

Rain!

Rainwater Management Solutions are a critical component of how we are planning on delivering a high quality plan to reduce the activation of storm overflows across the North West. We must do this, due to the nature of piped sewerage infrastructure and the projected impacts from climate change.

Contents

Drivers	02
Solutions	03
Adoptions	04
Water for Schools	05
Examples and Discussion	06

Strategic Drivers

The Environment Act and Storm Overflow Discharge Reduction Plan (SODRP) has introduced a statutory obligation that all storm overflows activate less than ten times per year by 2050.

54% of United Utilities (UU) sewer network is combined, with rainwater and wastewater travelling to sewage treatment works together for treatment prior to discharge to the environment.

This means that it is particularly important for UU to manage rainwater to achieve better river health, minimising requirements for future conventional storage and unlocking wider benefits for future generations.



[Stockport Mayoral Development Corporation](#)

Stockport represents an average rainfall region within the North West. Its drained area needs 59% more storm sewage storage to meet a 10 spills per annum target than the typical England rainfall average.

Rainwater Management Solutions

Capture

We will work collaboratively to develop how we work in partnership and incentivise what, where and how **Natural Flood Management** (NFM) is installed within catchments.

Attenuate

Controlling **everyday rainfall at source**. By managing the first 5mm of rainfall, this natural resource is productively utilised, whilst reducing peak flow to sewers and increasing the efficiency and performance of drainage networks.

Disconnect

To achieve step changes in performance, we will assess where separation needs to be done. Whether this is highway drainage, surface water sewers, watercourses we will deliver this alongside our Dynamic Network Management (DNM) to monitor and manage **reducing exogenous sources**.

Reuse

Value rain for the precious resource that it is! We want to embrace the extremes of rainfall through reuse and think differently about rain, so it **doesn't go down the drain** all so quickly.

Adoptions

We adopt SuDS from developments where they meet the definition of being a sewer, and are constructed to satisfactory design standards.

<https://www.unitedutilities.com/builders-developers/wastewater-services/sustainable-drainage-systems/>



Water for Schools

Churchtown Primary,
Southport

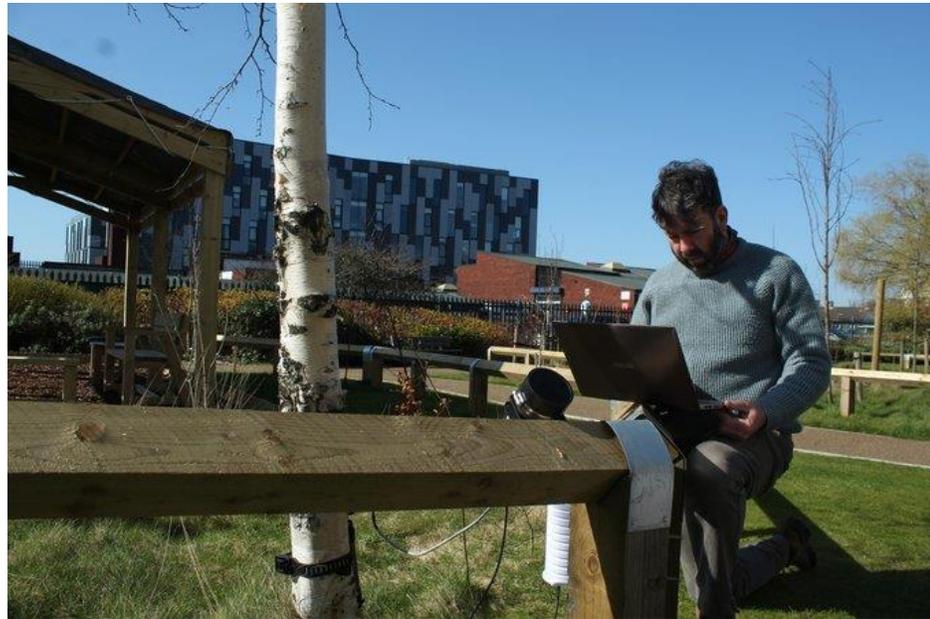
Ursuline Primary, Crosby

Farnborough Primary, Ainsdale

Linekar Primary, Southport



Examples



Bowie the Tweeting Tree

6

[Smart Forests Atlas](#)

Raingardens in Chinatown

[STRI Group](#) 



www.greytogreen.org.uk



Sheffield Grey to Green



Alder Hey Hospital

[NBS Source](#) 



[Civic Engineers](#)

Bloom Street, Salford

Thank you.