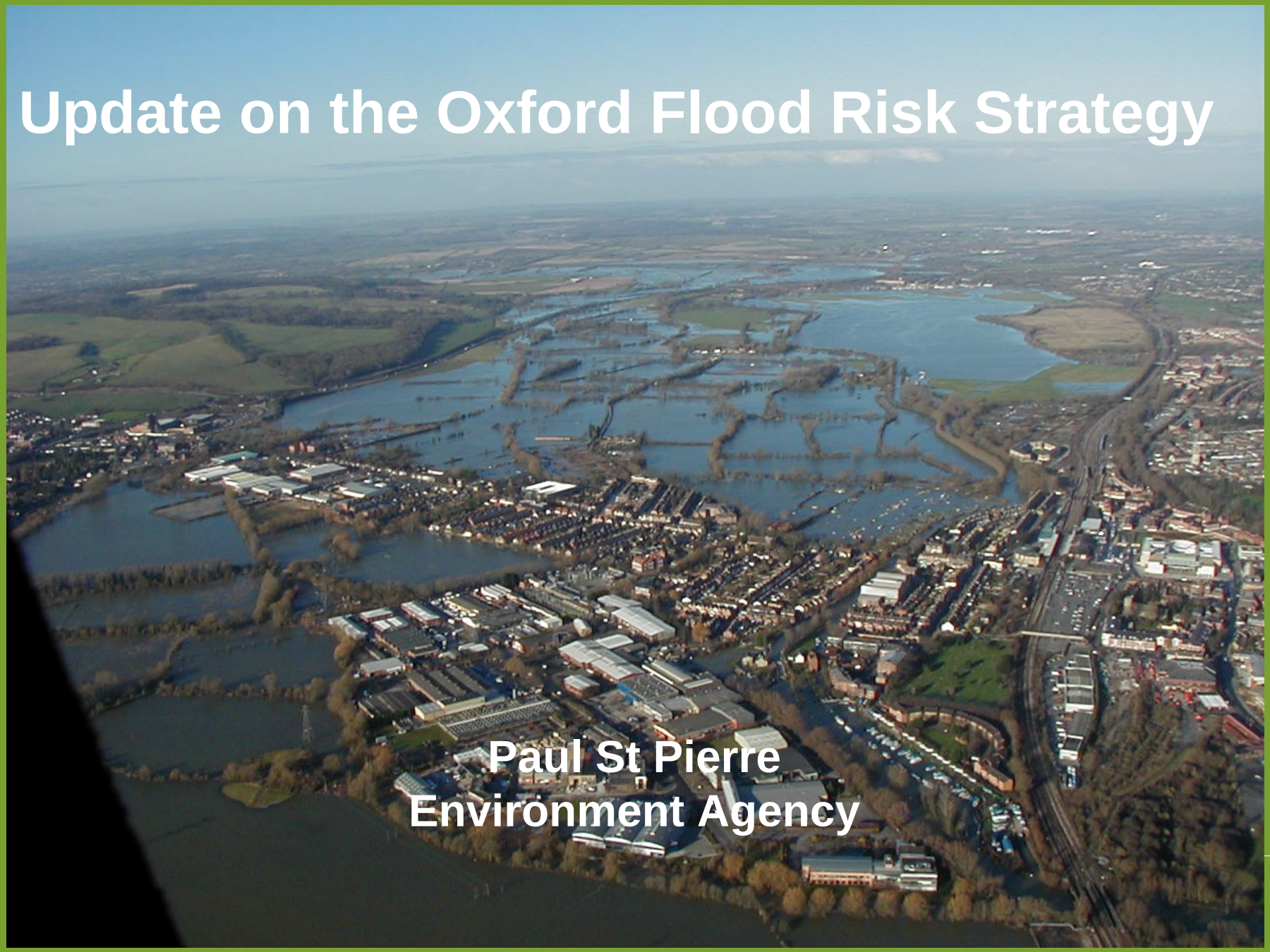
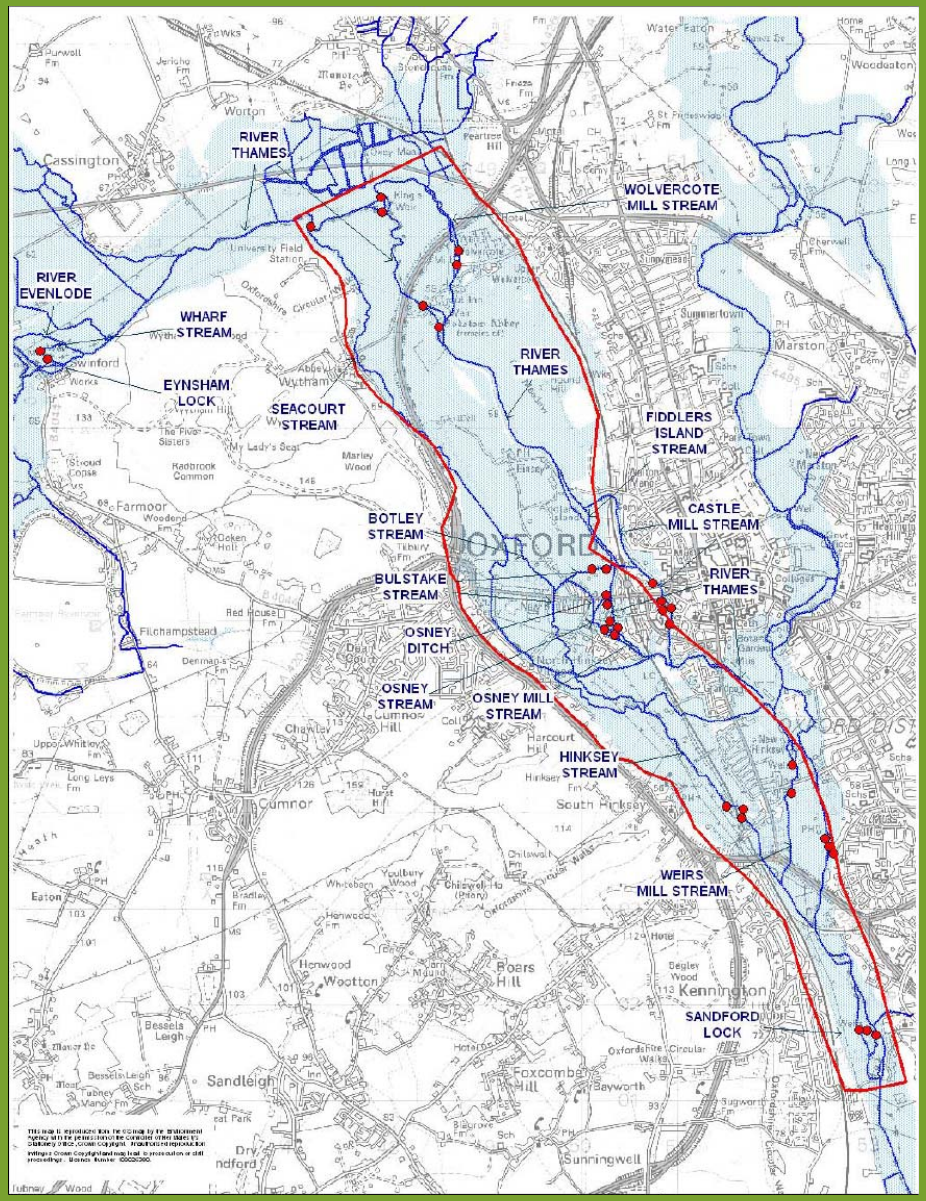
Update on the Oxford Flood Risk Strategy



Paul St Pierre
Environment Agency



Environment Agency

Issues within strategy area

- Total area: 35km^2
- 3600 properties at risk (3385 residential and 215 commercial)
- 12 designated wildlife areas (SACs and SSSIs and County wildlife sites)
- Main railway line from Oxford to London
- Major roads including Botley Road
- 7 schools and 2 hospitals
- Archaeological and heritage sites
- Recreational and agricultural land

Strategy history

- History of flooding in Oxford BUT 2000,2003,2007 recent large events
- Work on the current strategy began in 2004/05
  - Identification of habitats and species at risk
  - Monitoring network on protected sites – SSSI/SAC
- Final strategy including the Strategic Environmental Assessment circulated for consultation in 2009

Options identified

- **1. Do nothing**
- **2. Do minimum** – current level of maintenance. No significant capital investment
- **3. Do minimum – sustain** Current level of protection including replacement of existing structures when necessary
- **4. Enhanced maintenance**
- **5. Small western conveyance** – same as 3 plus small new channel to west and south west and or increasing size of existing watercourses. 18-20 cumecs
- **6. Medium western conveyance -** 35-40 cumecs

Options

- **7. Large western conveyance** – 55-60 cumecs
- **8. Small western conveyance and flood storage area (FSA)**
- **9. Medium western conveyance and FSA (climate change)**

- **All above options appraised to see if technically feasible, economically viable and environmentally acceptable**

- **Option 9 was preferred option BUT economic re-assessment – changed conveyance channel to a climate change response**

Flood Storage Area

- Climate change response (70-100 years)
- Upstream of confluence of R Windrush and Thames
- Ecological concerns – BBOWT/NE – Chimney meadows/Oxford Meadows – hydrology, flooding, sediment deposition/nutrients
- Chimney Meadows – Flood duration not increased but frequency
- Agreement that the features of the SSSI would not be allowed to be impacted by scheme
- Monitoring – Part of the strategy - not immediately.

Implementation plan

- 0-5 years
  - Short term measures phase 1 and 2 – desilting/culverts/demount-able defences
  - Raised flood defences – wolvercote
  - Flood resilience measures
  - Multi-agency flood plan
  - Improved watercourse maintenance (with biodiversity scrutiny)
- 5-70 years (climate change options)
  - Western conveyance – widen some existing channels and construct new ones
  - FSA
  - Depends on realisation of climate change predictions
  - Habitat creation and enhancement
  - No impact on protected sites – requirement for further monitoring revisited regularly through strategy life