# water; how can we live with it?



Chryse Tinsley
Landscape Planner
Planning, Development and Transportation



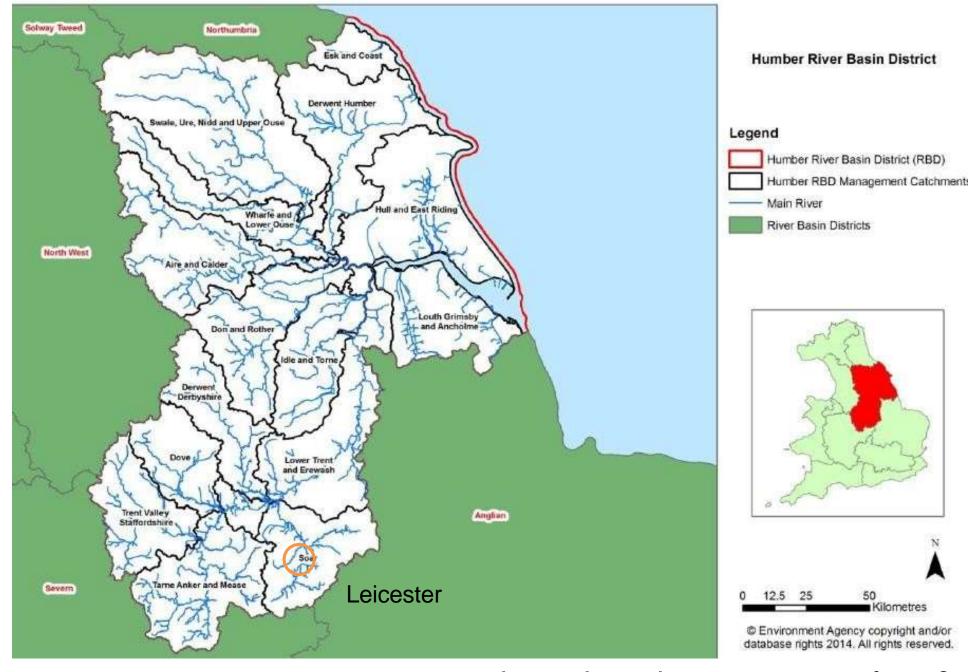
Bio blitz 2016



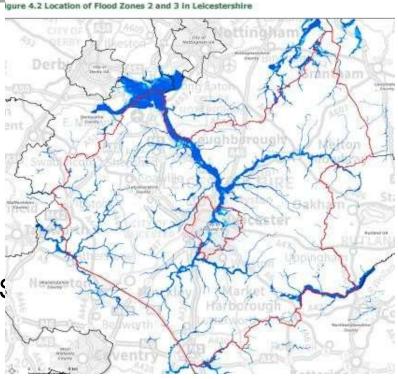


"The rainfall last night was very heavy. The flash flooding was one of the worse ones I have witnessed for a very long time."

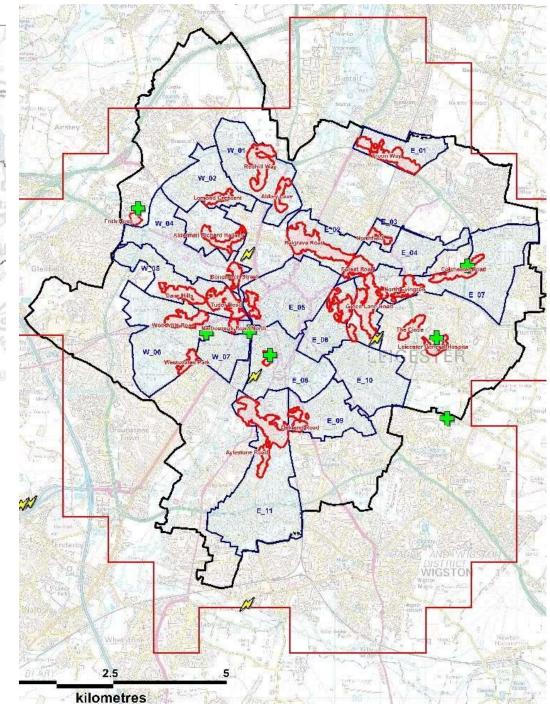




where does the water come from?



Critical drainage areas and flooding hotpots















What happens to water?







what happens to our open spaces?













water can be good





Hamilton



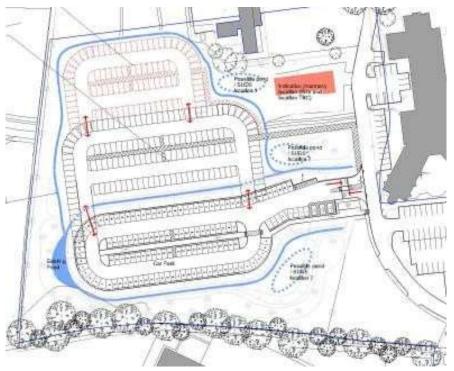












Glenfield hospital; a SuDS scheme; now phase 2...



Asda supermarket

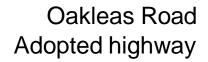
**Surprising water** 







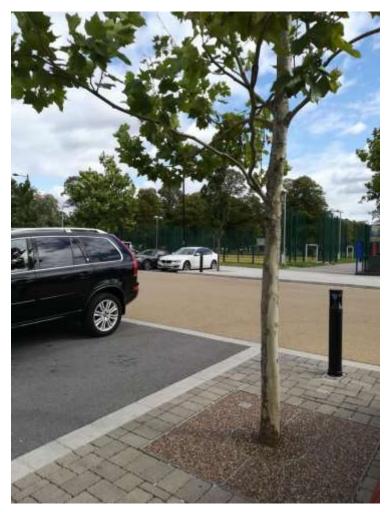




Trail blazing water







Centenary Square

Owning the process water



April 2018

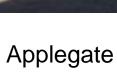




new wetland projects









reuse of existing cobbles; set in concrete to act as edgerestraint

cobbes at angle to al;low water to enter resin bound gravel areas

\_30mm resin bound surfacing

150mm free draining stone; 20-30mm nominal size (not Type 1)

-terram membrane

1170mm tree soil - mix 25/75 structural/topsoil gravel wrapped in terram 1000(acting as French drain)

sliva (or similar) tree cells

200mm free draining stone 30-40mm city centre SuDS

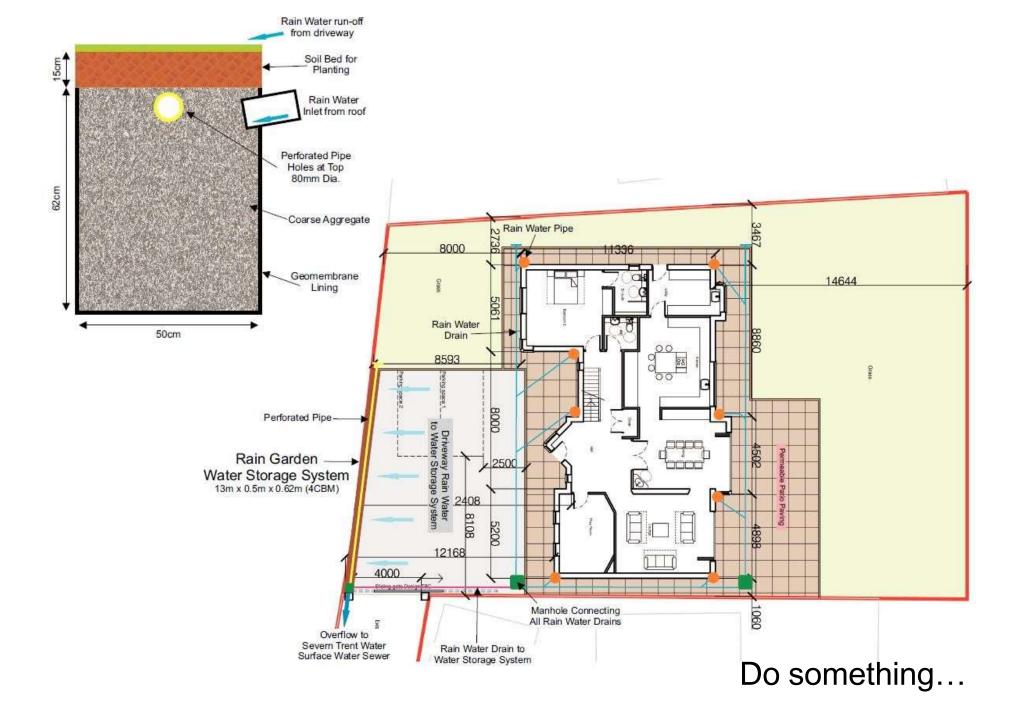






is this the best way to manage water in cities?







Making a difference...







Involvement







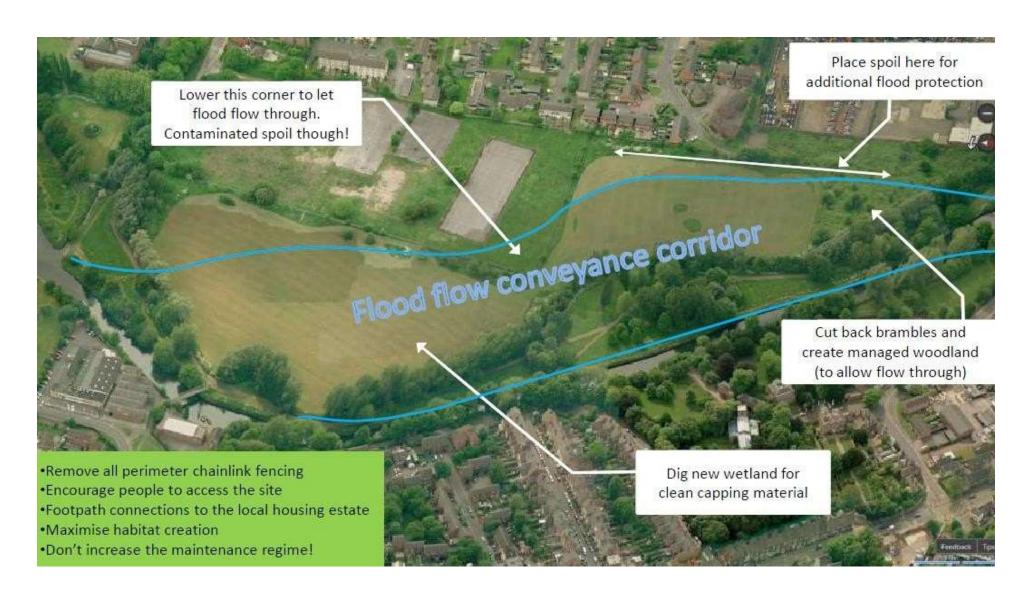
Mill Lane
De Montfort University
Pretty water







Mill Lane
Photos Tom Jonnson June 2018



Saving money
Very good water





PhotosLouise Davis



.. from a local resident who wrote into the council on June 16th 2017

'Have just discovered Ellis Meadows ... and wanted to say how wonderful it is. The mass of white daisies were beautiful and the large ponds lovely. I realise from the signboards that it is in essence part of a flood relief scheme along the River Soar, but it really is a lovely natural area'

Leicester City local development framework

## **CORE STRATEGY**

adopted July 2014





SS 250

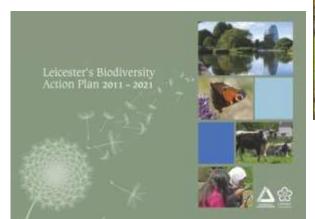




Climate Change Adopted January 2011

Supplementary Planning Decument

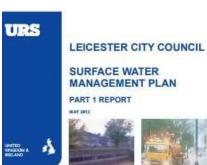






Leicester City Council Preliminary Flood Risk Assessment

























Leicester City Council Sustainable Drainage Systems (SuDS) Technical Guide

#### Section 1.Overall aim

This guidance explains how to achieve planning and other approvals for your development with respect to the provision of sustainable drainage.

- Information is provided as a series of simple steps.
- Working through these steps should ensure a greater likelihood of an easier and faster route through the planning approvals process with regard to sustainable drainage
- It is a unified Council response considered by all services with a responsibility for sustainable drainage.
- Provide clarification on what LCC will adopt or not adopt.

Preparation
Site analysis, context, topography,
drainage...



LCC website, surface water management plan, EA & STW info etc



Initial proposal showing SuDS integrated with development; proposals for longer term maintenance. Engagment with STW and S104 conversations expected



Check against SuDS standards, relationship to site and to multi functionality



Final design, including test results, calculations...



Assess, approve, write conditions



Detailed work to discharge conditions



Discharge conditions



Negotiate re any adoption Inspection Request as built drawings



Adoption / handover commuted sums As built drawings

Developer

## LCC/Other agencies

### Section 6. Swales and storage areas





12



these are the houses at risk from flooding

these are the children from those houses



get the next generation involved