

# Sewage Summit



# Welcome to our Sewage Summit

Cllr Lisa Spivey  
Cotswold District Council

# AGENDA

- 10:00 - 10:10 Introductions & Welcome Cllr Lisa Spivey
- 10:10 – 10:40 Scene Setting Phil Martin/Matthew Britton
- 10:40 – 11:05 Thames Water Tess Fayers
- 11:05 – 11:30 Severn Trent Water Sarah Jayne O’Kane
- 11:30 – 11:55 WASP Ashley Smith

## **BREAK – 11:55 to 12:05**

- 12:05 – 12:30 Earth Watch Sam Frith
- 12.30 – 12:55 Wessex Water Matt Wheeldon
- 12:55 – 13:20 Environment Agency Colin Chiverton

## **LUNCH – 13:20 to 14:10**

- 14:10 – 15:10 Panel Q&A session with all speakers
- 15:10 – 15:15 Summary and Goodbye Cllr Lisa Spivey

# Scene Setting

- The water cycle;
- Responsibilities for river water quality and sewage flooding/systems capacity;
- Relevant regulation and legislation;
- The role of the water industry;
- The role of the local authorities.

# The Water Cycle



# Responsibilities for river water quality and sewage flooding/systems capacity

- Environment Agency
- OfWAT
- DEFRA
- Drinking Water Inspectorate
- Water and Sewage Companies
  - Wessex Water, Thames Water, Seven Trent
- Lead Local Flood Authorities – Gloucestershire County Council
- Local Authorities
- Highways Authorities
- Riparian Owners
- Property Owners

# Regulators of the Water Industry

- **Environment Agency** – issue and enforce environmental permits. Co-ordinate efforts to meet the objectives of environmental legislation;
- **OfWAT** – economic regulation of the water industry. Setting framework for and approving business plans;
- **Drinking Water Inspectorate** – Provides independent assurance of the quality and safety of drinking water;
- **Defra** – Oversight of EA, OfWAT, DWI, environmental legislation.

# Relevant regulation and legislation

- Land Drainage Act 1991
- Water Industry Act 1991
- Flood and Water Management Act 2010
- Water Act 2014
  - Made amendments to the 1991 Acts
- The Environment Act 2021
  - 141A Storm overflow discharge reduction plan



# Environment Act 2021

## 141A Storm overflow discharge reduction plan

(1)The Secretary of State must prepare a plan for the purposes of—

(a)reducing discharges from the storm overflows of sewerage undertakers whose area is wholly or mainly in England, and

(b)reducing the adverse impacts of those discharge Requires:

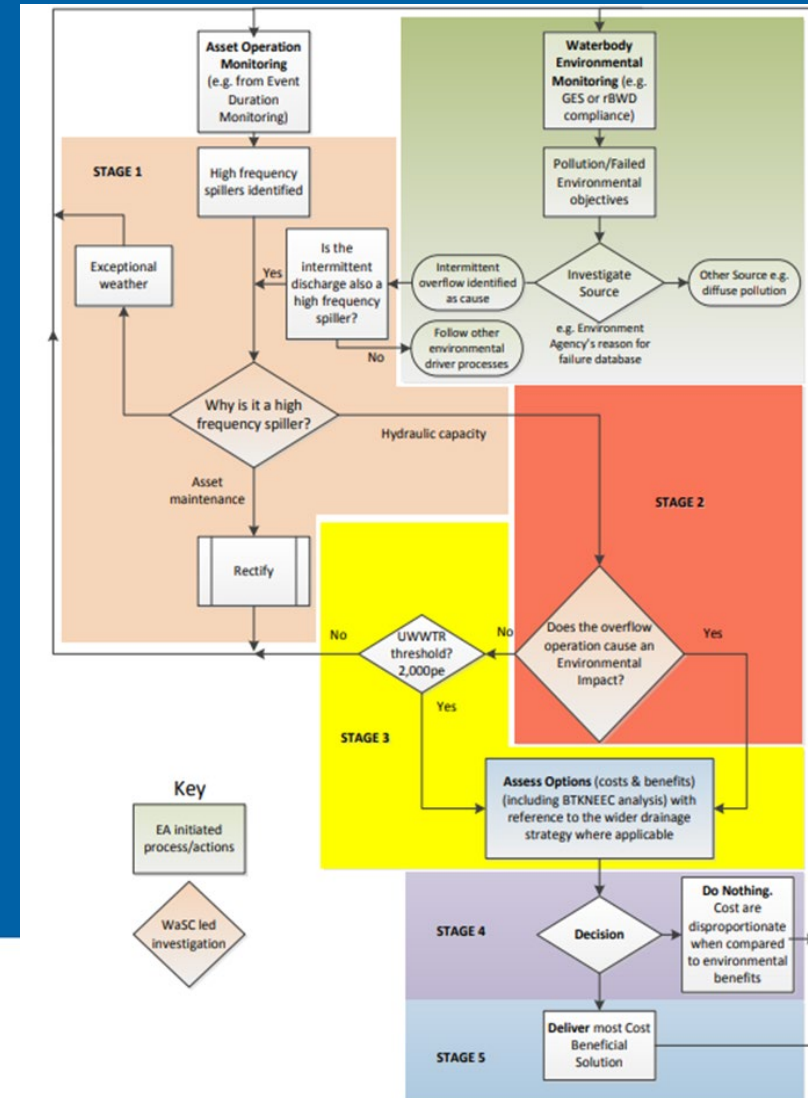
- A storm overflow discharge reduction plan
- Annual reporting
- Live (within 1 hour) reporting of discharge events
- Continuous water quality monitoring upstream and downstream
- Makes preparing drainage and sewerage management plans a statutory duty on water companies

# Defra Storm Overflows Discharge Reduction Plan

- Over 15,000 permitted overflows in England;
- By 2035, water companies will have: improved all overflows discharging into or near every designated bathing water; and improved 75% of overflows discharging to high priority sites;
- By 2050, no storm overflows will be permitted to operate outside of unusually heavy rainfall or to cause any adverse ecological harm.

# Managing storm overflows – Drainage and Wastewater Management Plans (DWMPs)

- 25-year long-term (2025-50) plans for managing all aspects of the resilience and performance of wastewater systems.
- Spring 2023 – consultation complete, final versions being prepared.
- Will direct investment over AMP8 (2025-30).
- Includes Sewer Overflow Assessment Framework (SOAF)



# The role of the Water Industry



# Water Company Duties

**Water Industry Act 1991 - 94** General duty to provide sewerage system.

(1) It shall be the duty of every sewerage undertaker -

(a) to provide, improve and extend such a system of public sewers (whether inside its area or elsewhere) and so to cleanse and maintain those sewers [and any lateral drains which belong to or vest in the undertaker] as to ensure that that area is and continues to be effectually drained; and

(b) to make provision for the emptying of those sewers and such further provision (whether inside its area or elsewhere) as is necessary from time to time for effectually dealing, by means of sewage disposal works or otherwise, with the contents of those sewers.

(2) It shall be the duty of a sewerage undertaker in performing its duty under subsection (1) above to have regard -

(a) to its existing and likely future obligations to allow for the discharge of trade effluent into its public sewers; and

(b) to the need to provide for the disposal of trade effluent which is so discharged.

# The “right to connect”

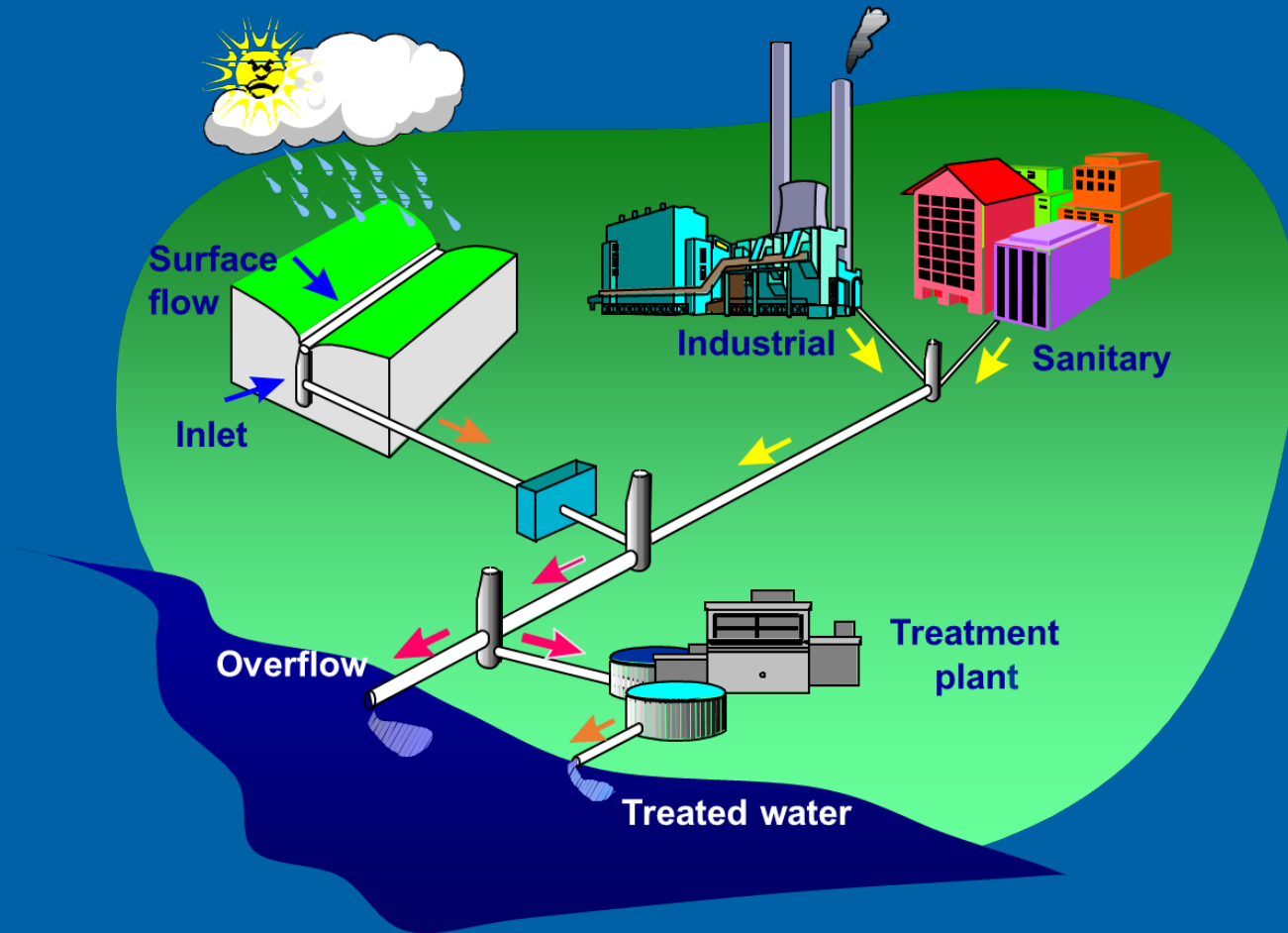
**Water Industry Act 1991** - 106 Right to communicate with public sewers.

(1) Subject to the provisions of this section—

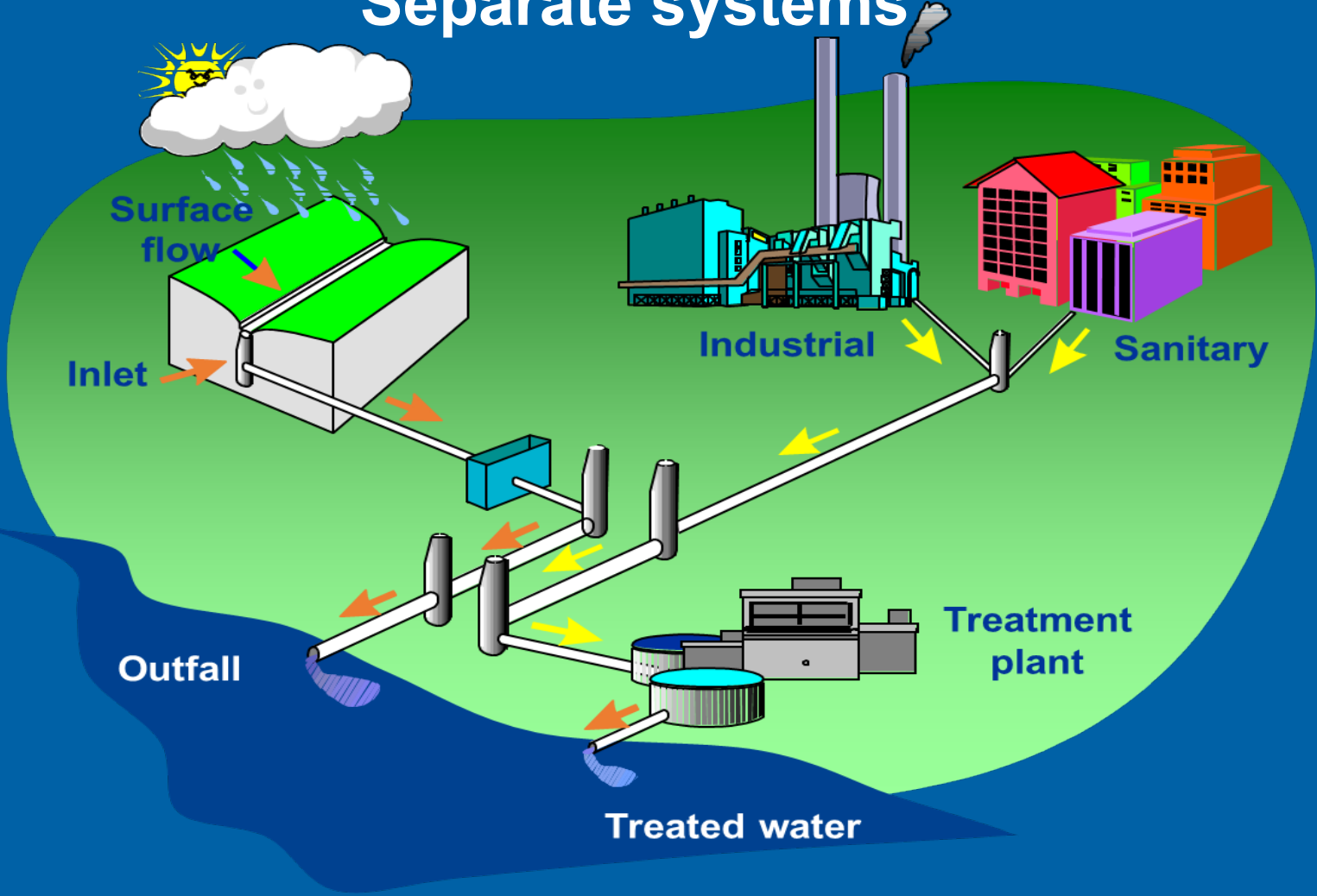
(a) the owner or occupier of any premises, or

(b) the owner of any private sewer which drains premises, shall be entitled to have his drains or sewer communicate with the public sewer of any sewerage undertaker and thereby to discharge foul water and surface water from those premises or that private sewer.

# Combined Systems



# Separate systems



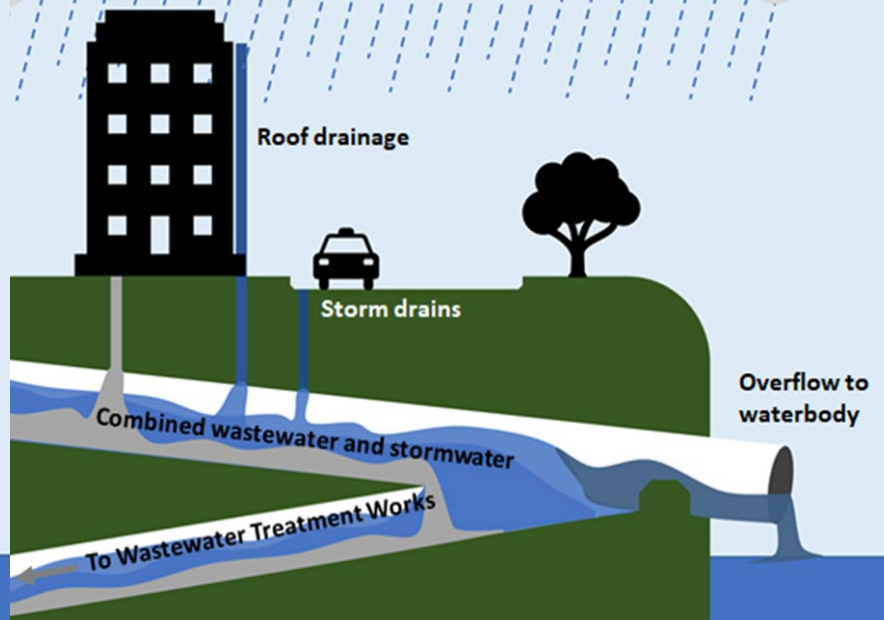


# Storm Overflows

Normal operation



Heavy rainfall



# The impacts of Sewer Overflows

## Impacts to biodiversity - physico-chemical

- Ammonia – toxic to fish
- Biochemical oxygen demand – depletes water of oxygen
- Nutrients – over-enrichment, algal blooms

## Impacts to people

- Biological – viruses and bacteria
- Aesthetic

## Emerging impacts

- Micro-plastics
- “Forever” chemicals



# Managing storm overflows – solutions

- Storm storage in networks and at treatment works
- Relining sewers to reduce infiltration
- SuDS retrofit and as part of new developments
- Monitoring and control technology to optimize storage in sewers
- Treatment of discharges



# The Role of Local Authorities



# Local Authorities Statutory Duties

- Local Authorities have no statutory powers in respect of direct enforcement against the water companies
- The water companies are not statutory consultees in regards, however the Council has been working closely with them to get their input into planning applications
- The production of a Local Plan and provision of a 5 year land supply

# The Local Plan

- Cotswold District Council adopted a Local Plan in 2018.
- Adopted Local Plan contains a policy on 'Water Management Infrastructure'.
- The Council is updating its adopted Local Plan to make the policies 'green to the core', responding to the Council's climate and ecological emergency declarations.
- This substantially updates the adopted policy to reflect current evidence and national policy.
- Also undertaken two public consultations.
- Aim to submit updated Local Plan by June 2025 for independent examination in public.

## POLICY CC6: WATER MANAGEMENT INFRASTRUCTURE (FORMERLY POLICY INF8)

### Policy proposal

Update Policy CC6 (formerly INF8) as follows:

Further updates may be required to reflect the latest evidence provided by the forthcoming Water Cycle Study (2023).

### Policy **INF8 CC6: Water Management Infrastructure** ( )

**Sb.6.1.** In recent years, frequent flooding, exacerbated by climate change, and increasing water demand due to population growth in the UK has made the need for managing flood risk **and water resources** increasingly important. ( )

**Sb.6.2.** **Adapting to the future includes protecting our water quality, water supply and aligning the capacity of our water and wastewater infrastructure with new development, in addition to mitigating flood risk. This policy seeks to improve, where possible, water quality and water efficiency, reduce water consumption and avoid an overload of infrastructure that can lead to sewer flooding and storm overflow discharges. The NPPF (paragraph 100) states that "inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere."** ( )

### Policy **INF8 CC6**

#### WATER MANAGEMENT INFRASTRUCTURE

##### **Water and wastewater provision** ( )

1. Proposals will be permitted **where it is demonstrated** that **there is adequate water and wastewater infrastructure to serve the development.** ( ) **Proposals must take into account the capacity of existing off-site water and wastewater infrastructure and the impact of development on it, and make satisfactory provision for improvement where a need is identified that is related to the proposal. Where such infrastructure is required, it must be in place prior to the occupation of the development, or, if it is demonstrated that delivery within that timetable is not possible, within a timeframe that has first been agreed by the LPA. ( )** Proposals will be subject to conditions to ensure that the first and/or subsequent occupancy is aligned with the delivery of the necessary infrastructure upgrades. ( ) **In addition, proposals should not result in a deterioration in water quality. Where a need for improvement or a risk of deterioration in water quality is identified, the Council will require satisfactory improvement or mitigation measures to be implemented in full prior to occupation of the development.** ( )

##### **Water Resources**

2. **Proposals where water resources are materially impacted must incorporate design features that:**

- a. address sustainable water supply through the implementation of demand management measures, particularly to reduce the use of water and to prevent leakages, and are **complemented** **complemented** by management initiatives that make efficient use of water, for example, through rainwater harvesting and grey water collection;
- b. **demonstrate that a water efficiency standard of 110 litres per person per day can be achieved for new dwellings.** ( ) **A condition will be attached to all planning approvals for new dwellings ( ) to ensure that the water efficiency standards are met. Non-**

