



What are SuDS?

Sustainable Urban Drainage Systems (SuDS) are designed to be functional, fully integrated elements of green infrastructure, and are now increasingly important parts of new developments. They were introduced to address concerns regarding surface water flooding resulting from increased urban development.

The variety of components used within sustainable drainage delivers a wide range of benefits.

SuDS deliver multiple environmental, social and economic benefits. In addition to managing flows, volumes, and diffuse pollution some components (particularly vegetated or landscaped features) can positively impact air quality, carbon reduction, recreation, education and other elements of community health and wellbeing providing monetary and social value.

The benefits are very closely aligned with those associated with green infrastructure and as such these approaches also provide flexibility for those communities needing to adapt to a changing climate.




About the Land Trust

The Land Trust is a charity that is committed to the long-term sustainable management of open space for community benefit. Our vision is to improve the quality of people's lives through the creation and management of sustainable, high quality green spaces that deliver real and lasting, environmental, social and economic benefits.

We currently have ownership and responsibility for over 2,500 hectares of open space across the country. Our diverse portfolio includes amenity spaces, country parks, SANGs, SuDS, Sites of Special Scientific Interest, nature reserves and Scheduled Ancient Monuments.

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The Land Trust: SuDS

Sustainable Urban
Drainage Systems





Why choose SuDS as a developer?

Sustainable urban drainage systems (SuDS) present an opportunity for you to add value to your scheme whilst at the same time meeting local planning requirements around increasing sustainability and managing flood risk.

Adopting good practice SuDS on your next site could save you time and money - both of which have a major impact on your bottom line - but that is not all.

SuDS can:

- **Speed up the approval process**
Embracing a well-designed SuDS scheme encourages a faster approval process and facilitates positive planning outcomes
- **Make your development more attractive**
SuDS enrich the aesthetic and recreational value of a development, promote health and wellbeing and support green infrastructure, ultimately making it a more attractive and desirable place to live, work and play
- **Make your investment go further**
High quality SuDS, incorporating well maintained open space such as ponds, swales and basins can add significant value to the properties you are selling.

To see those benefits in full, appointing the right body to manage them in the long term is vitally important to their future success. This is where the Land Trust comes in.

Why you should choose the Land Trust to manage the SuDS within your development

The Land Trust has extensive experience of managing SuDS on many of our service charge sites. This experience, particularly in liaising with residents and using SuDS as something that can be enjoyed and provide real tangible benefit to the communities we work with, sets us apart from many other land management organisations.

Our Estates Management team are extremely knowledgeable about the effective management of SuDS systems and we employ trained contractors on site who follow the Ciria guidance to ensure best practice is followed, ensuring the system delivers the benefits they are supposed to and more.

One key lesson we have learned throughout our time managing these systems over the last three years is the importance of engaging with residents at the earliest possible stage. By listening to their views and helping them understand the complexities of the systems required we have managed to install top class facilities which communities understand and like.

We take on the ownership and management of SuDS and associated green spaces throughout your development, helping to speed up your sales process and delivering you a sustainable exit strategy.

Design and maintenance

There are many courses and advice on the design of SuDS. There are a number of principles that should be considered when designing a system:

Treatment close to source
This reduces the size of the features by spreading them around the development, so lots of rain gardens would be better than one large basin.

Surface features where possible
There are times when a development does not lend itself to surface features, but many of the benefits of SuDS can only be achieved by having surface features.

Multiple treatments should be considered
By collecting surface water close to the source and allowing sediments to drop out, sunlight to effect chemical treatments and the plants to absorb other pollutants, clean water can be passed into the river.



Climate change adaptation
A system is likely to allow for climate change in several ways but once installed can be difficult to change. Allowing for greater than historic maximum is usually required under planning, but these allowances seem to be regularly increased so perhaps a precaution would be to allow more than the planners might require.

Long term management
Confined spaces, steep banks, retaining walls and other features can look positive on a plan but create maintenance difficulties with H&S management which increases the life time cost of a system. As an example, desilting an area of gabion baskets would require pulling the stones out and washing them, while a permeable soil bed with a gentle fall can allow ground water recharge in most circumstances.

The benefits

SuDS are considered more sustainable than traditional drainage methods because they:

- Are aesthetically pleasing
- Have positive environmental impacts:
 - Filter pollutants
 - Restore groundwater storage
 - Prevent sewage overflows
 - Reduce downstream flooding
- Increase infiltration rates
- Minimise public and environmental impacts as a result of decreased pollutants
- Have a positive impact on property values.

SuDS in practice

A great example of SuDS working successfully was on our residential service charge site at Upton in May 2018, when heavy rainfall in Northampton caused flash flooding in the area.

The properties of our customers at Upton, and the wider community, could have been seriously affected had it not been for the effective management of the SuDS, which held the water back and protected their homes until the worst of the rainfall was over and the water had subsided.

For further information on The Land Trust and our approach to SuDS, please contact our Estates Manager, Charles Langtree, by email: charleslangtree@thelandtrust.org.uk