



Environment  
Agency



# Climate Change: Adaptation

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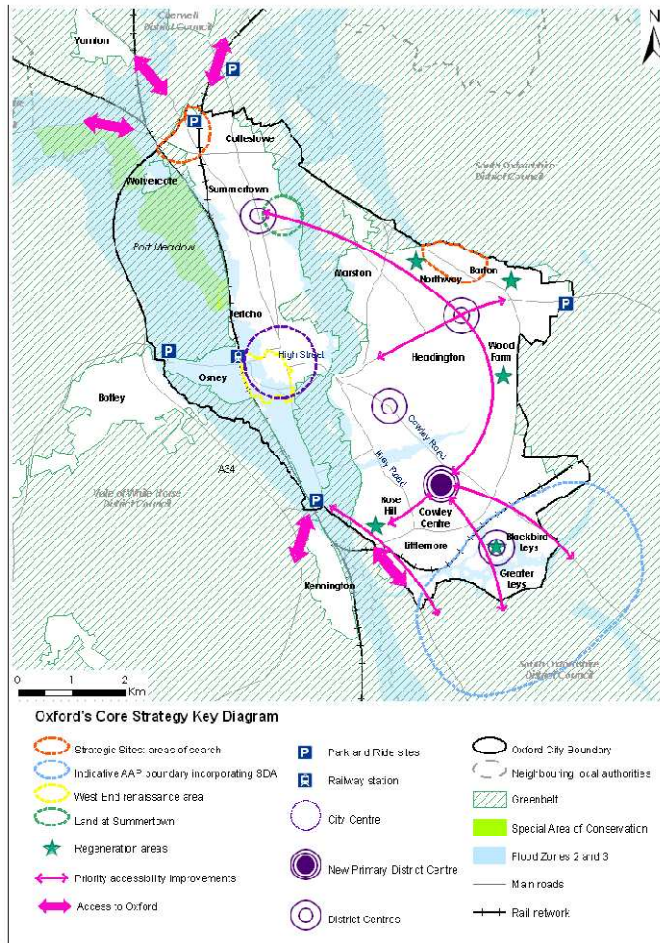
Job title: Planning & Corporate Services Manager

Date: Monday 18 January

# Agenda

- ➔ Climate change adaptation in LDF
- ➔ Eco-town example
- ➔ Water efficiency
- ➔ Flood risk management
- ➔ Surface water flooding
- ➔ SFRA

# Examples of climate change adaptation in LDFs



- ➔ Sustainable design (SODC & VOWH)
- ➔ Green Infrastructure (SODC)
- ➔ Water Cycle Study (Aylesbury and Swindon)
- ➔ Flood risk policy (VOWH)
- ➔ Spatial strategy avoiding flood risk areas (Reading and Wycombe)

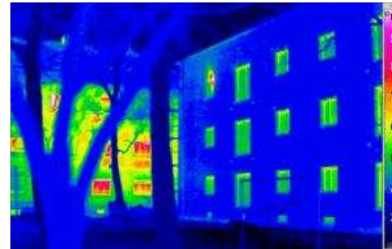


# Climate Change Adaptation at NW Bicester



## Towards Water Neutrality

- ⇒ Water efficient buildings
- ⇒ Retro-fitting existing stock



## Passivhaus modular buildings

- ⇒ Energy efficient construction
- ⇒ Adaptable to changing needs



## Biomass & CHP

- ⇒ Efficient use of natural resources



## Green Infrastructure

- ⇒ Managing increasing flood risk
- ⇒ Open water to control temperature



## Smart-Energy

- ⇒ 10% reduction in existing community

# Why water efficiency?

- ⇒ Thames Region is one of the driest in the country...
- ⇒ ...and is one of the most densely populated
- ⇒ In Oxfordshire demand for water is 155 vs target of 105\*
- ⇒ Swindon and Oxfordshire Water resource zone is at risk
- ⇒ Much of Oxfordshire water supply is from the River Thames via Farmoor





# Flood Risk Management – Our Role

- ⇒ Implement government policy on flood risk
- ⇒ Strategic overview of flooding from all sources
- ⇒ Powers and duties relating the main rivers
- ⇒ Duty to produce flood risk maps
- ⇒ Duty to issue flood warnings
- ⇒ Statutory consultee in the planning process
- ⇒ Encourage use of SUDS



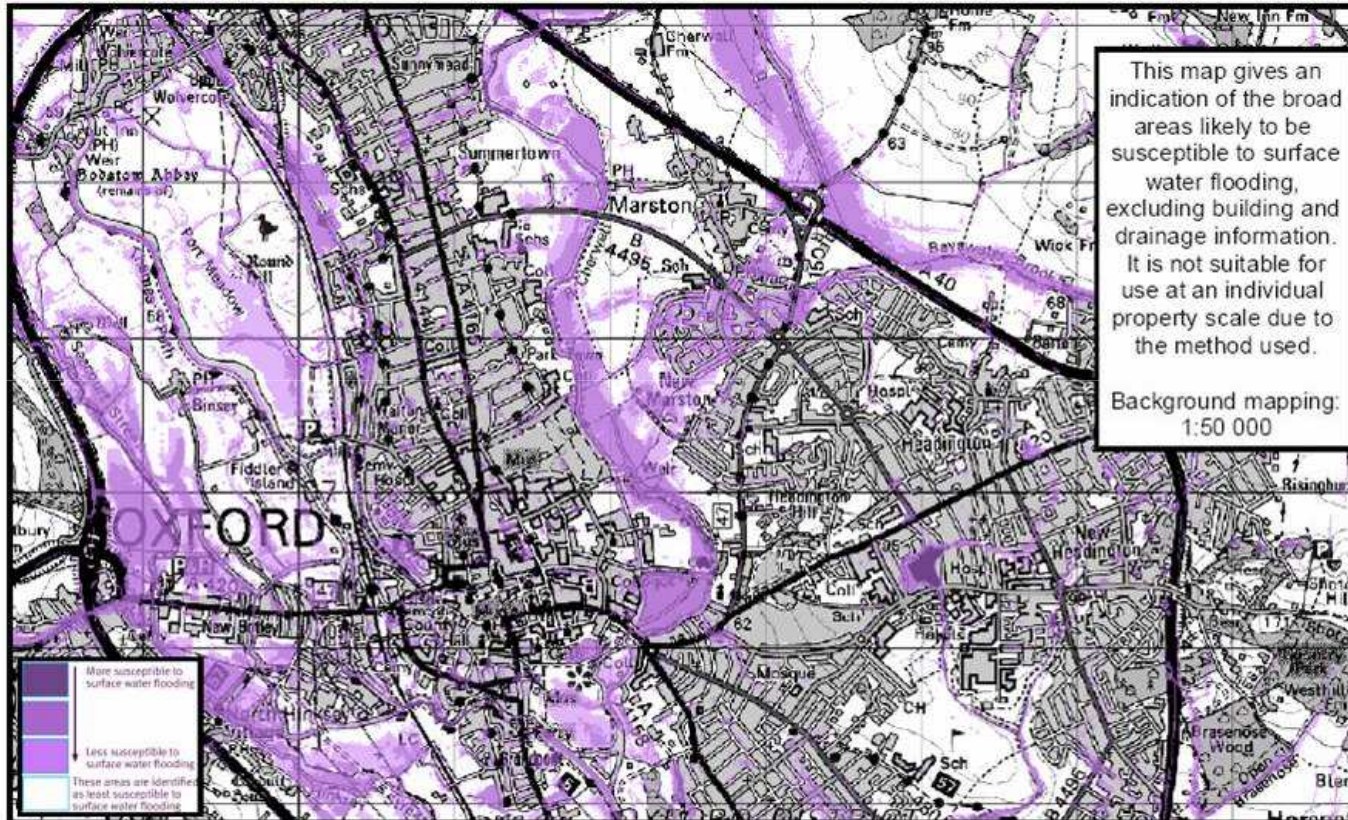
# Flood Risk Management – Local Authority Roles

- ⇒ Lead for local flood risk management
  - ⇒ surface water
  - ⇒ groundwater
  - ⇒ ordinary water courses
- ⇒ Powers to maintain and improve ordinary watercourses
- ⇒ Encourage the use of SUDS
- ⇒ Determine planning applications in line with
- ⇒ Coordinate local resilience and emergency planning



# Areas Susceptible to Surface Water Flooding Maps

## Areas Susceptible to Surface Water Flooding



Version 4 - January 2009

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# Surface Water Flooding

The risk of flooding from Surface Water may increase with climate change

- Last year Defra made £5 million available for “Early Actions” to manage surface water flooding
- We received 11 bids for funding from Oxfordshire
- Successful bidders will be notified in March





# Property Level Flood Resilience Grant

- ⇒ Single point of Contact (SPOC), Partnership work with Local Authorities
- ⇒ £5.5 Million grant scheme
- ⇒ Local authority apply on behalf of properties that meet the criteria...
- ⇒ ...and will be able to provide properties with surveys and a contribution to the cost.
- ⇒ Oxfordshire received awards for three applications in year one of the Scheme
- ⇒ Oxfordshire has submitted 17 applications for second round of the Grants





# Strategic Flood Risk Assessments

- ➔ SFRAs have been prepared for all Oxfordshire District Councils
- ➔ SFRAs define flood risk (including 100 year plus climate change flood event) across local planning authority boundaries



- ➔ We are currently working with Oxfordshire to prepare a county wide Minerals and Waste SFRA



Thank you, and questions?