SuDS Research

Hayley Bowman

C.WEM, MCIWEM, CEnv

Senior Scientist, Flood and Coastal Risk Manage Research

Environment Agency
• Why do we need research on SuDS?
• Our framework driving SuDS research for surface water flood management
• Recent projects
• Future research needs
Why is SuDS research important?

3.2 million
Our role

Strategic Overview

- Set direction
- Support local delivery
- Help develop skills
- Provide evidence and advice

Joint Research Programme

[Logos of the participating organizations]
Research Framework

A set of practitioner needs and project ideas to steer and deliver collaborative research

SuD1: SuDS performance now & in the future

SuD2: Measure and explain the costs and benefits of SuDS

SuD3: Improve the perception of SuDS

SuD4: Incentives to retrofit measures

SuD5: Flexible designs, adaptable to change

SuD6: Collaborative ways of working and decision making

Increase resilience to flood and coastal erosion risk
Published research and guidance

Retrofitting to manage surface water (C713)
Valuing the benefits of blue green infrastructure

Distribution of SuDS benefits: B£ST assessment to support Glasgow City Centre Surface Water Management Plan
(source: susdrain.org)
SuDS Asset Register and Mapping

Location

Owner

Design: biodiversity

Design: water quantity

Design: water quality

Design: amenity

Type / construction

Connectivity

Maintenance plan
Achieving urban resilience in an uncertain future

Research to support coordinated planning, design and operation of urban water systems for flood risk and water management

http://www.urbanfloodresilience.ac.uk/
Future focus

- Role of communities in maintaining SuDS
- Monitoring and measuring benefits
- Developing resilient places: role of SuDS in integrated water management for flood and drought resilience
Support others to deliver good SuDS to build resilient communities

- Enhance knowledge and understanding
- Provide tools and guidance
- Develop new ways of working
Research Framework and published research is online at: www.evidence.environment-agency.gov.uk

Contact for ongoing / new projects: Hayley.bowman@environment-agency.gov.uk

@FCRMResearchEA