*
Rain harvesting reduces demand on water supply and quantity of runoff discharged from site.	Infiltration potential, even if infiltration rates are low to reduce the volume of runoff from sites.	High flow conditions. Requirements for Consent to discharge.	Existing capacity of the sewer. Potential for surcharge conditions within the sewer at time of discharge.	Discharge to the combined sewer should not increase the risk of Combined Sewer Overflow (CSO) spill.

With increasing development and urbanisation, unless we commit to more sustainable systems of drainage, the heavier rainfall we are now all experiencing as a result of climate change will flow out to sea instead of into the ground where it supports the natural water cycle.



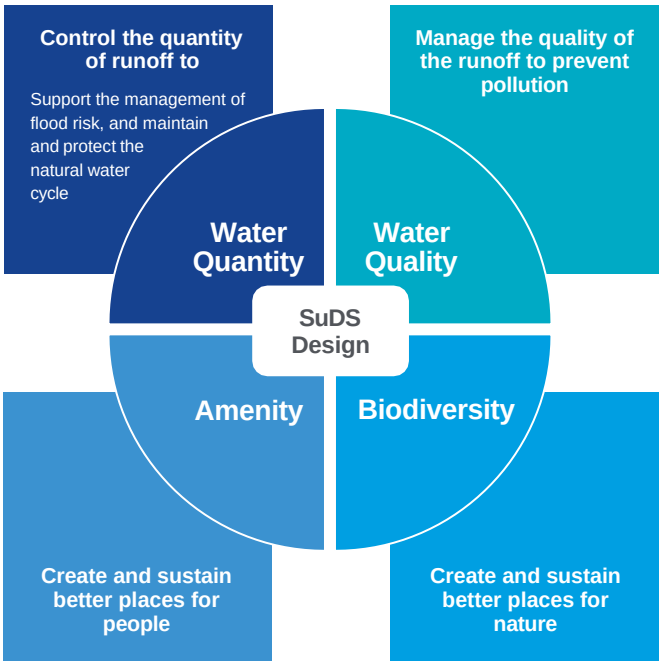
The risk of flooding and storm overflows can also be reduced by slowing surface water runoff reaching the sewer*. There are a number of ways SuDS can assist with this. The illustration below shows designs incorporating SuDS. SuDS can reduce run off rates from development and return these to the former greenfield levels.

Where you are designing a SuDS within an SPZ please see our additional guidance here.



What is sustainability in the SuDS context?

SuDS are currently only a requirement in legislation for developments greater than 10 dwellings but we encourage all developments to follow the hierarchy so that the most sustainable approach can be taken. The sustainability benefits of SuDS are illustrated below by the **four pillars of Sustainable Drainage Systems:**



Principles of Adoption

SuDS will be considered for adoption where the following criteria are met:

- Compliance with Appendix C of Design and Construction Guidance for new surface water drainage systems is demonstrated.
- Construction of SuDS conforms to requirements set out in CIRIA document 'The SuDS Manual C753'.
- SuDS are part of a continuous sewer system –not an isolated end of pipe SuDS component.
- It is constructed for the drainage of buildings and yards appurtenant to buildings.
- It has a channel (a depression between banks or ridges with a definite boundary).
- It conveys and returns flows to a sewer or to a surface water body or to groundwater; and,
- It has an effective and maintainable point of discharge, which must have lawful authority to discharge into a watercourse or other water body or onto or into land.
- It is safe and practical to maintain.

Which SuDS components could be adopted if designed and constructed to the code?

The following components are examples of SuDS that we include for adoption through us:

- Swales
- Rills
- Bio-retention systems
- Ponds and Wetlands
- Basins (normally dry)

Examples of SuDS not considered for Adoption

The following components are examples of SuDS that we exclude for adoption through us:

- Watercourses as defined in law (these include rivers, streams and can include some ditches)
- Components built primarily for the drainage of surface water from streets or for the drainage of land

Useful Information

For further information on SuDS and how they can be incorporated onto your development site, please refer to the standards for their design, construction, maintenance and adoption in the Design and Construction Guidance for foul and surface waters offered for adoption, CIRIA's guidance on the construction of SuDS, the CIRIA SuDS manual and the Susdrain website.