

A case study on financing sustainable drainage systems (SuDS) The IGNITION project



GREATER MANCHESTER
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European Union
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What are SuDS?

SuDS are sustainable drainage systems that manage water using natural methods, unlike drainage systems within grey infrastructure. However, SuDS also benefit biodiversity, water and air pollution reduction, carbon storage, regeneration and land and property value. These co-benefits could potentially identify stakeholders that would want to invest in this nature-based solution.

SuDS can be split roughly into three different systems: storage facilities (such as ponds), filter strips and swales (shallow channels) and infiltrations (such as soakaways).



The IGNITION Nature-Based Solutions Evidence Base

The IGNITION project collated over 1,000 evidence items on nature-based solutions over 12 benefit areas. This research found that, on average, SuDS can:

Remove pollutants:

- 79% of total suspended solids
- 62% of phosphates
- 19-70% of nitrates

Capture and manage rainfall by absorbing water into the ground, channelling it to new and safer locations and storing it above ground to create biodiverse blue spaces.

Provide 60-80% species richness

compared to a natural pond

How are SuDS traditionally financed?

In England and Wales, SuDS are encouraged by policy and standards within new developments to be funded by the developer or landowner. For occasions where the SuDS are retrofitted, particularly in problem flooding areas, a higher variation of funding exists, ranging from the landowners, local authorities, highways departments and water companies.

Coinvestment in SuDS – A case study from Dales Brow

Current concept stage: Completed and monitoring

Investors and support: Environment Agency, Salford City Council ([Green City Funding](#)), [Natural Course](#), United Utilities

Managed by: City of Trees

Performance monitoring: University of Salford



IMAGE: Dales Brow

City of Trees has worked in partnership with **Salford City Council** and the **Environment Agency** to develop a SuDS scheme (wetland and swales) that will turn a previously waterlogged greenspace into a multifunctional green asset. This has created a new habitat for wildlife, which will help address surface water flooding along Dales Brow in Salford.



IMAGE: CoT mapping Dales Brow

SuDS capital cost: £127,000

Environment Agency £54,000

Salford City Council £73,000

Dales Brow is a fantastic example of co-financing by finding a nature-based solution to a problem that will financially benefit multiple parties. This shared investment benefits the stakeholders, makes a community more resilient to climate change, cleans up pollution and transforms a disused space so that the local community can engage with nature. The Dales Brow scheme highlights how a low-cost neighbourhood-scale SuDS construction can serve as a vital drainage function, which reduces pressure on the combined sewerage system while contributing to improved water quality. This transformed wetland site now enhances biodiversity and provides a high-quality recreation, space which creates an attractive area for people to live in and encourages inward investment. The site provides climate change adaptation benefits at a low cost; something that could be easily replicated.



Quantifying and collating the benefits



Managing a flood-prone area

The SuDS have created an accessible space, whilst diverting rainwater from an estimated area of a 400m² away from the public wastewater networks during high rainfall events. This in turn reduces the potential for pollution incidents in rivers.

Increased biodiversity

Transforming a plain grassed area into a significantly more biodiverse planting design creates more habitat, food and safety for wildlife.



IMAGE: Dales Brow

Filtering water for pollutants

New swales and wetland on site filter the water through the vegetation and soil naturally and, when full, diverts the clean water into the adjacent Deans Brook, rather than into a public wastewater network. This includes water containing vehicle-based pollutants from the adjacent road.

Now the site is established, **The University of Salford** will monitor the quantity and quality of surface water entering and exiting the site to quantify the amount of water diverted away from the combined sewer. This will also gather data on the ability of the SuDS features to remove vehicle-based pollutants. The data will be valuable in showing how the scheme has helped to reduce flooding.