

The draft London Water Strategy

Alex Nickson, Strategy Manager Climate Change Adaptation & Water

Presentation to the London Waterways Commission

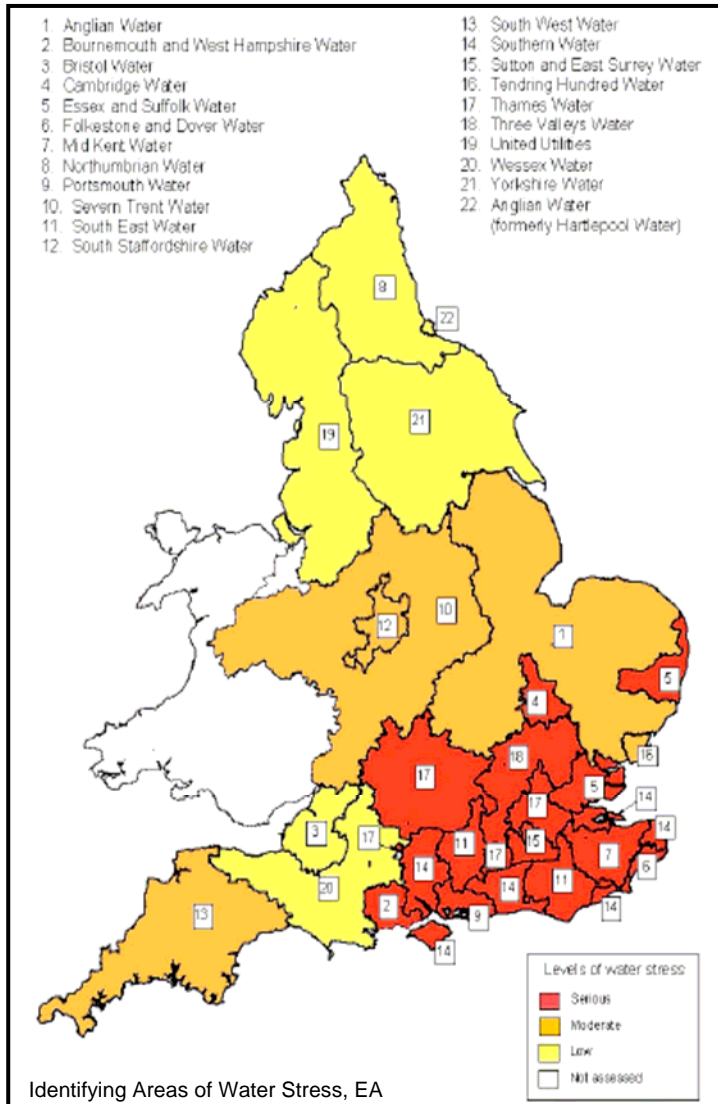
Objectives of the Water Strategy

- To use the water London already has more effectively and efficiently
- To minimise the release of wastewater and diffuse pollution to the water environment
- To reduce the threat to people and their property, businesses and infrastructure from sewer, groundwater and surface water flooding and to mitigate its effects.

Structure of the Strategy

- Pressure on water resources
- Managing water use
- Managing rainwater
- Disposal of wastewater
- Paying for water services

Pressure on water resources



- The south east of England is already seriously 'water stressed'.
- London's water resources are already over-abstracted, or over licensed.
- 80% of London's water supply from Thames and Lea, 20% from aquifer
- In a dry year, Thames Water forecast that current demand would be 80MI/d greater than available supply
- London's growing population and changing demographics will increase demand
- Climate change will reduce supply and increase demand for water

Managing water use

Policy : Water use in London

The Mayor believes that we should apply the following hierarchy for managing water supply and demand in London

- 1= reduce the loss of leakage through better leakage management
- 1= improve the efficiency of water use in residential, commercial and public buildings (new and existing)
- 2 Use reclaimed water for non-potable uses (rainwater harvesting and grey-water recycling)
- 3 Develop, as necessary, those water resources that have the least climate change and environmental impact

Managing rainwater

Policy – Drainage in London

1. Store for use later
2. Use porous surfaces to let rainwater soak into the ground where soil conditions allow
3. Slow the runoff by directing rainwater into ponds or open water features for gradual release to a watercourse
4. Slow the runoff by directing into tanks / sealed features for gradual release to a watercourse
5. Discharge direct to a watercourse
6. Discharge direct to a surface water drain
7. Discharge to a combined sewer as a last resort

Disposal of wastewater

Combined Sewer Overflows

- 50-60 discharges per year
- Failure to comply with Urban Wastewater Treatment Directive
- Mayor supports the Thames Tideway Tunnel

Internal Sewer flooding

- 12,477 properties at risk of sewer flooding once every 20 years
- Thames Water removing about 500 properties from being at risk each year

Misconnections

- Thames Water estimates 1 in 20 homes has a misconnection. Maybe as high as 1 in 10 in some areas of London

Energy opportunity from sewage waste

- Sewage sludge represents a significant renewable energy source (new technologies)

Paying for water services

- Only 1 in 5 home in London have a water meter
- Mayor's view is that all homes should be metered with tariffs to protect vulnerable households
- Walker Review draft report concluded metering was the fairest way of charging for water
- Water poverty could become an issue for Londoners
- GLA and EA study into social impacts of water metering found that
 - For most households changes will <£20 per year
 - Half the poorest 10% already spend >3% of income on water
 - Metering will have a varying effect – large families hardest hit
 - A tariff that links water charge to Council Tax band provided greatest protection to low income families.

alex.nickson@london.gov.uk