THE FLOOD HUB

BLUE-GREEN INFRASTRUCTURE

Blue-green infrastructure manages the risk of flooding in urban environments by introducing a more natural water cycle and multi-functional land use to generate benefits for the environment, society and the economy. Blue and green infrastructure are integrated into urban spaces, and linked up to control rainwater and excess surface water and combat increasing development and hard surfaces.

Using green space to manage surface water and implement a more natural approach to urban drainage enables water to be controlled closer to the source. More water is retained in blue-green infrastructure which reduces the chances of traditional drainage systems becoming overwhelmed.

Blue infrastructure is features that contain water such as rivers, detention basins, ponds and wetlands. **Green infrastructure** applies to natural land or plant based features including trees, hedgerows, gardens, green open space and parks.

By utilising **green** infrastructure to manage the **blue**, the flow of rainwater can be attenuated before it enters a watercourse, providing areas where water can be stored and later harvested for re-use.

Blue Infrastructure	Green Infrastructure
Ponds	Gardens
Swales	Green walls & roofs
Detention basins	Trees & hedgerows
Wetlands	Green open space
	Recreational grounds

New developments provide better opportunities to apply and utilise blue-green infrastructure, as old developments require retrofitting and may present restrictions due to how they were originally built, and land constraints. Blue-green infrastructure also fits within the scope of natural sustainable drainage systems (SuDS) and can help to reduce surface water runoff in the urban environment.

Multiple benefits

- Reduces the volume of surface water in traditional drainage systems.
- Reduces the risk of flooding.
- Improves amenity of areas, providing attractive, usable space for communities and recreation.
- Improves air quality as trees and plants filter out industrial and vehicle air pollutants.
- Improves water quality by removing pollutants and contaminants in runoff.
- Provides habitats for wildlife and improves biodiversity.

Image: The Flood Hub

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This resource has been produced by Newground who work in partnership with the Environment Agency

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