

Working together to manage urban flooding

Encouraging the uptake of designing for exceedance

Paul Shaffer, CIRIA & Dr Chris Digman, MWH

www.ciria.org

www.susdrain.org

Overview

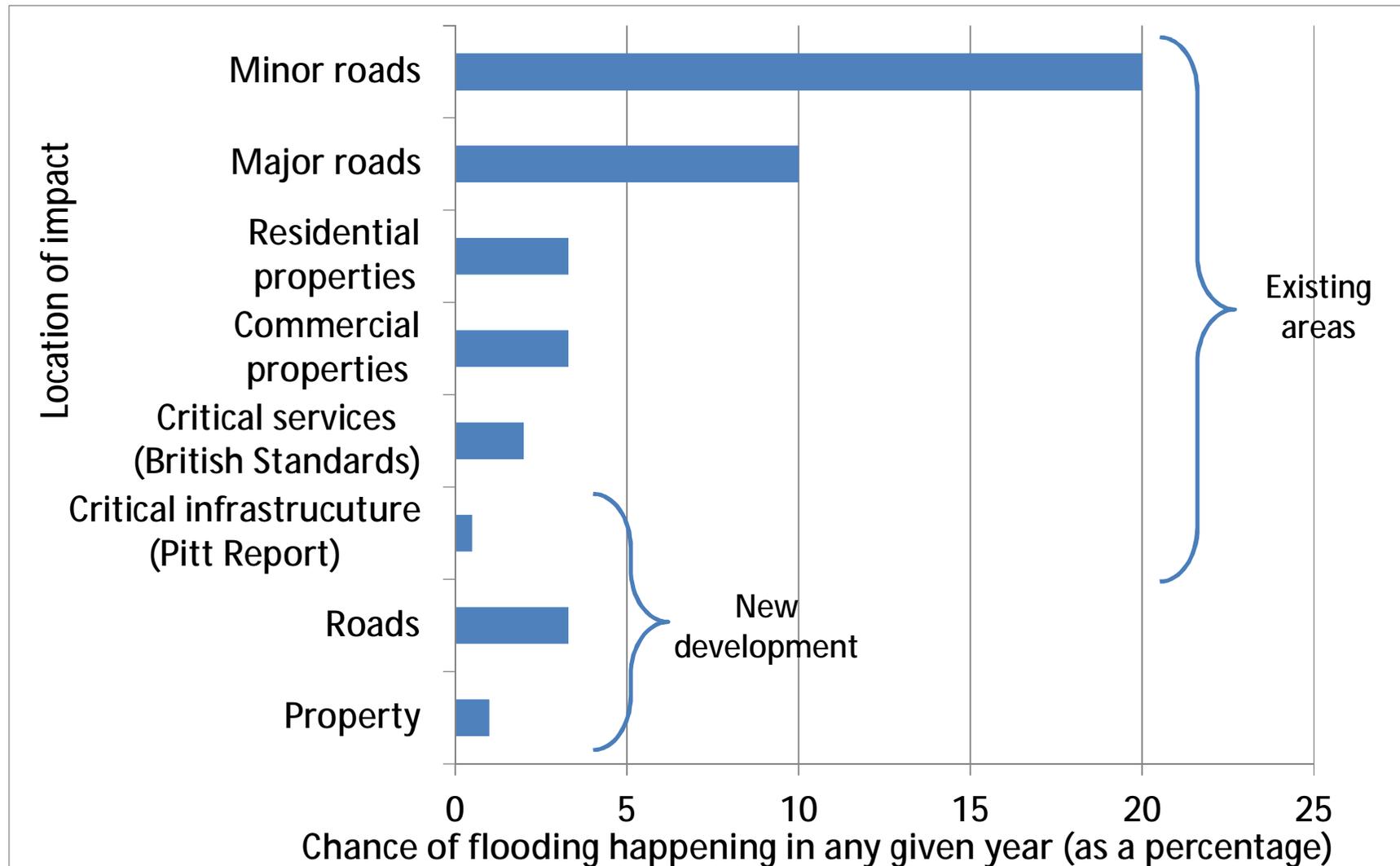


- Our drainage approach and what this means
- Making a choice to manage 'forgotten' rainfall
- How we can make our areas more resilient
- Examples of managing exceedance
- What makes a success
- Sharing our learning
- Final thoughts...

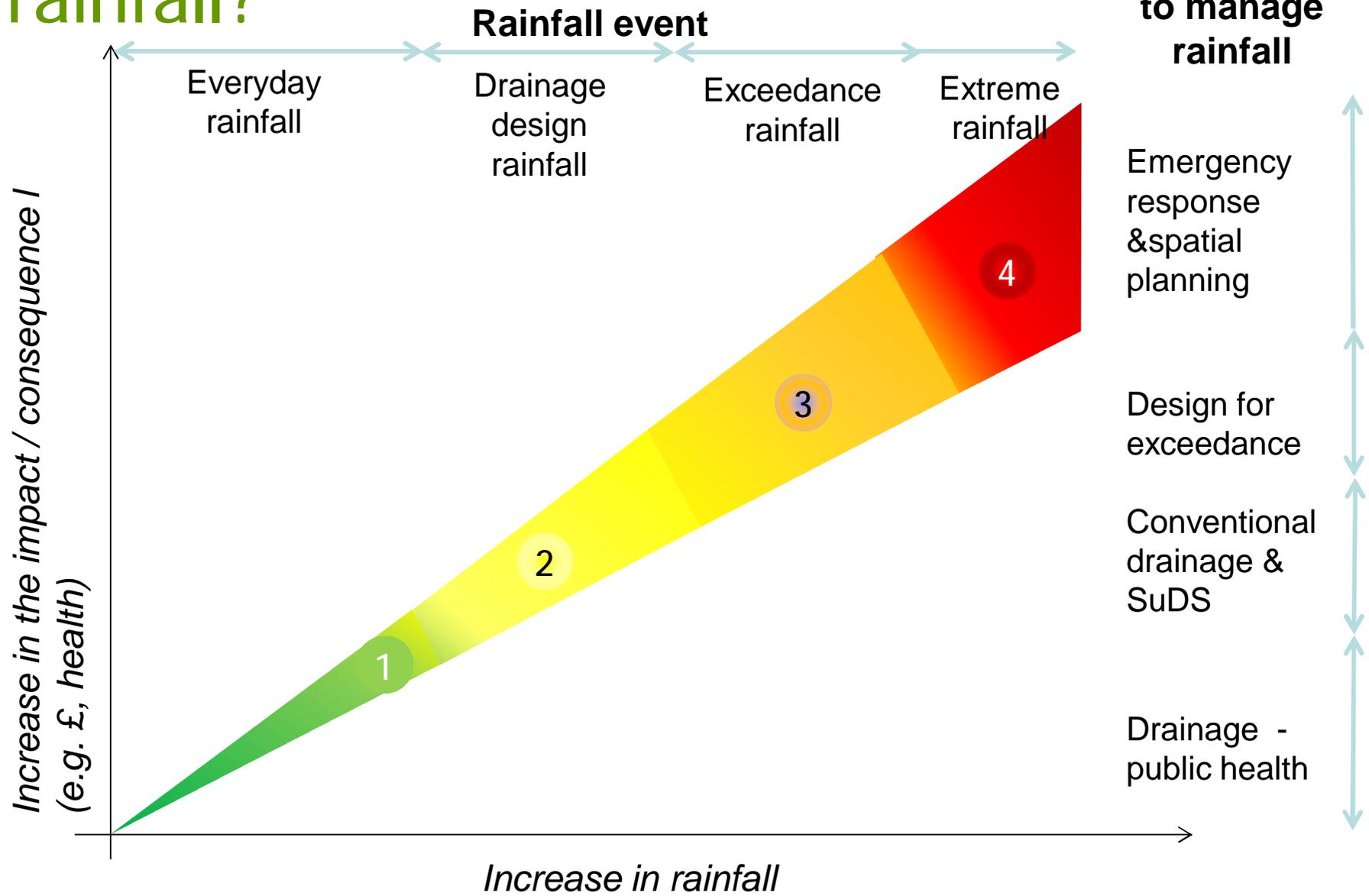
www.ciria.org

www.susdrain.org

What do standard do we design drainage to?



What about the 'forgotten' rainfall?



What happens when the drainage capacity is exceeded?



- So what should we do?

We have choices:



- Builder bigger ? – unsustainable and unaffordable
- Let it happen ? – accept and manage the consequence of the impact
- Make our spaces more resilient - design for exceedance

www.ciria.org

www.susdrain.org

Encouraging the uptake of designing for exceedance

- Provide information to support practitioners and decision makers
- Learning lessons and critical success factors
- Identifying and summarising case studies
- Summarising what we need to do

www.ciria.org
www.susdrain.org



So how might we manage exceedance?



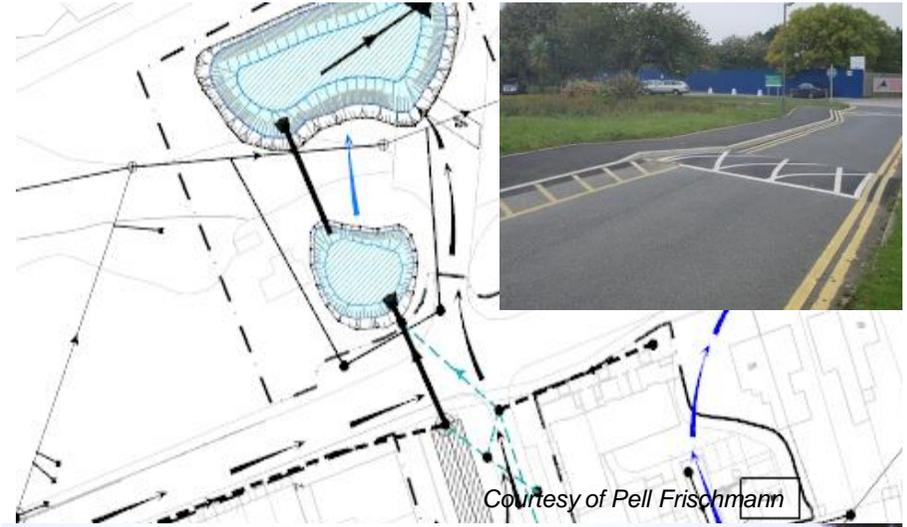
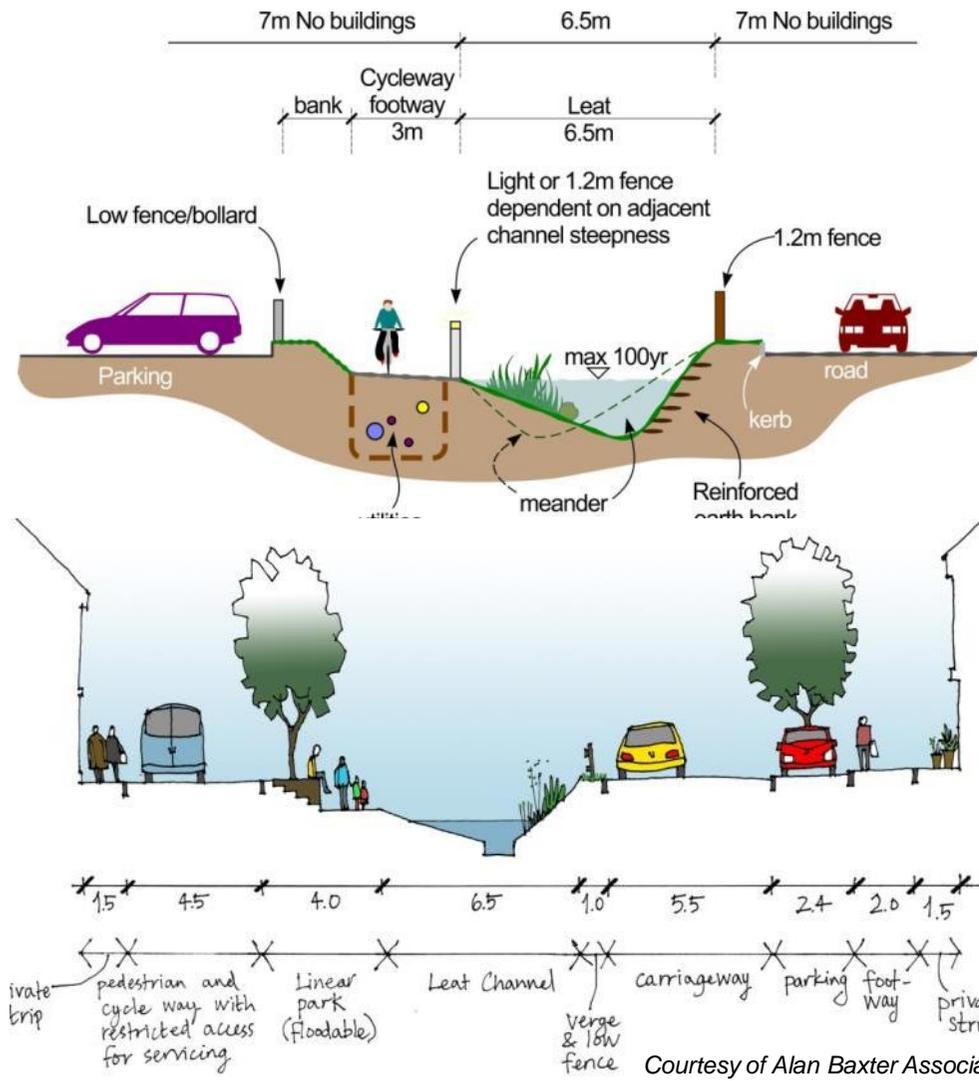
Examples of managing exceedance - Witney



Examples of managing exceedance - Aston



Examples of managing exceedance – Camborne Poole Redruth



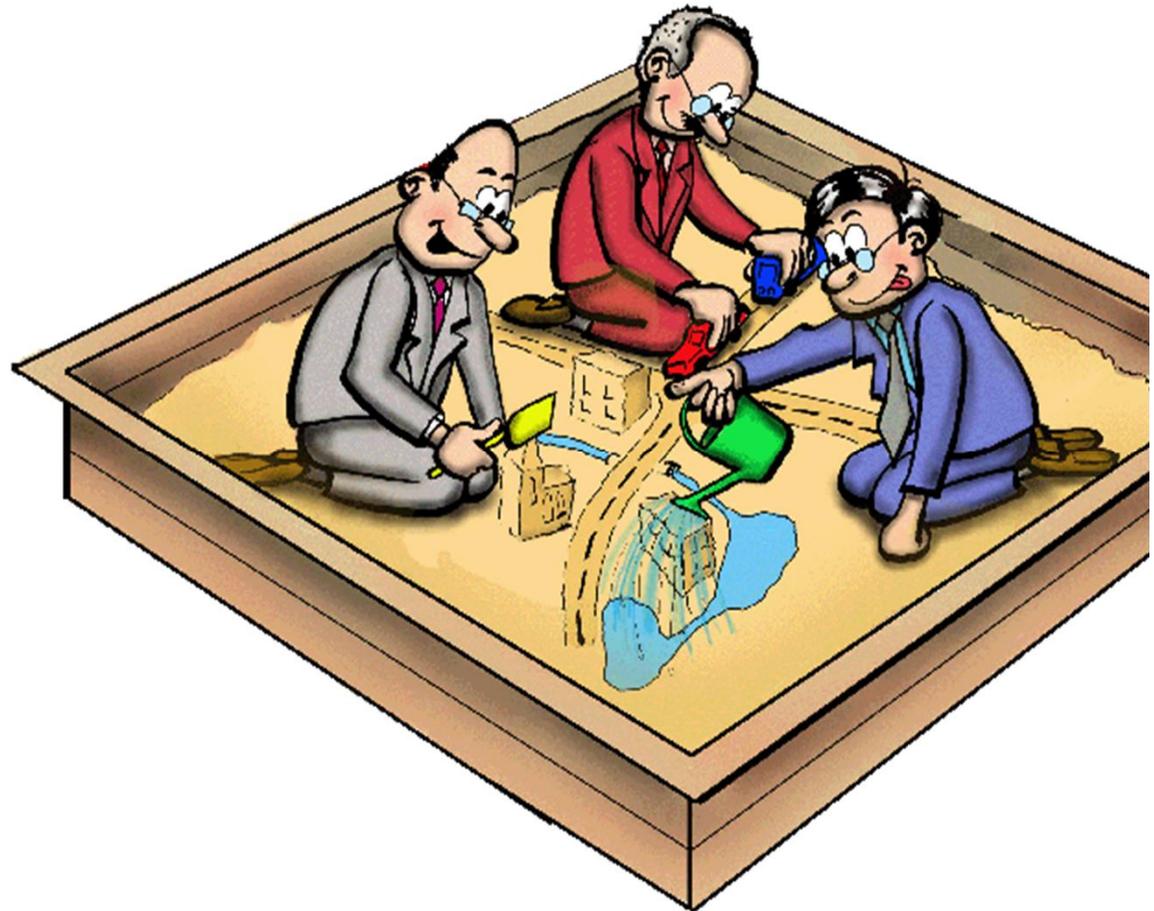
What makes a success – working together



1. Disciplines

2. Organisations

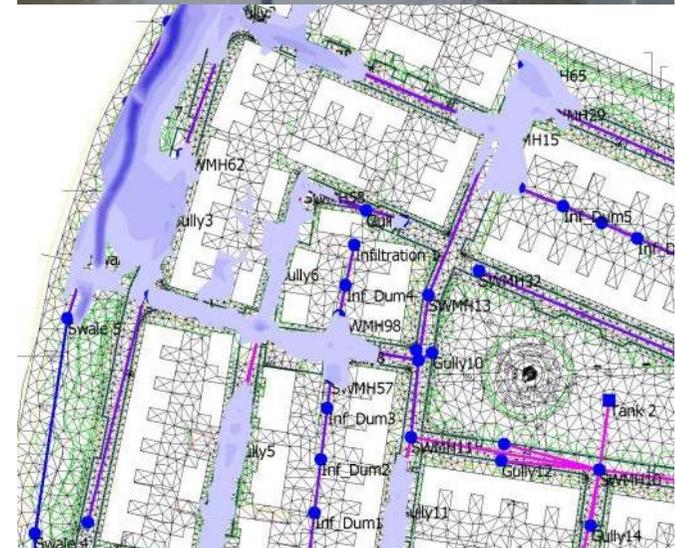
3. Communities



What makes a success – attention to detail



1. Understand where water goes
2. Use appropriate survey and modelling techniques
3. Design the measures and locations to be resilient and safe



What makes a success – creating & using spaces & places



1. Create the space



2. Shared space



3. Multi-functional

www.ciria.org
www.susdrain.org

Next steps to encourage this approach



- 30th April – Launch and debate at the Institution of Civil Engineers
- Information and resources
 - Summary report
 - Case studies
 - Lessons and success factors report
 - Literature review
- Susdrain - website

www.ciria.org

www.susdrain.org

Final thoughts



- Know where exceedance occurs and where it moves over the surface.
- Design for exceedance using a range of measures making our spaces and places more resilient.
- Create multi-functional infrastructure and shared space.
- Work together to manage flooding.

www.ciria.org

www.susdrain.org

A photograph of ancient Roman ruins. In the foreground, there is a cobblestone path. To the right, there are several large, cylindrical stone columns. In the background, there are more ruins and a group of people walking. The scene is brightly lit, suggesting a sunny day.

For more information contact:

- paul.shaffer@ciria.org

- suzanne.simmons@ciria.org.uk

- christopher.j.digman@mwhglobal.com

www.susdrain.org