RIVERS AS GREEN SPACES IN URBAN ENVIRONMENTS

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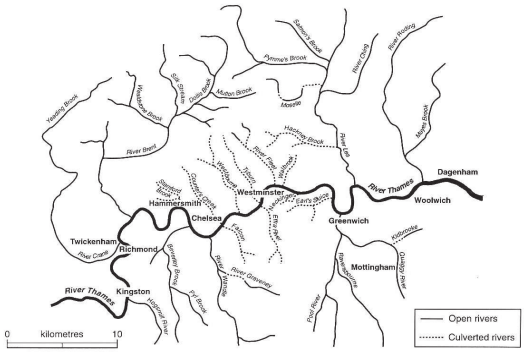
1. "LOST RIVERS OF LONDON"

- Rivers culverted, lined or enlarged
- Fauna and flora affected by poor water quality
- Loss of riparian vegetation
- Erosion of banks, leading to bank protection
- Negative views of watercourses



2. IMPORTANCE OF RIVER CORRIDORS

- Provide natural refuges and corridors for wildlife
- Improve flood storage capacity
- Connect communities
- Pubic open space provides an escape (healthy environment)
- Important for education

Drivers for change

- Last 10 years+:-
  - Land use planning
  - Legal consents and licences
  - The Water Framework Directive
  - The Habitats Directive
  - Miscellaneous policies
  - Available funding

River Channel Types in the Wandle Catchment

Figure 1. London Plan 2004: Blue Ribbon Network

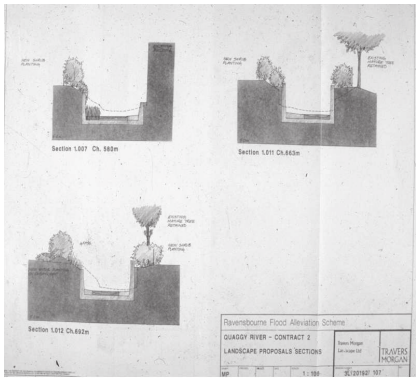
- Unique policy

  - Resist development if loss of biodiversity
  - Design new waterside developments to increase habitats
  - Take opportunities to open culverts and naturalise river channels

3. CONTINUUM: EXAMPLE 1

- **River Quaggy (south London); Early 1990s**

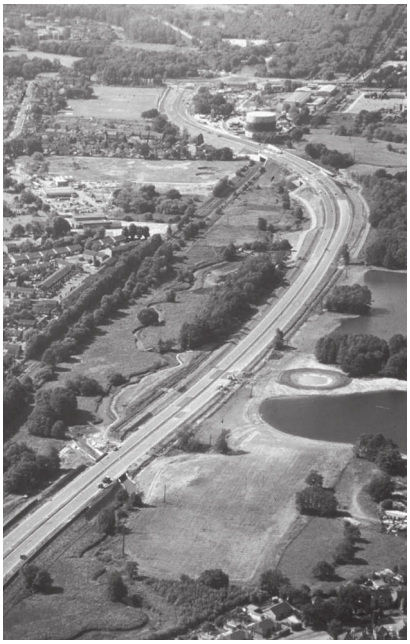
  - Enhancement opportunities
  - Options evaluation
  - Public involvement
  - Detailed appraisal issues *eg groundwater*
  - Other examples: 1950's football pitches in parks



4. CONTINUUM: EXAMPLE 2

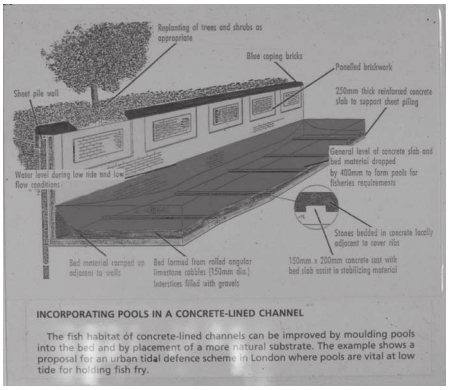
- **River Blackwater, Surrey and Hampshire; Early 1990's**

  - Developers meet cost
  - Opportunity for re-naturalisation
  - Two stage channel
  - Wildlife corridors (in channel and on adjacent floodplains)



5. CONTINUUM: EXAMPLE 3

- **River Crane, Twickenham, London; Early 1990's**
  - Flood control driven
  - Constrained river corridor
  - Involvement of riparian owners in bankside treatment
  - Unique '*in channel'* corridor
  - Notion of *Creation*



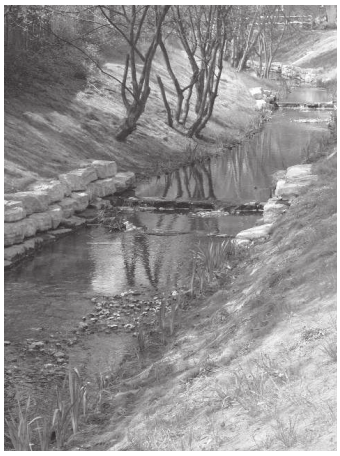
6. CONTINUUM: EXAMPLE 4

- **Airport; Built 2003/04**
  - Purpose of 'Twin Rivers'
  - £40 million from developer
  - Alternative options
  - Issues with chosen option
  - Sustainable development?
- **Where are the boundaries?**

– Deculverting/ artificial watercourses; poor water quality

7. SOME CONSTRAINTS

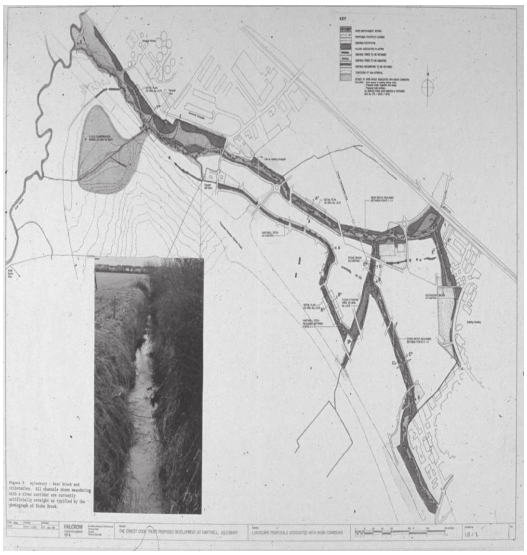
- Lack of space leading to 'harder solutions'
- '*Creation*' rather than re-naturalisation (eg low-flow width; substrate)
- Water quality remains poor; reed bed treatment
- Vandalism/ arson of 'softer' solutions causes problems
- Need for adaptive management



8. THE OPPORTUNITIES

- **Coldharbour Farm – a new development; Late 1980's**

  – Major re-design of 7 kilometres of watercourse
  – Enhanced house prices



- **Tilmore Brook, Hampshire; Built 2003**

  – Highly valued by the public
  – New issues – acoustics and crayfish

9. OVERALL CONCLUSIONS

- Aesthetics and other social issues as well as ecological criteria
- A '*Horse for a course'* – there is a continuum of approaches
- Processes

  – Sustainable development involves negotiation
  – Consultation *ie* involve local people
  – Adaptive Management is needed to deal with uncertainties