

Multiple Benefits of SuDS

Amenity and open space

SuDS can vastly improve the aesthetic value of an area, by providing large, open green spaces and water features. They add value on to house prices. They create recreational areas and improve the health and well being of communities.

Education

The large, open spaces created by SuDS enable children to learn outside and enhance their education, they may learn about the environment and habitats or use them for sporting activities.

Biodiversity and ecology

Some SuDS create and maintain habitats for new and existing wildlife

Rainwater Harvesting

SuDS can help to reduce water use as water collected in water butts can be used for household activities such as toilet flushing and gardening. The water can also be used during a drought, which will increase a household's water availability without increasing the demand on mains supplies. By 2050, it is believed that demand could exceed supply by up to 22%.

Not only do green roofs intercept and store water, they also absorb less heat than traditional roofs during the summer and help keep properties cool. Green roofs can retain between 70-80% of runoff in summer months.

Groundwater recharge

SuDS allow for infiltration and recharge, increasing water availability in areas of water stress. The storage of water all year round means that there is likely to be more water available that could be used during a drought and reduce the chance of a potential hosepipe ban. Groundwater makes up 30% of public water supply.

Improving water quality

SuDS reduce the amount of sediment and contaminants in run off by sediment settlement or biological breakdown of pollutants. They also reduce the amount of water which enters sewers and therefore reduce combined sewer overflow, improving water quality

Flood Risk Management SuDS allow for natural drainage patterns and limit the amount of runoff reaching drains. They can provide areas to store water, slow the flow of water before it enters a watercourse, allow water to infiltrate and allow transpiration from vegetation and evaporation from surface water, reducing an area's flood risk. SuDS can be adapted to our changing climate. SuDS which are above ground can be up to 86% cheaper to build.

Pumping and treating wastewater

The volume of water which needs treating at sewer systems is reduced through using SuDS. This is due to reduced volumes of surface water runoff entering sewers and drains. Therefore there is less water that needs pumping and treating through the system. This also reduces treatment costs and reduces the sewage systems total energy use.

