



West Oxfordshire DC Environment Overview Scrutiny

20 July 2017

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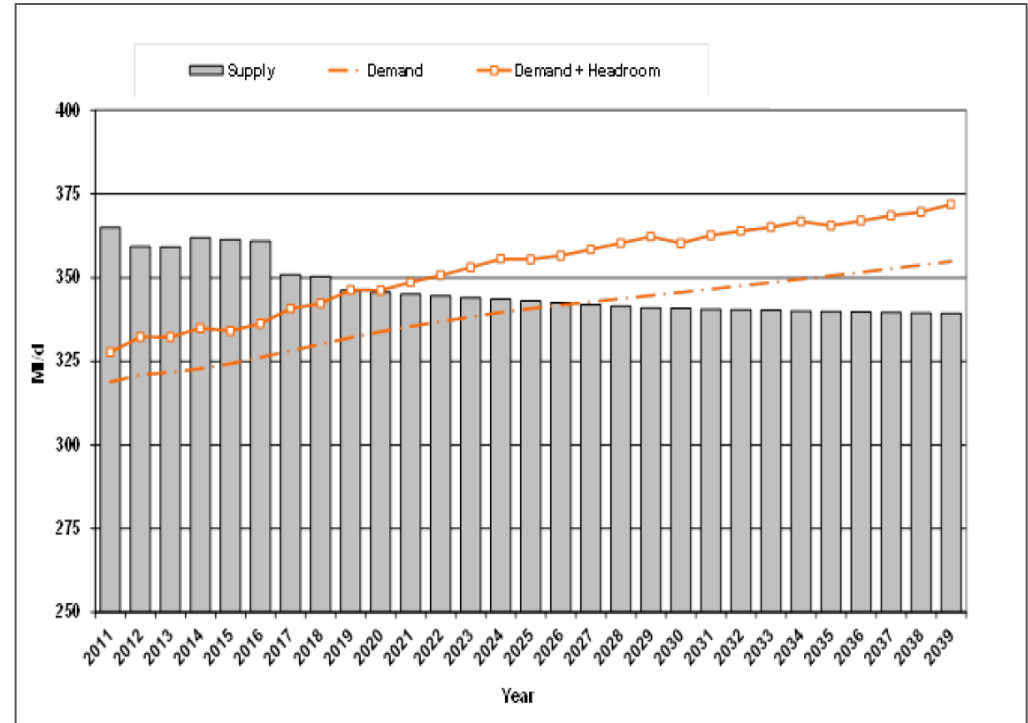
Agenda.

- Strategic water resource management planning
- Our role in the Planning process
- West Oxfordshire drainage strategies update
- Concluding points and discussion



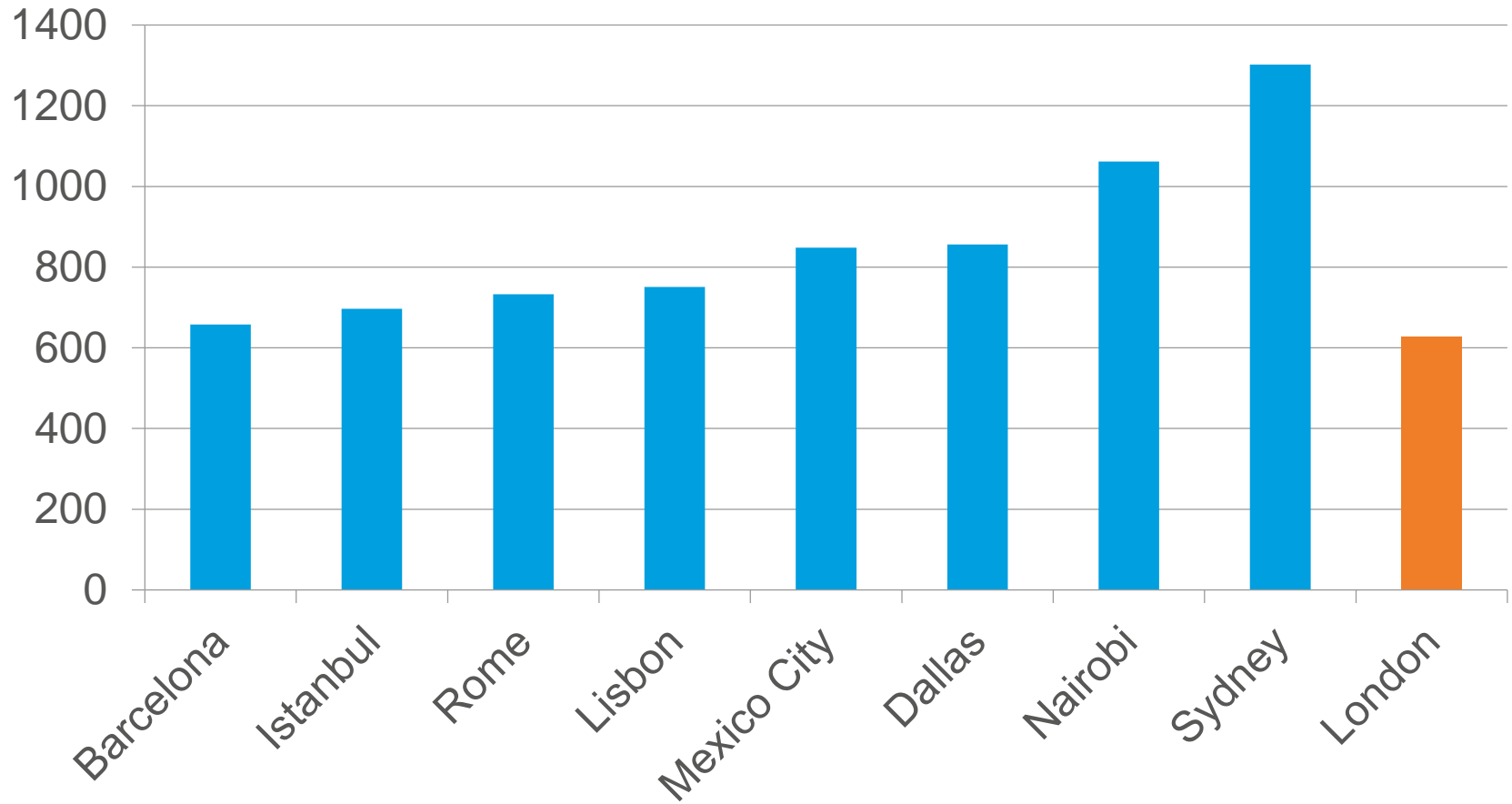
The need for water resource planning

- Protecting the environment
- Adapting to climate change
- Population growth
- Resilience of current assets



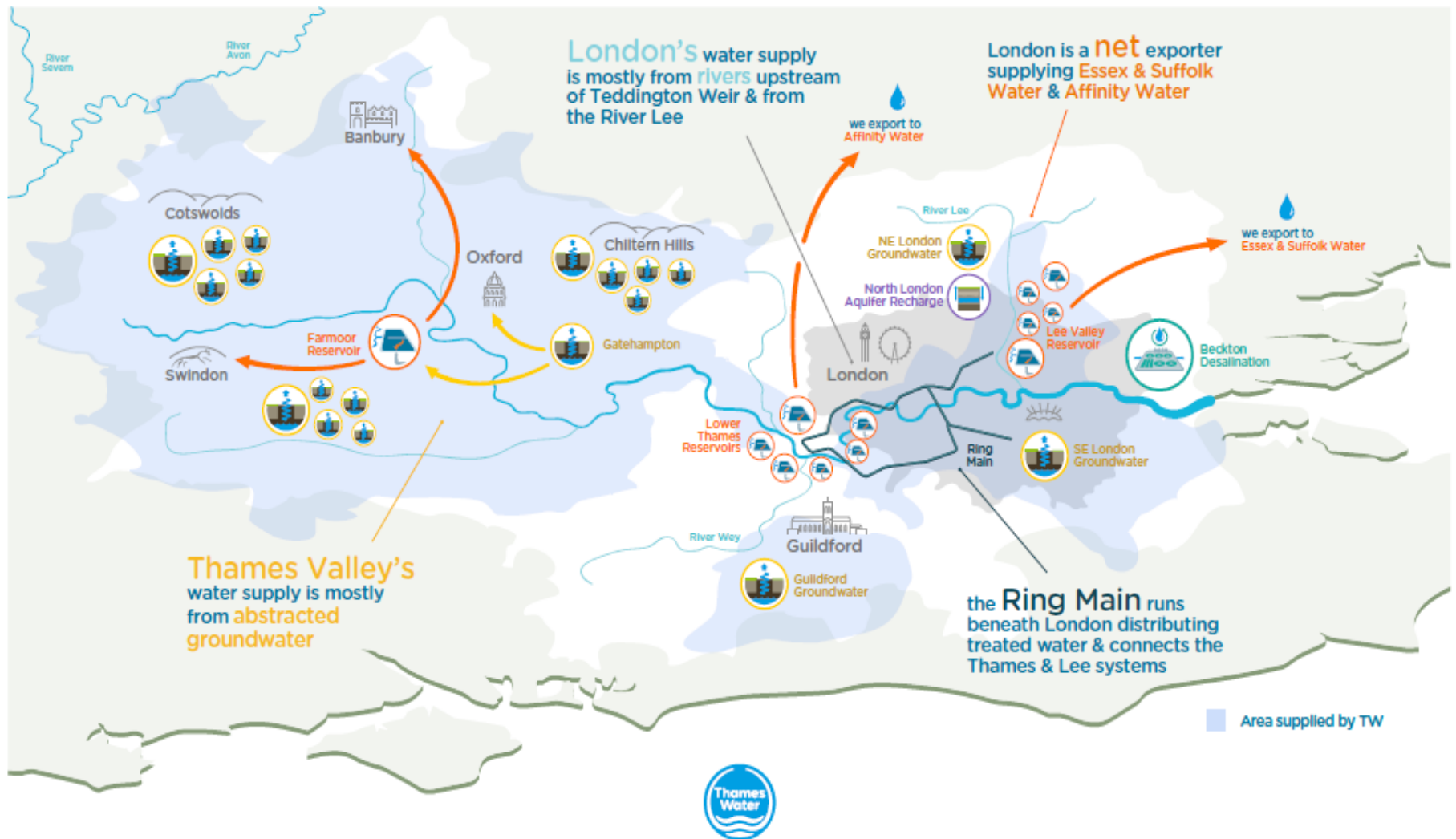
Isn't it always raining ?

Average annual rainfall (mm)



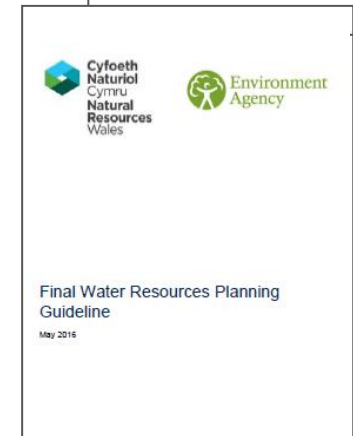
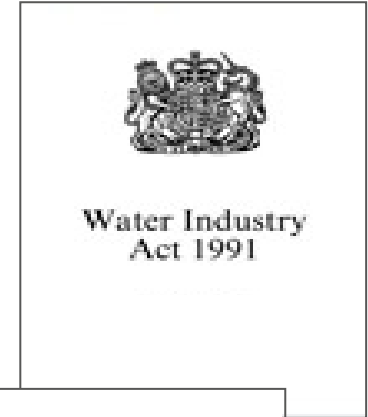
Our water resource area

Thames Water current water resources



Planning future water resources

- Every 5 years we produce a Water Resource Management Plan (WRMP)
- In the plan we need to:
 - take a long term strategic approach
 - address future challenges including a growing economy and population, and environmental requirements
 - consider a wide range of options to meet future needs
 - take account of the needs of customers now and in the future
 - demonstrate we have secure and resilient supplies



The WRMP: A step-wise approach



Customer & Stakeholder Engagement throughout



Since 2015 the challenges have amplified

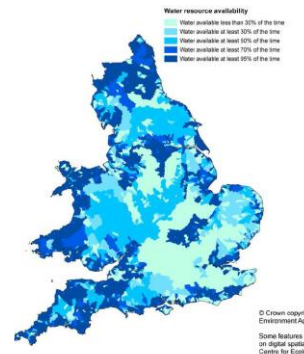
➤ Current levels of resilience are inadequate



➤ Planned levels of growth are unprecedented

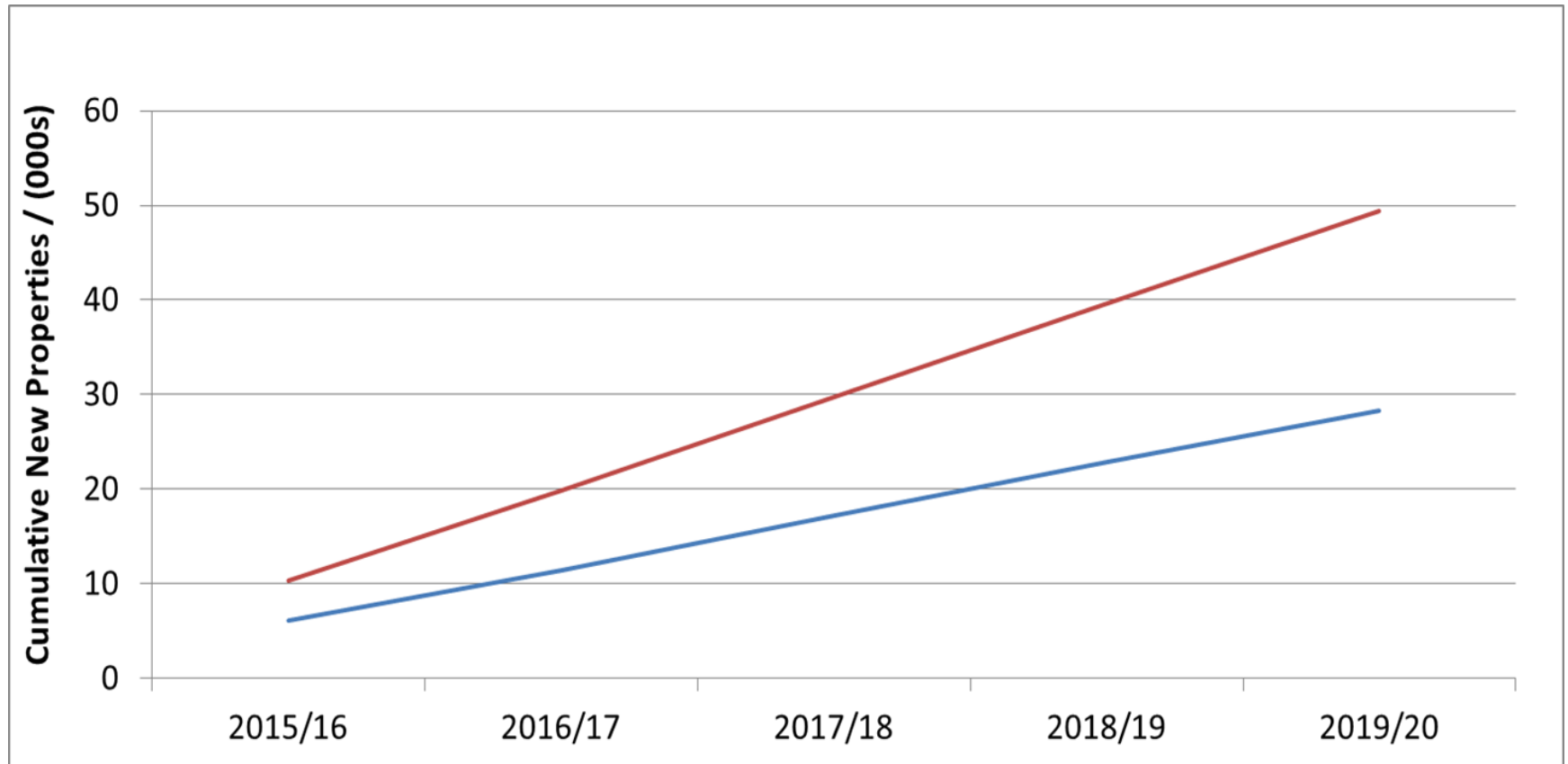


➤ Available resources will diminish



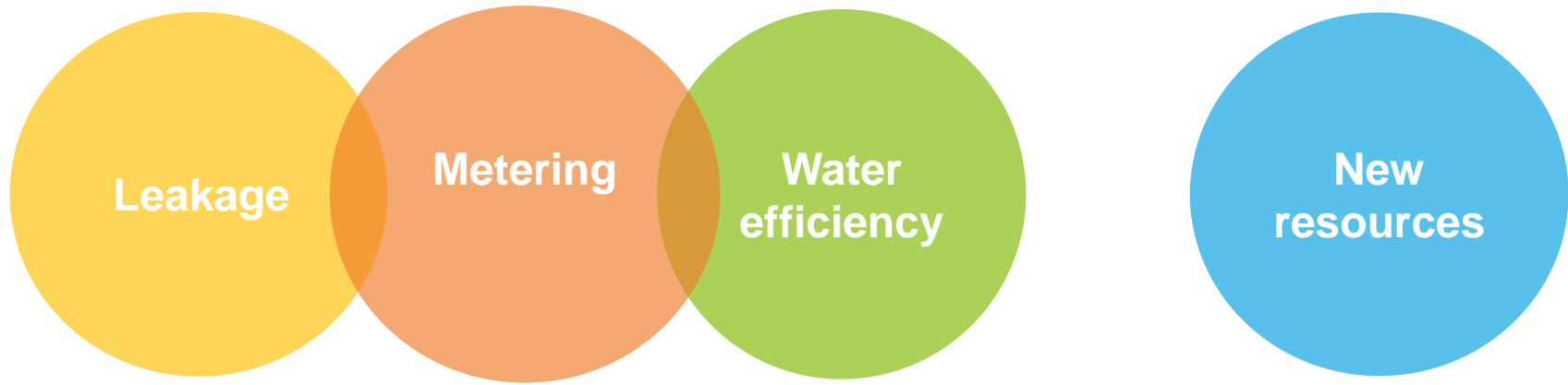
Growth in Oxfordshire

— WRMP14
— Oxfordshire SHMA forecasts



Balancing supply and demand

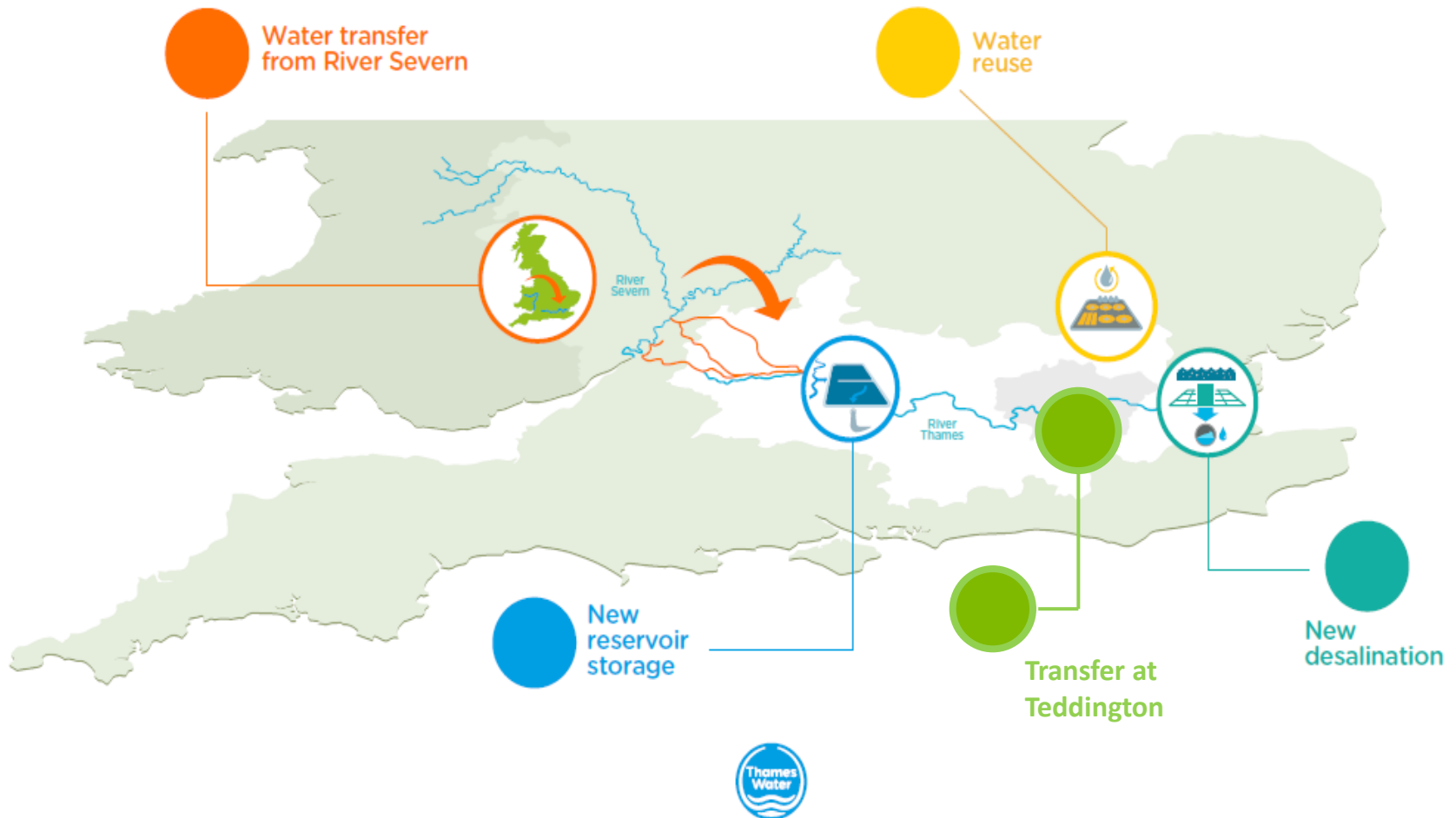
We are focused on Demand Management in the next 10 years – metering is pivotal to this.



And we will need to develop new resources in the future.

Resource options

Possible future resource options



Our role in the town planning process.

Development Plans

- Assess growth and plan for strategic infrastructure improvements
- Help local authorities influence the type, scale and location of development
- Support Local Plan and Neighbourhood Plan policies that support sustainable development and infrastructure provision.

Development management

- Aligning development of water and wastewater infrastructure with development growth
- Seeking planning conditions where appropriate to ensure residents and the environment are protected



How we're increasing our engagement in the development process.

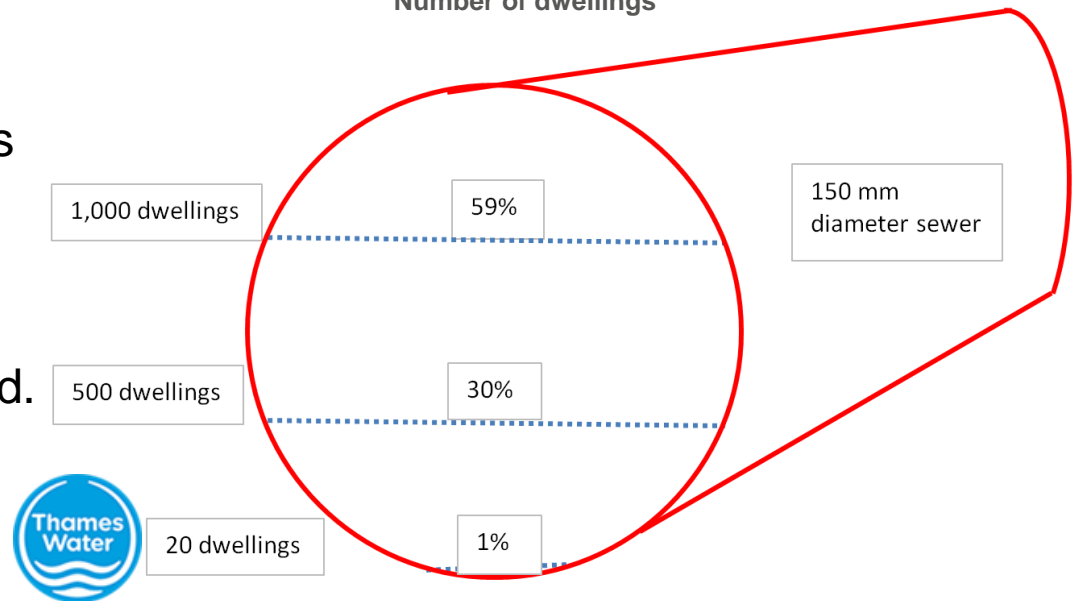
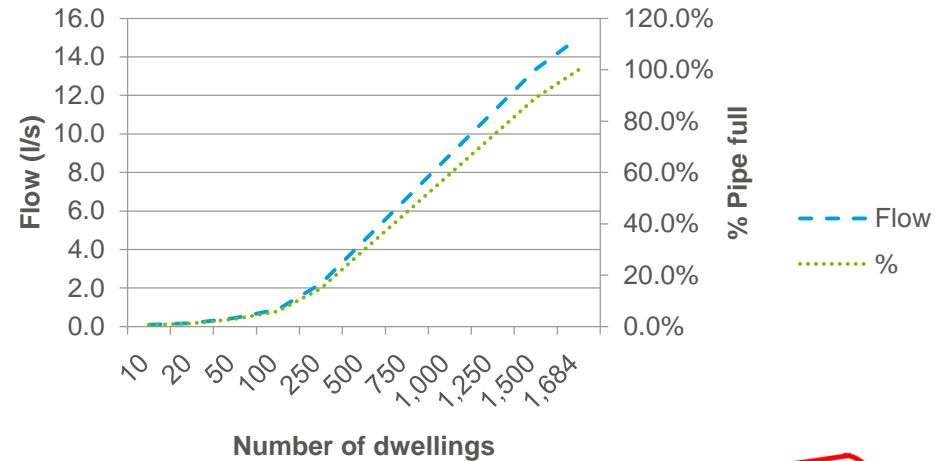
Examples	Detail
Proactively seeking out site developers	Meeting developers , promoters and agents for development sites at an early stage of the planning process
Working with LPAs on gathering the appropriate infrastructure evidence	Water Cycle Studies, Drainage Strategies, Integrated Water Management Strategies, Strategic Flood Risk Assessments, Infrastructure Delivery Plans
Supporting LPAs and developers through Local Plan promotion	Developer planning forums / Local Plan examinations
Ensuring supportive infrastructure delivery policies in Local Plans	Seek effective infrastructure policies that help enable sustainable growth and infrastructure
Greater emphasis on working with developers and LPAs on masterplans	Establishes drainage impacts as a result of the development and highlights mitigation measures



How we assess impacts of growth

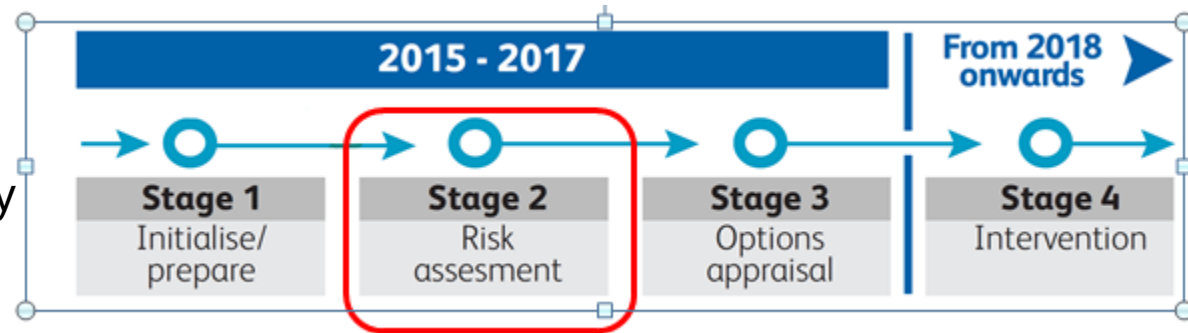
- **Drainage strategies** submitted by developers confirming the point of connection into public sewers and flow rate.
- **Impact studies** completed for sites where insufficient sewer capacity has been identified.
- The impact of a development on the existing sewerage system is primarily measured by the **increased flood risk**.
- **Hydraulic modelling** includes sites already connected.
- **Cluster impact studies** completed for areas where strategic solutions are required.
- **Infrastructure upgrades** required where detriment is predicted to occur.

Example of a typical pipe



Drainage Strategies

- We are in **stage 2** of the 4 stage framework.
- We have been hampered by the unusually **dry winter** therefore no infiltration was detected.
- We are investigating an **innovative technique** for finding infiltration, called Electroscan, which uses electrical conductivity to find pipe defects.
- Next update on the investigation work will be provided in **December 2017**.
- We will continue the **monitoring and investigation** beyond this year.
- Future challenges will be taken into account, eg the likely relative impact of **climate change, population growth** and **urban creep**.



To sum up.

- **Significant growth** coming up in the next few years
- We seek to **work closely** with the Council's development management and planning policy teams.
- Our goal is to **engage earlier** in the planning process with both councils, developers and other key stakeholders.
- Delivery of new infrastructure should be **in tandem** with development



Thank you

