

Introductions





Katherine Waters | Sustainable Water Management | Technical Director - | <u>Katherine.Waters@WSP.com</u> Katherine leads our Flood Risk Management and SAB Capability with 20 years of experience working within the Water Management sector specialising in flood risk management, water policy, legislation and surface water management and design. Prior to joining WSP, she was working within a Local Government setting as a Flood Risk Manager and was the past-chair and co-founder of the Association of SuDS Authorities (ASA).



Leanne Smith-Perrins | Transformation Advisory | Director | <u>leanne.smith-perrins@WSP.com</u>
Leanne leads our transformation advisory capability and is experienced at navigating, influencing, and working with executive teams and employees to design and embed sustainable change. She brings significant experience of leading and delivering complex transformation and organisation change programmes within both local government and the private sector.



Conor McCarthy | Delivery Advisory | Technical Director | conor.mccarthy@WSP.com
Conor leads our delivery advisory capability and has extensive experience in providing valuable strategic delivery advisory services and delivery model design to support clients to make informed delivery decisions, manage risk, optimise resources, and enhance stakeholder value. With a background in Water Engineering and Major Project Delivery, Conor brings experienced of leading complex advisory and large-scale infrastructure delivery commissions.

Contents

- Floods and Water Management Act 2010
- Schedule 3 and the SuDS Approving Body (SAB)
- SuDS Approving Body
- What are SuDS?
- WSP Skills Research
- Transition
- Service Delivery Model
- Questions



Background Government Commitment



Environment Minister Rebecca Pow said (stated in Jan 2023):

"Our traditional drainage systems are under increasing pressure from the effects of climate change, urbanisation and a growing population.

The benefits of sustainable drainage systems are many – from mitigating flood risk by catching and storing surplus water and reducing storm overflow discharges, to enhancing local nature in the heart of our developments and helping with harvesting valuable rainwater.

Taking a more consistent and effective approach to sustainable drainage systems will improve the resilience of our drainage and sewer infrastructure, while reaping these broader benefits."

Government announcement Jan 10th 2023:

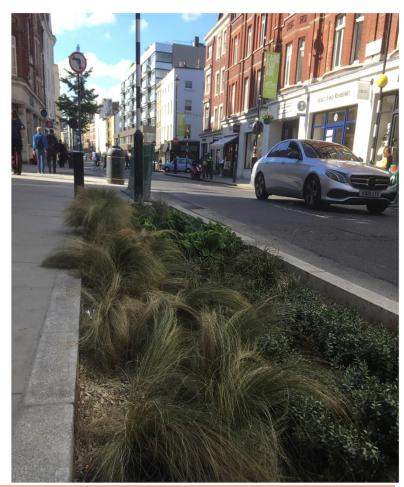
"Following today's publication of the review, regulations and processes for the creation of sustainable drainage systems at new developments will now be devised, through the implementation of Schedule 3 to the Flood and Water Management Act 2010. Implementation of the new approach is expected during 2024."

Schedule 3 and SuDS Approving Body



Flood and Water Management Act (2010)

- The Flood and Water Management Act (2010) was enacted to address the gaps identified with how flood risk was managed in England and Wales.
- Schedule 3 of the Flood and Water Management Act was never enacted in England. It provides a framework for:
 - > The approval and adoption of drainage systems
 - ➤ A sustainable drainage system approving body within unitary / county councils
 - National standards on the design, construction, operation and maintenance of sustainable drainage systems for the lifetime of the development
 - ➤ Approving the right to connect surface water runoff to public sewers (conditional to drainage systems being approved before construction work can start)



SuDS Approving Body (SAB)



The review for implementation of Schedule 3

The Government's review for the implementation of Schedule 3 resulted in a recommendation to make SuDS mandatory in new developments in England.

This approach will ensure SuDS are designed effectively to reduce the impact of flooding to new developments.

Regulations and processes for the creation of SuDS at new developments will now be devised through the implementation of Schedule 3, expected during 2024.



SuDS Approving Body (SAB)



The review for implementation of Schedule 3

As part of this, Unitary Councils and where there is not a Unitary Council the County Council will become the SuDS Approval Body (SAB).

SuDS schemes will require approval from the local authority acting in its SAB role in addition to other permissions Prior to commencement.

This will lead to environmental benefits for developments, as SuDS will be designed to not only control flows and volumes, but to provide water quality, amenity and biodiversity.





Sustainable Drainage Systems – SuDS

- o SuDS are an approach to managing surface water which take account of water quantity, water quality, biodiversity and amenity.
- o SuDS are designed to mimic natural systems, typically managing rainfall close to where it falls.
- o They can be designed to transport surface water and slow down run off before it enters watercourses using areas of water storage. Alternatively, water can be allowed to soak into the ground.

Consider

Rain harvesting reduces demand on water supply and quantity of runoff discharged from site.

Consider

Infiltration potential. even if infiltration rates are low to reduce the volume of runoff from sites.

Consider

High flow conditions. Requirements for Consent to discharge.

Consider

Storm sewer Existing capacity of the sewer. Potential for surcharge conditions within the sewer at time

of discharge.





SuDS Approval Body (SAB)



Work will be undertaken during the implementation of Schedule 3 including formalising standards, roles and responsibilities, application forms and guidelines.

Design standards are expected in accordance with the recommendations from the DEFRA Non-Statutory Technical Standards review.

There are currently 14 standards, and it is expected that the first 6 will be updated.

The standards are expected to include biodiversity, amenity, water quality, construction phase drainage and designing for maintenance.

SuDS schemes should demonstrate these or provide a reasonable justification on why they have not been included.



Requirements



All projects larger than 100m2 that have a surface water drainage implication will need to incorporate a SuDS based drainage scheme that complies with the new standard and is approved by the SAB prior to commencement of the development.

SuDS should be imbedded in the design from early stages, to avoid SAB refusal, resulting in delays to the project, additional costs and future design changes to the scheme and layout.

Surface water drainage systems may be subject to mandatory adoption therefore the SuDS that drain more than 1 property will need to be located within Publicly accessible land.

SAB consent will be required in addition to planning permission at an additional standalone fee. There will also be a fee for inspection, preapplication, adoption and on-going maintenance.

	Applications received	Applications decided ²
Year or quarter	Number	Number
2012-13	454,825	419,215
2013-14	471,887	426,339
2014-15	473,906	409,845
2015-16	474,301	425,190
2016-17	486,681	439,940
2017-18	470,058	431,207
2018-19	447,128	406,253
2019-20	424,451	391,263
2020-21	431,446	369,333
2021-22	459,177	423,538
2022-23	395,227	376,456

Number of Planning applications received

The SuDS Manual, Woods-Ballard et al., 2015

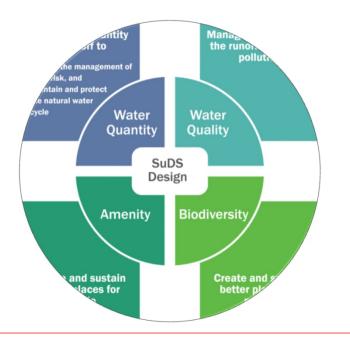
Research Drivers

WSD

- The review of Schedule 3 to the Flood and Water Management Act (2010) recommends that the government must act and implement Schedule 3 with the unitary authority or county council.
- Informal feedback from industry stakeholders indicates poor understanding of the skills and expertise required to successfully implement Schedule 3 and creation of SABs within England.
- Experience from Wales highlights challenges relating to skills and training gaps across the SuDS industry.



The review for implementation of Schedule 3 to The Flood and Water Management Act 2010



Stakeholder Engagement



Stakeholders were engaged in the following ways:

- Focus group sessions with Welsh stakeholders to discuss the implementation of Schedule 3 and lessons learned from Wales (see Final Report Appendix D: Stakeholder Workshops Review and Summary)
- A stakeholder workshop with SuDS industry stakeholders from across England, to
 prioritise skills and training requirements and evaluate future training, accreditation
 and certification needs (see Final Report Appendix D: Stakeholder Workshops Review
 and Summary)
- An online survey to gain feedback on the SuDS skills and training benchmark in England, evaluate skills and training requirements, and gain feedback on potential training, accreditation and certification formats (see Appendix C: Stakeholder survey review and summary)
- A targeted survey for academic institutions to gain insights into current availability of, and future interest and capacity for SuDS-related courses (see Appendix E: Academic survey review and summary)

Stakeholders included:

- Lead local flood authorities
- Local planning authorities
- Developers
- Water and sewerage companies
- Developers
- Design engineers/Consultants
- Landscape architects
- Environment Agency
- Natural England
- Academics and researchers
- Manufacturers of SuDS products
- Welsh government
- Welsh local Government Association
- SuDS Approving Bodies (SABs) in Wales
- Professional bodies
- Defra

Findings and Recommendations

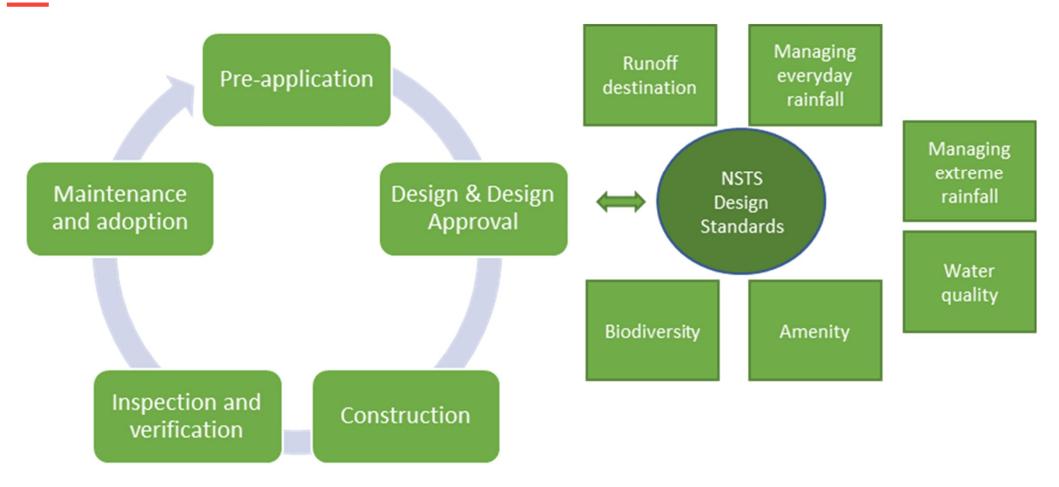
wsp

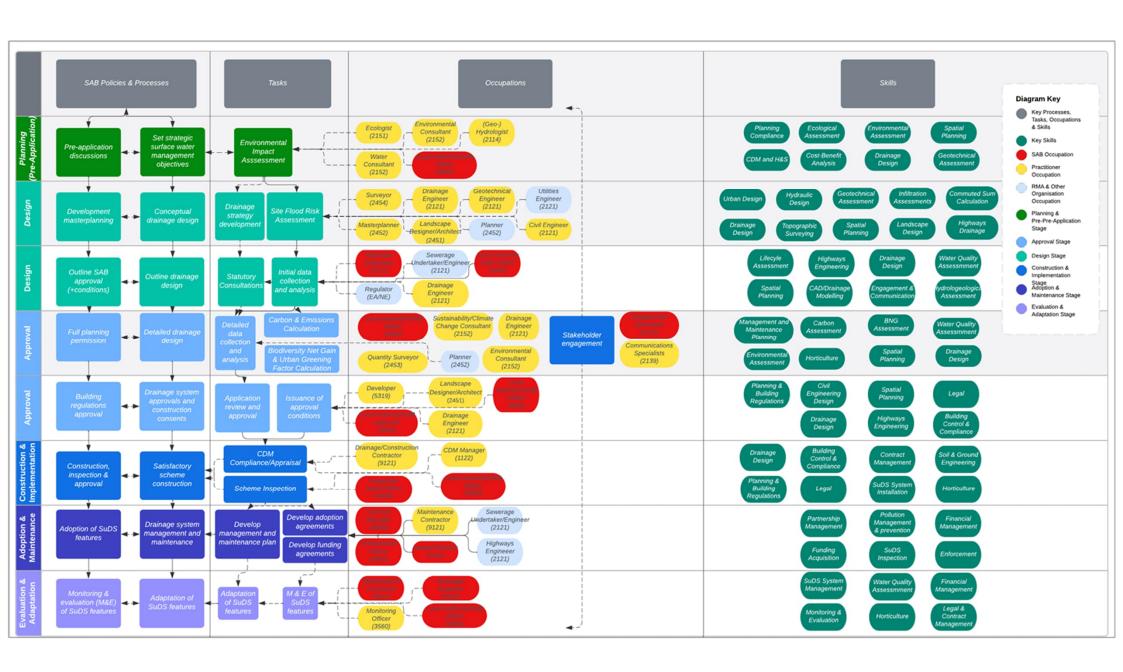
- All stakeholders recognise that there are currently insufficient skills and professionals availability for SuDS delivery in England
- Whilst Approver organisations typically significant recruitment and training of staff, developer and practitioner, and other organisations perceive a greater need for training to address skills and professional resource gaps
- Skills and professionals are more readily available for SuDS delivery stages associated with preapplication, and the design standards of drainage destination, managing everyday rainfall and managing extreme rainfall
- Skills and professionals associated with the SuDS design standards for water quality and biodiversity, and the delivery stages of construction and inspection, and maintenance and adoption, are relatively less to poorly available
- Skill areas that could be prioritised for training and skill development include:
 - SuDS design and approval principles
 - Water quality assessment and management
 - Integration of SuDS into developments and public space
 - · SuDS maintenance and management planning
 - SuDS inspection











Skills



Drainage design	Hydraulic modelling	Geotechnical assessment
SuDS design	Civil engineering	Landscape assessment
Landscape design	Highway engineering	Environmental assessment
Hydrological assessment	Water quality management	Ecological assessment
Hydraulic design	Spatial planning	Carbon assessment
Urban design	Engagement and communication	Building control/compliance
Sewerage connectivity	SuDS construction	SuDS maintenance
Contract management	Legal services	Partnership management
Obtaining funding	Economic assessment	Quantity surveying
Surveying	Geology	Horticulture



Key organisation considerations through transition

Governance

Understanding of your obligations, risks & implications

Resources

Build a plan to address the additional capacity and capability requirements, acknowledging market constraints.

Budget

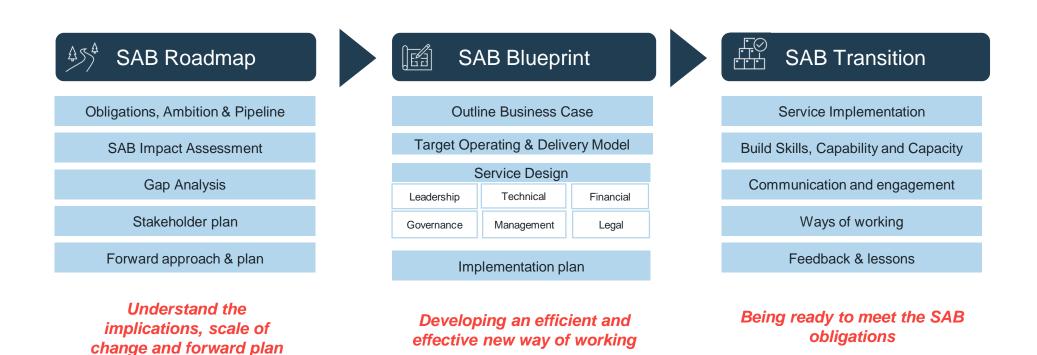
Understanding the cost implications – SAB setup, SAB ongoing running & SuDs operational and maintenance costs

Business Integration

Understand the change impact and be clear on how the existing operating model and ways of working will need to adapt



Key organisational considerations through transition





Key service delivery model considerations

Complex delivery ecosystem

SAB service delivery within a complex stakeholder environment - collaborative decision making is crucial to bringing all stakeholders on board with optimal delivery model.

In-house capability and capacity

Understand in-house capability and capacity to deliver SAB and where support will be required.

Build on best practice

Adopt best practice H.M Gov guidance (PPN 06/23 and H.M Gov Sourcing Playbook etc.) to ensure an evidence-based and data driven assessment of potential delivery models.

Wider sector/industry lessons learned

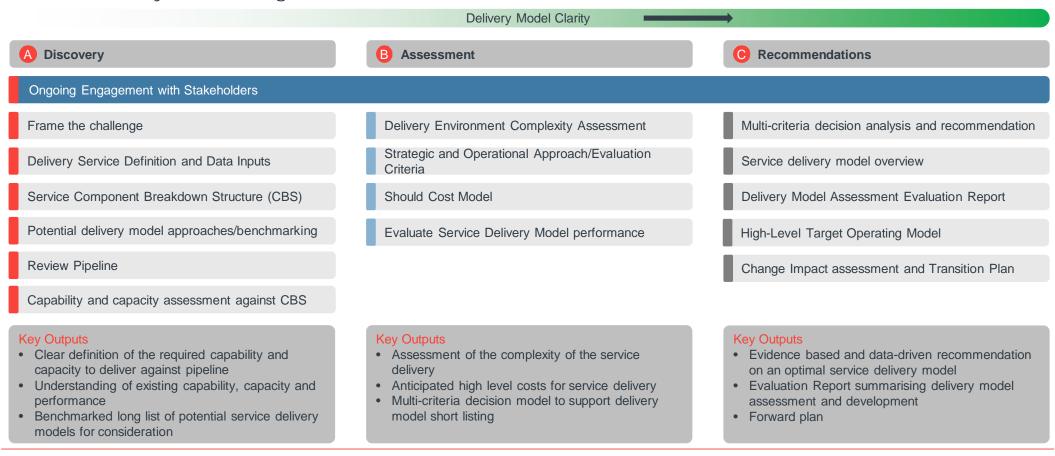
Consider wider sector best practices, lessons learned and emerging trends to inform potential delivery model approaches and their evaluation.

Comprehensive evaluation and assessment

Opportunity to develop an effective and efficient SAB service delivery model based on comprehensive assessment of requirements, capability, capacity and potential options.



Service Delivery Model design





06

Questions





Thank you

wsp.com