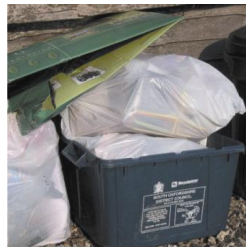


National Standards for Sustainable Drainage

Nick Orman – WRc

Paul Shaffer – CIRIA

Bridget Woods-Ballard – HR Wallingford





SUDS Requirements in England



- Interim Code of Practice
- Implemented through planning system
- PPS25 Requirements
- Adoption largely by local authorities with commuted sum





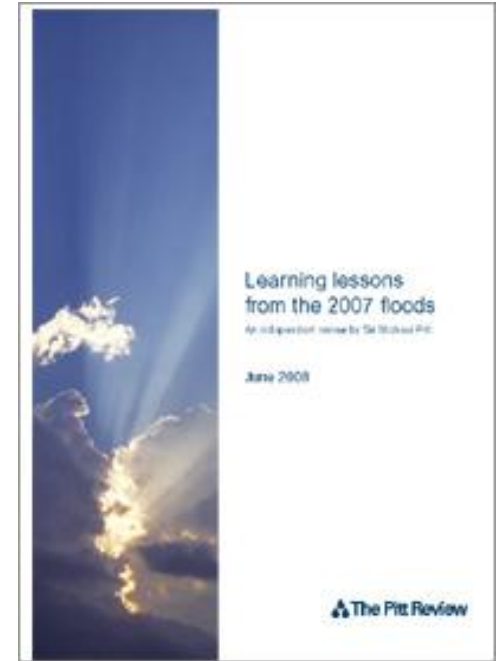
Pitt Report on 2007 Floods



- **RECOMMENDATION 10:** *The automatic right to connect surface water drainage of new developments to the sewerage system should be removed.*

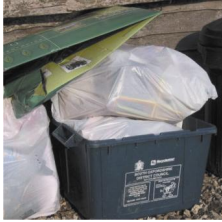


- **RECOMMENDATION 20:** *The Government should resolve the issue of which organisations should be responsible for the ownership and maintenance of sustainable drainage systems.*

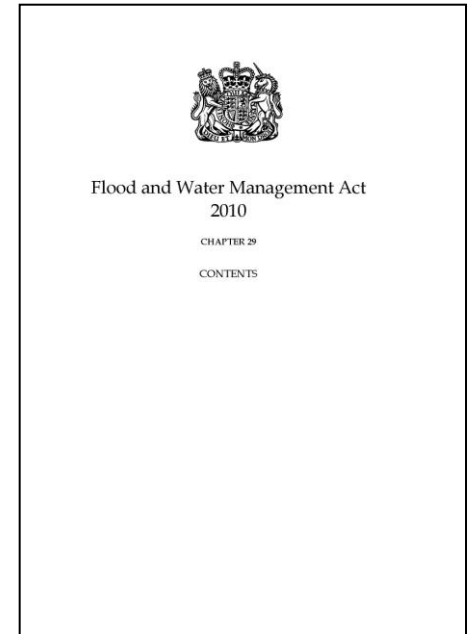




New Framework for Flood Risk Management



- Flood & Water Management Act 2010
- Flood Risk Regulations 2009
- New Roles:
 - Strategic overview role of Environment Agency
 - Lead Local Flood Authorities
 - Risk Management Authorities
- Risk Management Functions
- National and Local Strategies





Flood Risk Management Strategies



- National Flood and Coastal Erosion Risk Management Strategy
- Local Flood Risk Management Strategy





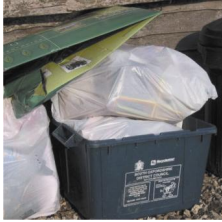
National Flood and Coastal Erosion Risk Management Strategies



- Risk management functions must be carried out in accordance with strategy
- Risk management authorities must take account of strategy in all other functions



Local Flood Risk Management Strategies



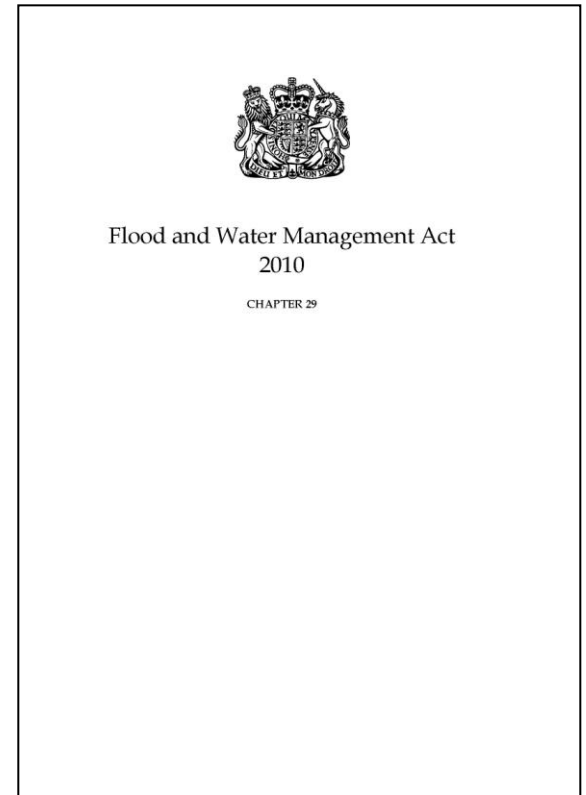
- Made by Lead Local Flood Authority. Will probably use SWMP process.
- Risk management function must be in accordance with strategy (except WaSC)
- Risk management authorities must take account of strategy in all other functions
 - e.g. all planning decisions



Surface Water Drainage in Flood and Water Management Act



- Approving Body
- Connection to sewer
- The approval process
- New SuDS National Standards
- Adoption





SuDS Approving Body (SAB)



- Approves and adopts SuDS
- FWMA nominates Unitary and County Councils
- Same as Lead Local Flood Authority
.... and Local Highway Authority
- Skills needed
 - Engineering
 - Planning
 - Landscape design



Connection to Sewer



- Right to connect WIA Section 106
- FWMA adds Section 106A
- Connection to the sewer is only permitted where this is included in the approved scheme.





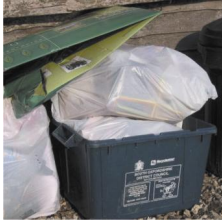
The process



- Details of the process will be in Secondary Legislation
- Approval is required before start of construction of the development
- To be approved the drainage system must meet new SuDS National Standards covering:
 - Design;
 - Construction;
 - Operation; and
 - Maintenance.



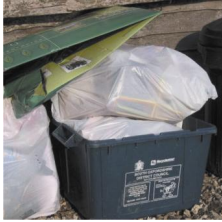
SuDS National Standards



- Applicable to a wide range of developments
 - Greenfield & previously developed
 - Domestic & Commercial
 - Pervious & impervious soils
 - Dense city centres and less dense peripheral areas
- Must deliver most sustainable option in all cases
- Under development
- Guided by a Project Advisory Board
- Subject to Consultation



SuDS National Standards Principles



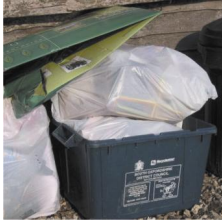
Might include:

- Consider drainage at earliest planning stage
- Multi-functional use of space
- Manage rainwater
 - On the surface
 - As close as possible to source
- No connection to foul sewers





SuDS National Standards Hierarchy Standards



Likely to cover:

- Runoff destination
- Peak rate of runoff
- Volume of runoff
- Visibility, adaptability and biodiversity
- Water quality treatment





SuDS National Standards Design, Construction, O&M



- Design standards likely to include
 - hydraulic performance
- Construction standards to include
 - Constructed to approved design
 - Does not compromise future operation
- Operation and Maintenance standards
 - Applies to SAB
 - Ensure system continues to function



Adoption of SuDS



- The SAB is required to adopt any approved SuDS unless:
 - It serves only a single property;
 - It is part of a public highway.
- All SuDS on private land (whether adopted or not) to be designated under FWMA
- Permission required to alter, remove or replace SuDS
- Voluntary Adoption Possible



Summary



- New legislation for Sustainable Drainage
- New developments require Approval
- Links to new FRM legislation
- SAB (LA) to approve and adopt
- Approval by reference to SuDS National Standards
- Consultation on Standards shortly

