

Making green & nature-based solutions the norm for the delivery of storm overflow reduction



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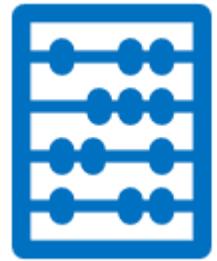
- Storm Overflows – What do we want to be remembered for



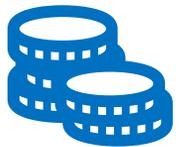
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Arup Water Engineer
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- Why and how to deliver green over grey

- How to deliver green well



1600



c£5bn

Storm Overflows

What can we do for future generations



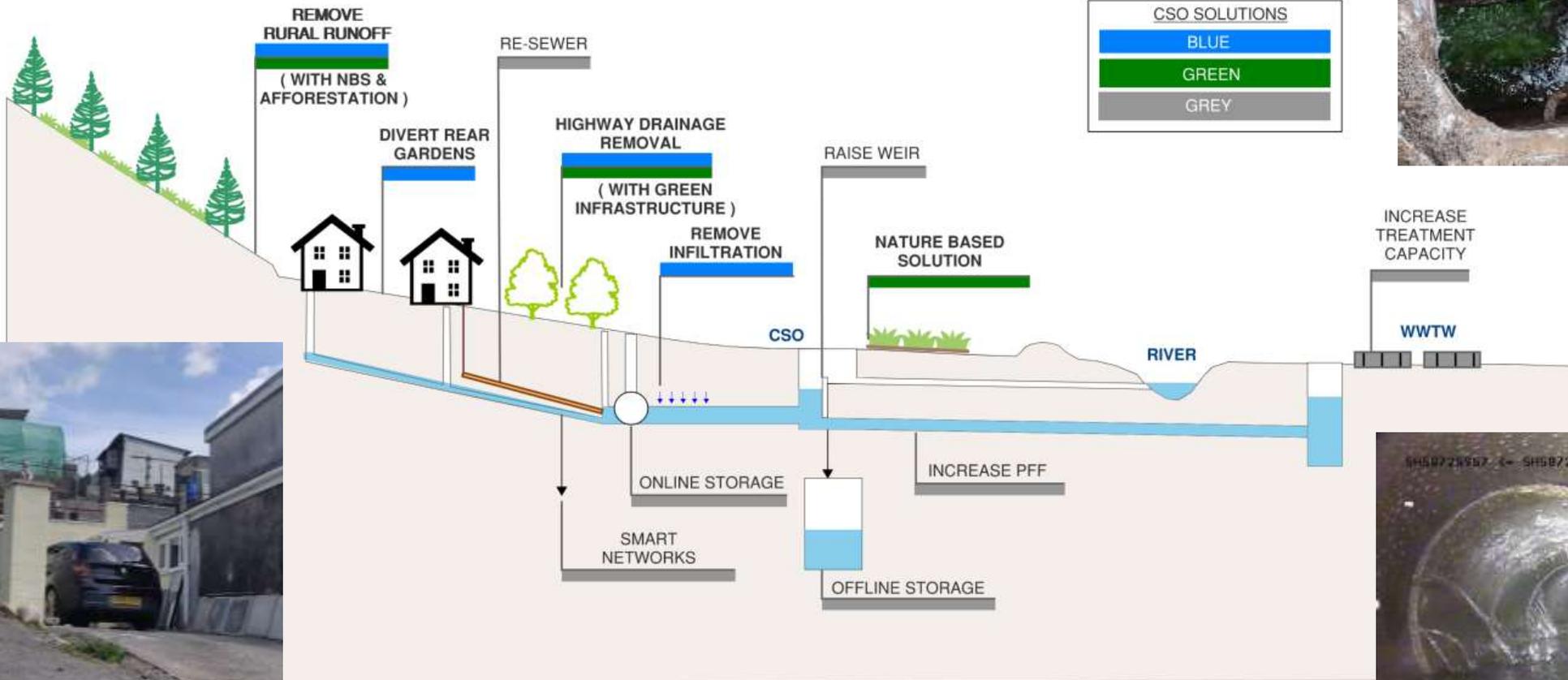


How do you deliver green and nature-based solutions for storm overflow reduction when solutions need:

- Quick Implementation
- Numerous
- Step-change in performance



Nature-based optioneering approach



CSO SOLUTIONS	
	BLUE
	GREEN
	GREY





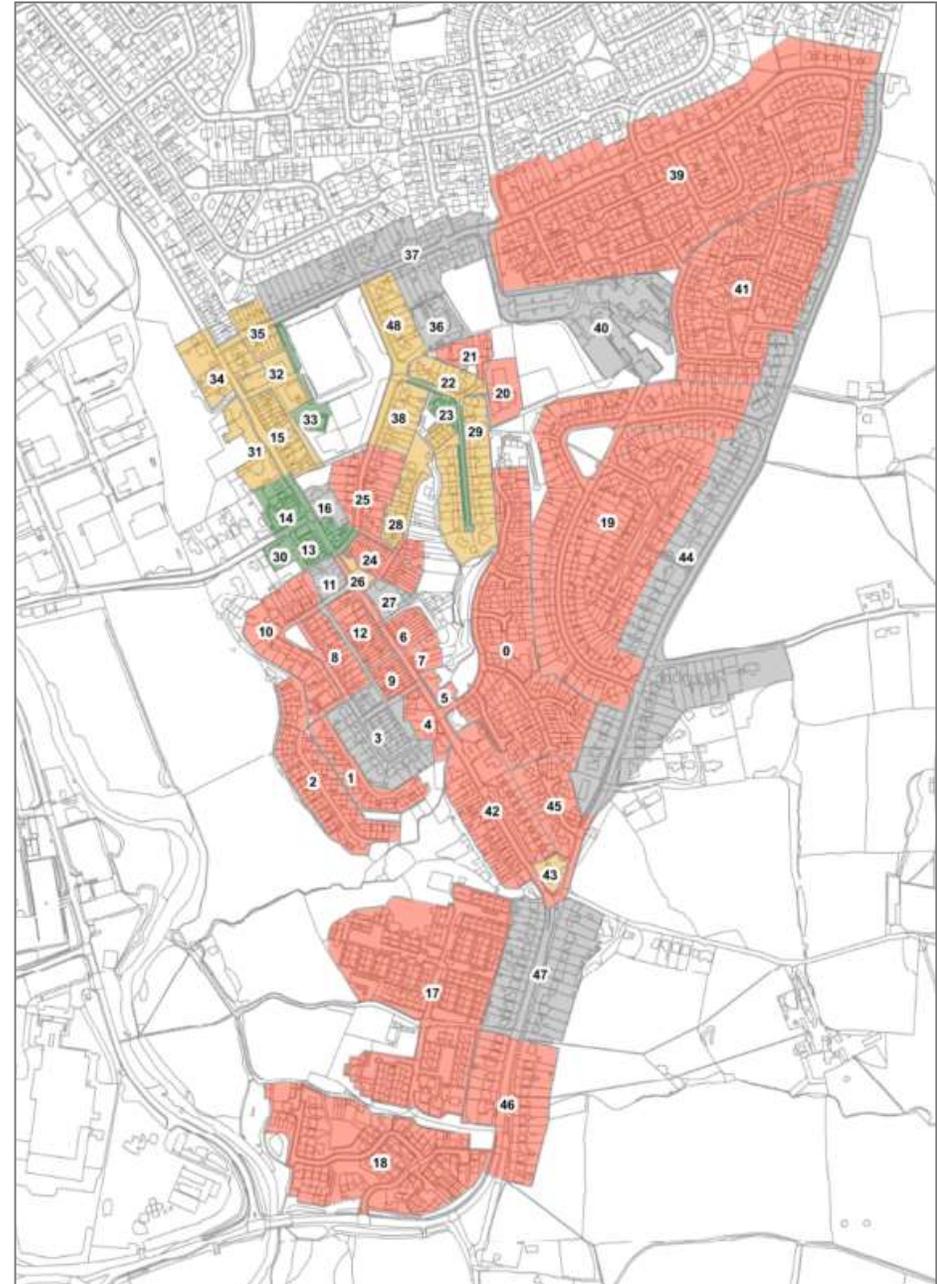
Hybrid Solutions

- Grey infrastructure as an enabling element for green.
- Example: Trelewis (126 spills/year, 10890 m³)
- 1.8 ha of surface water removal
- New flow control to optimize the use of online storage by 13m³
- Fully grey \approx 1230m³ storage tank



Multiple Capitals

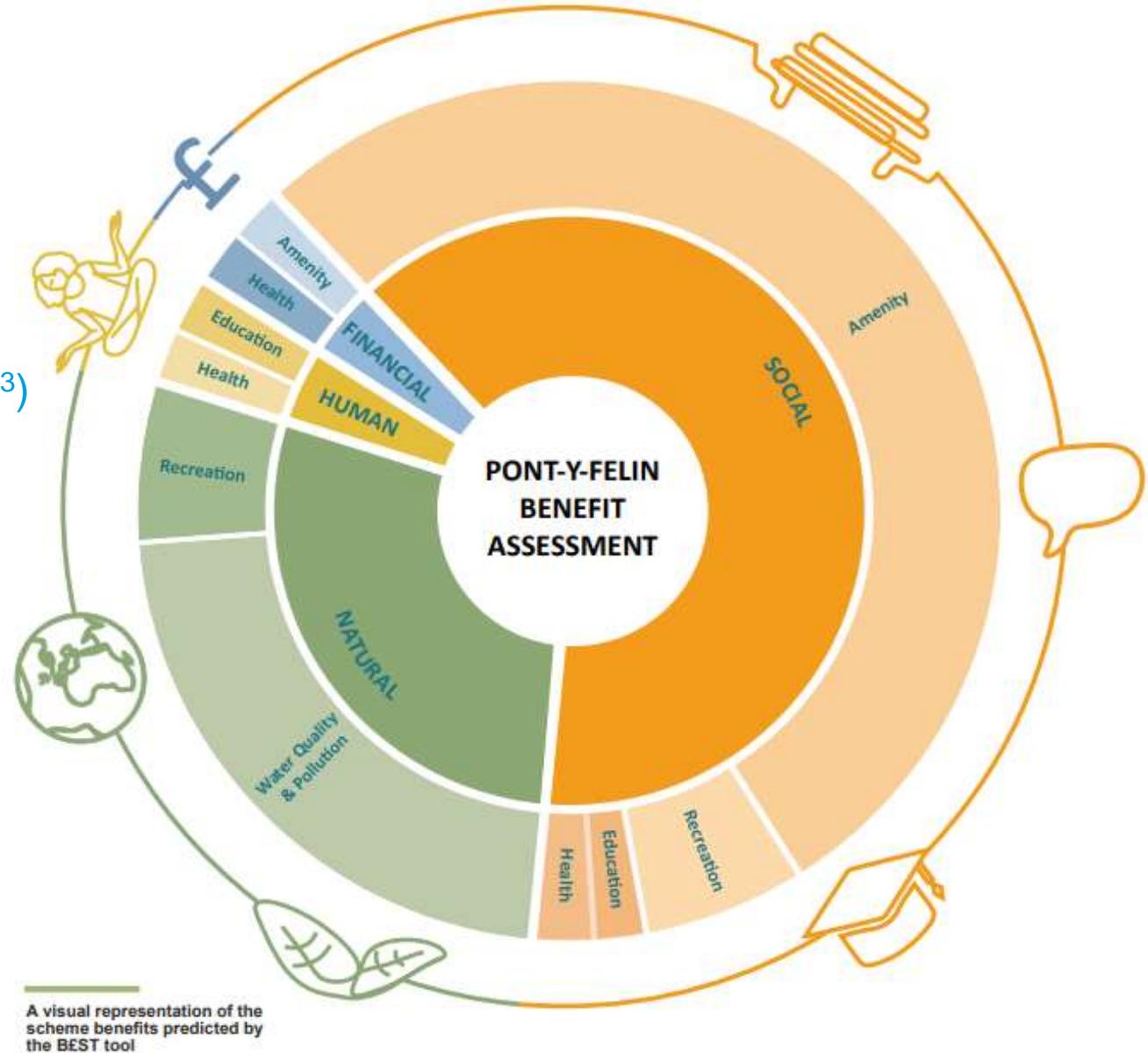
- B£ST Tool
- Example: Pont-Y-Felin (136 spills/year, 83,746 m³)



Multiple Capitals

- B£ST Tool
- Example: Pont-Y-Felin (136 spills/year, 83,746 m³)

- Shared investment opportunities



Resilience

- Long-term hydraulic benefits
- Example: Trelewis

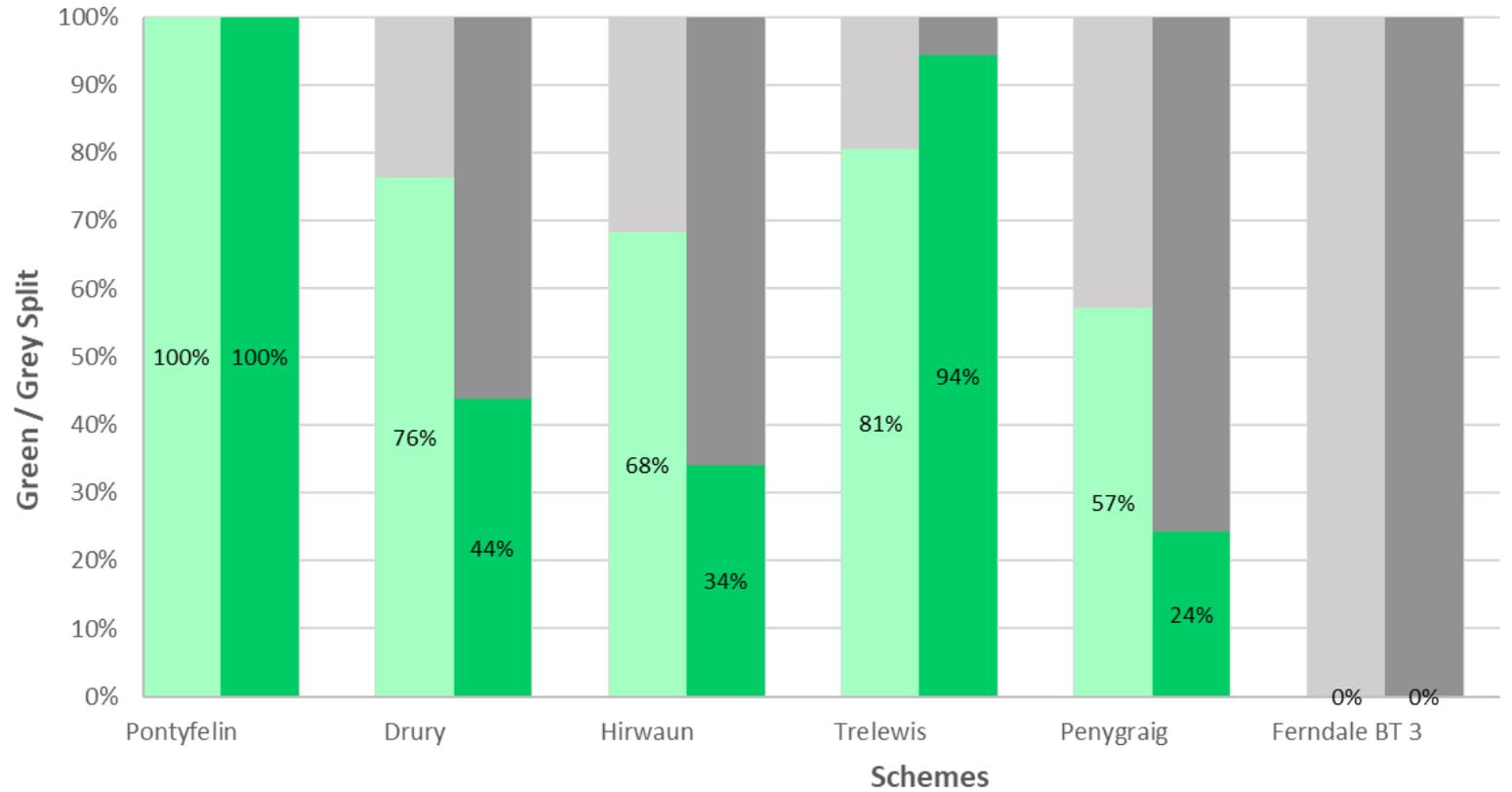


Our AMP7 solutions

Approach has achieved;

- £28.9m CAPEX
- £35.6m wider social, environmental and economic benefits (B£ST)
- 85% less whole-life carbon than baseline storage solutions

SOAF schemes green / grey split



Split on cost -

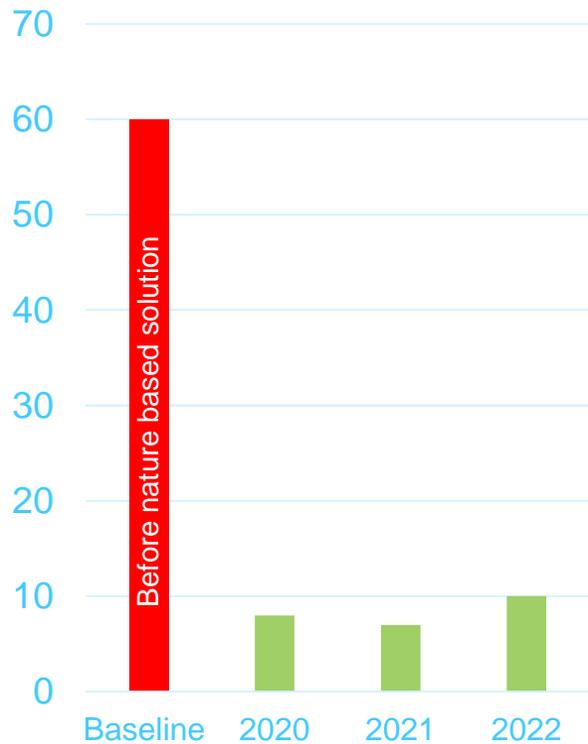
- Green
- Grey

Split on performance -

- Green
- Grey

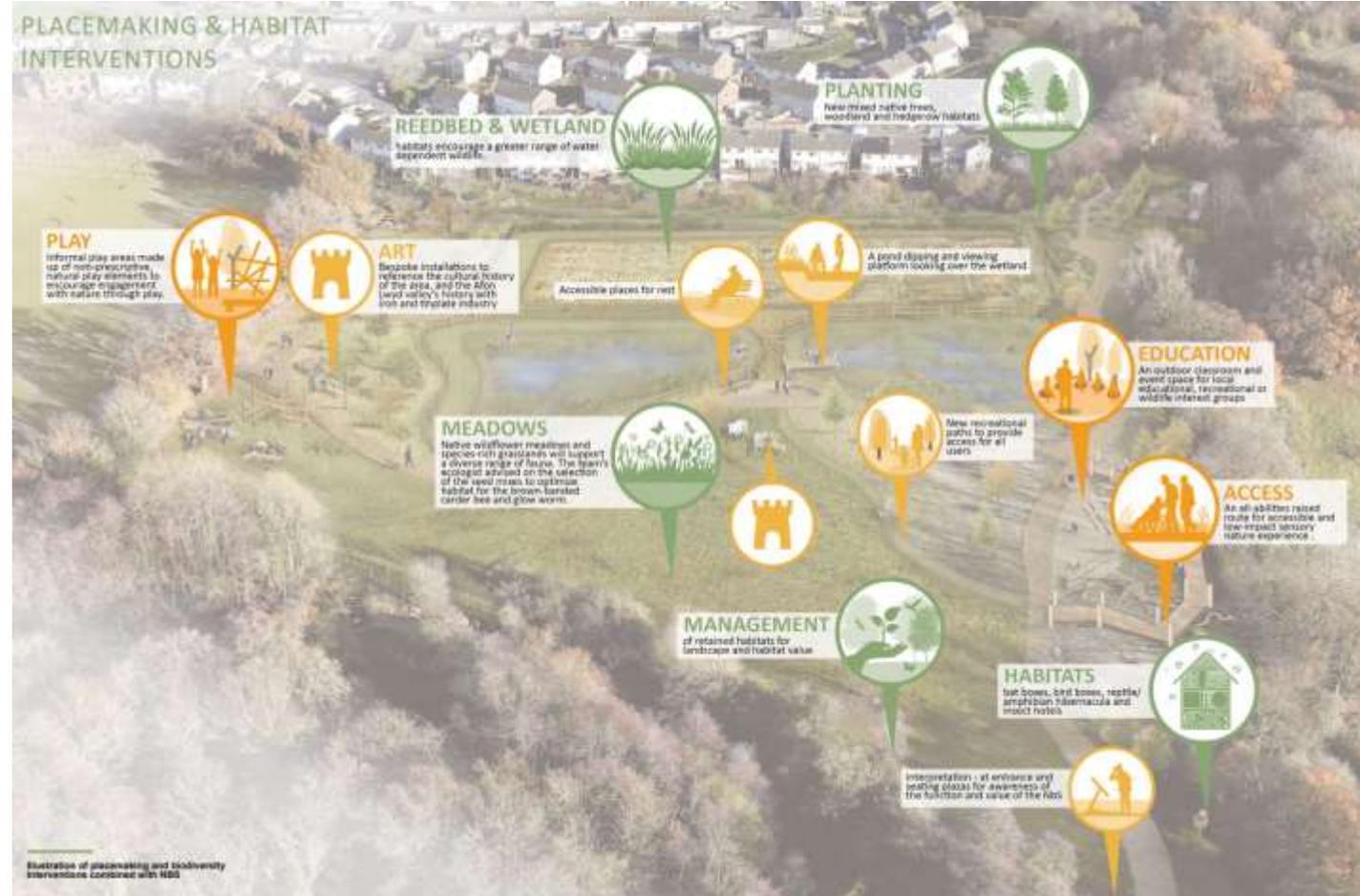
Proving hybrid green/grey solutions work

Annual spill frequency

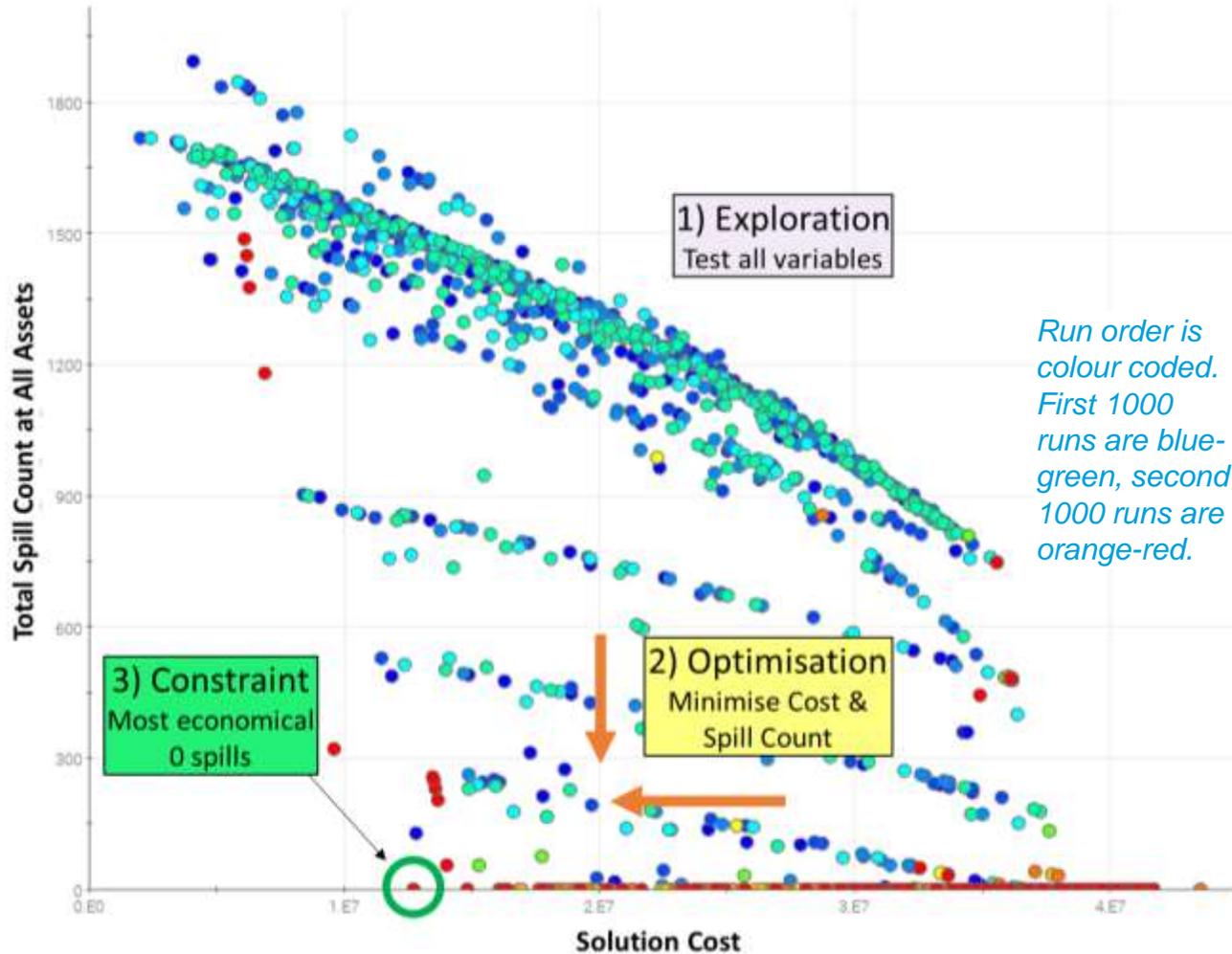


Community-led Design

- Empowering communities



Solution Optimisation



- Mode Frontier
- Catchment Scale



Case Studies and Future Planning

- Building Confidence
- Partnerships



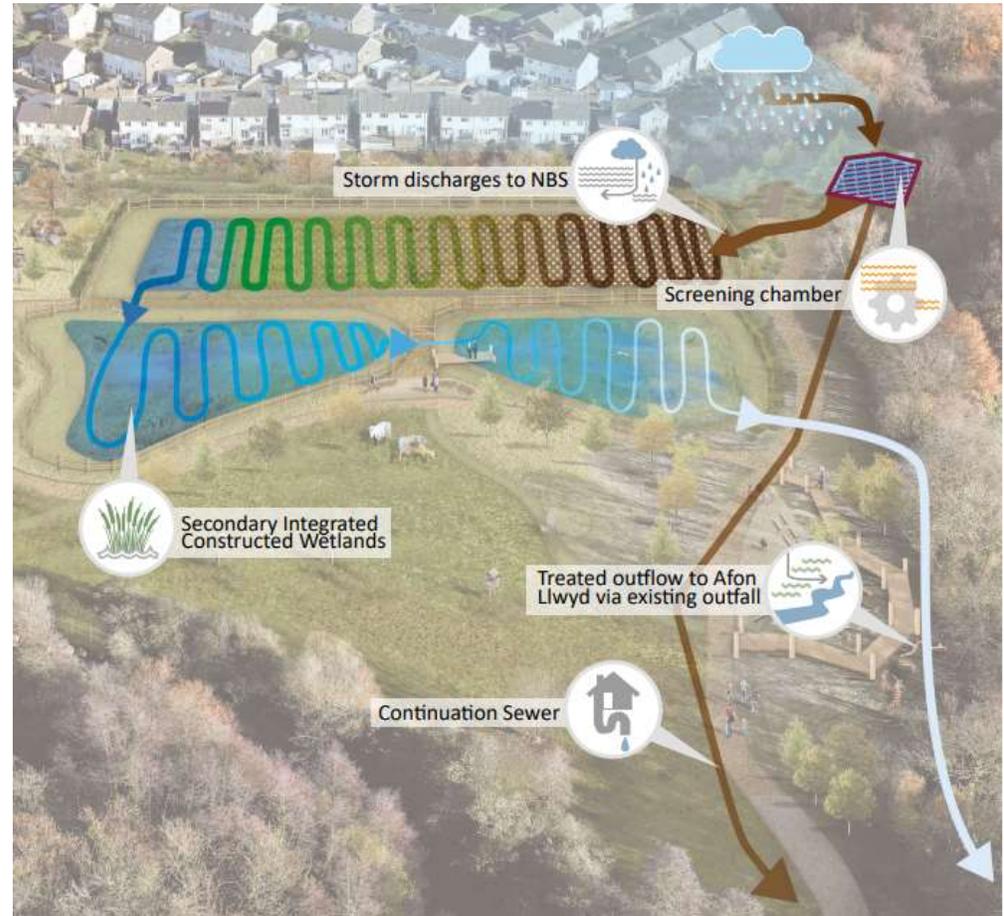
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VOLUME 1 - MAIN REPORT



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