

Flood and Coastal Risk Management in the Welland & Nene Catchment



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Overview

- ⇒ FWM Act 2010 → Roles and Responsibilities
- ⇒ Nature of Flood Risk in Northamptonshire & Northampton
- ⇒ Capital/Maintenance funding & Partnership Working
- ⇒ Growth – EA and NCC input to the planning system
- ⇒ Key partners and ways of working
- ⇒ Incident Management
- ⇒ Section 19 Flood Investigations
- ⇒ Key sites

Flood and Water Management Act (2010)

- ⇒ The Act clarifies legal responsibilities for different forms of flooding
- ⇒ Creates the Concept of a Lead Local Flood Authority (County/Unitary)
- ⇒ Partnership working is a key theme

Roles and Responsibilities

Environment Agency	Lead Local Flood Authority	Water Company
Flooding from “main river” watercourses (e.g. The Nene) and overview of all flood risks	Flooding from surface runoff, groundwater, and ordinary watercourses	Flooding from Water pipe leaks, overloaded sewers.

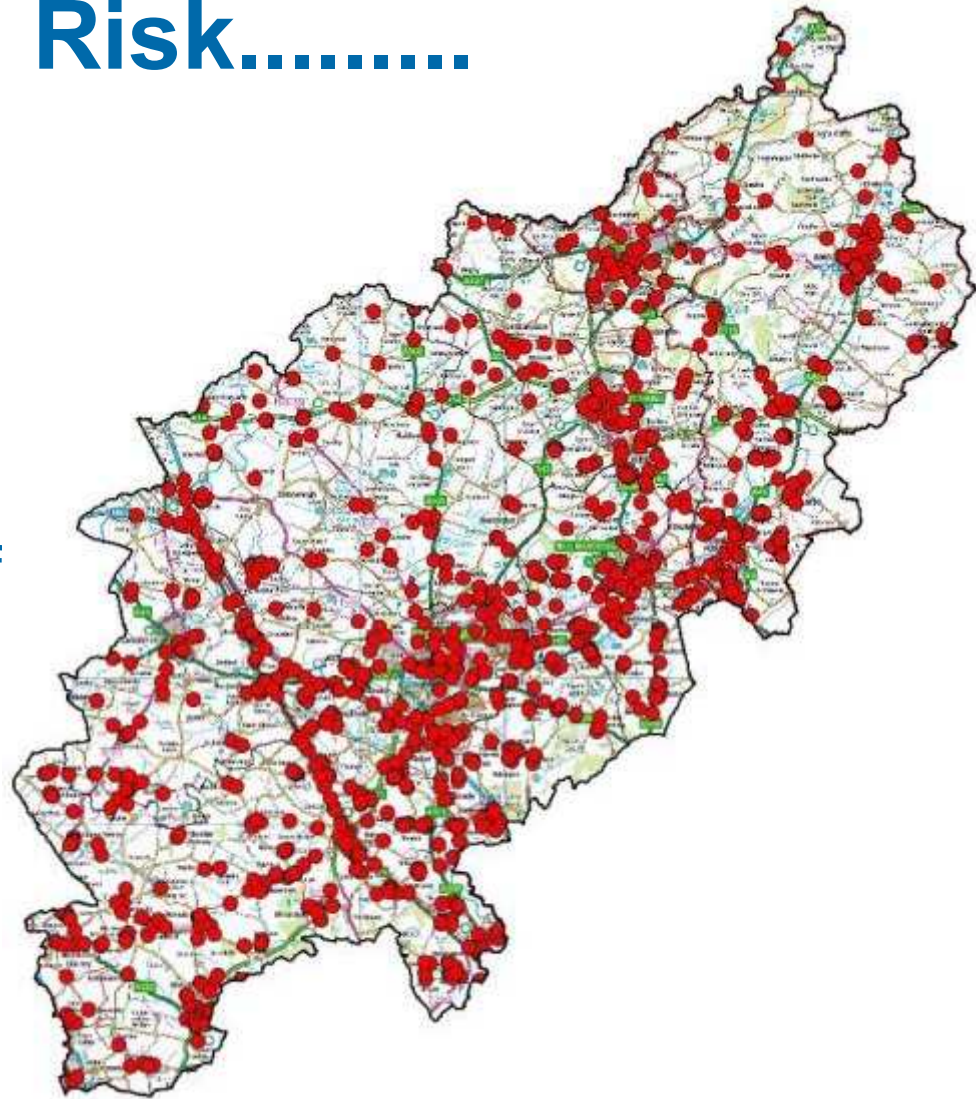
Nature of Flood Risk Northamptonshire

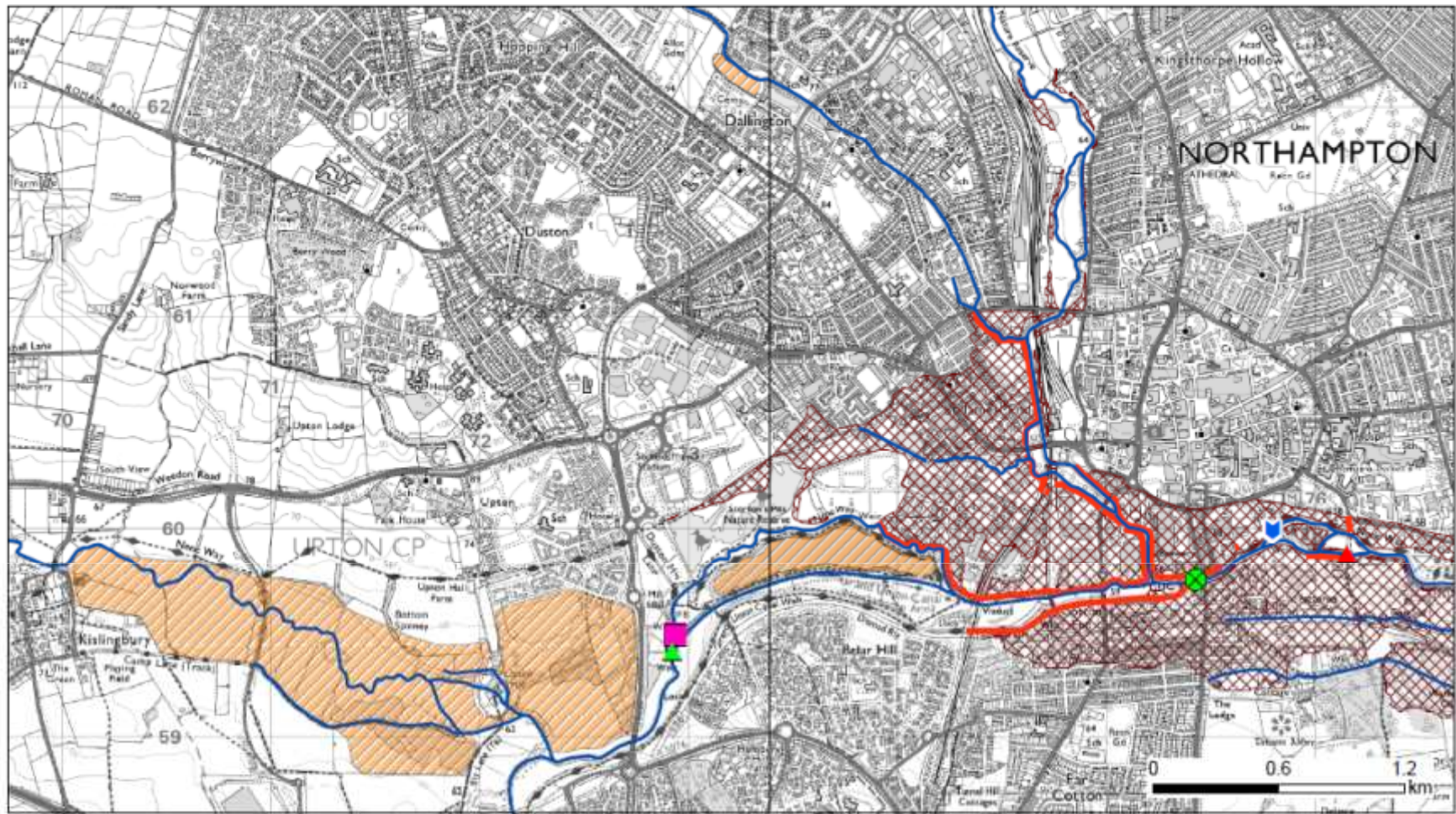
- ⇒ Extremely varied and widespread risk
- ⇒ Significantly affected in the Easter 1998 floods
- ⇒ Sources of recent flooding:
 - Main River
 - Ordinary Watercourses
 - Surface Water
 - Agricultural Runoff
 - Groundwater



The Widespread Risk.....

- ⇒ Collated from a wide variety of sources
- ⇒ Data capture from Jan 2011 to current day
- ⇒ Includes a great deal of information within the system





Northampton defences and flood storage

Legend

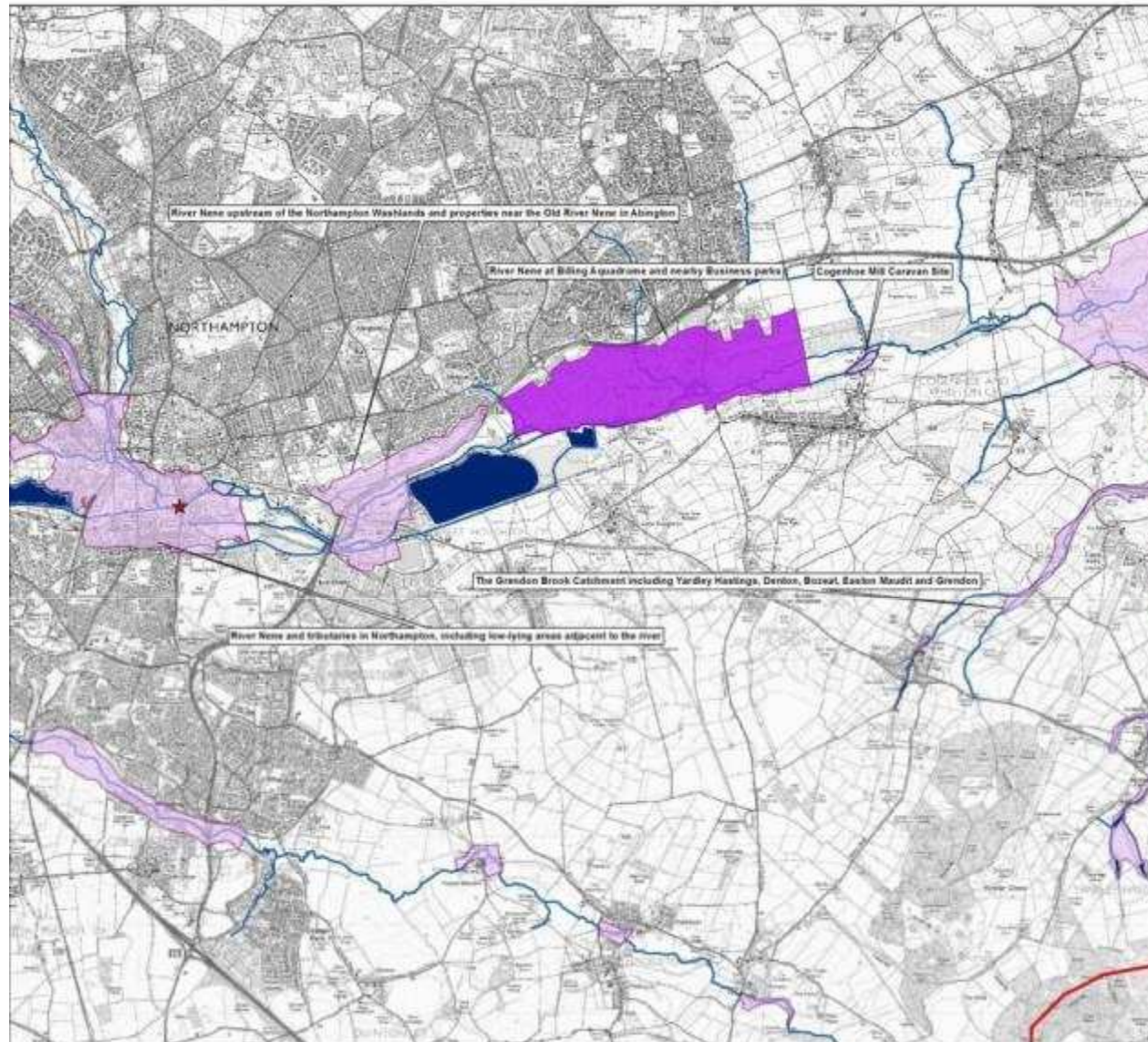
- rivers_main_010k
- Raised defences
- Northampton_Areas_benitfing
- Flood storage areas
- Structures**
- ▲ Duston Tilling gate
- Duston Inlet weir
- ↔ Lock
- ▲ Nunn Mills
- South Bridge Gauging Station



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Flood Warning Areas around Billing



Legend

-  Flood Warning Areas
-  Flood Storage Areas
-  Billing Aquadrome FWA
-  Southbridge GS
-  Main rivers
-  Nene catchment



Map created January 2013

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Northampton flood zones



Capital/Maintenance funding & Partnership working

- ⇒ Medium Term Plan – 6 year - capital investment
- ⇒ Working with Lead Local Flood Authorities, Local Authorities, Internal Drainage Boards, other partners & 'Communities at Risk'
- ⇒ Operations
 - ⇒ Field teams based in Kettering & Spalding Depots
 - ⇒ Incident Management – 24/7 management of rivers
- ⇒ Maintenance focus → Risk based, Urban focus
 - ⇒ Example: Northampton Dredging

Northampton - Dredging



Growth

- ➔ 'Northamptonshire is the largest single growth area outside London and has one of the fastest growing populations in England with a current population of about 700,000.' NCC's '10 point Plan' March 2013
- ➔ Typically large urban extensions e.g. Upton, St Crispins, Harleston Firs & Dallington Heath
- ➔ Surface Water transition to LLFAs & EA support

Key partners

- ⇒ LLFAs = NCC, PCC, Rutland CC

- ⇒ Other RMAs
 - ⇒ Local Authorities - NBC
 - ⇒ Internal Drainage Boards = NLD, W&D, South Holland
 - ⇒ Anglian Water Services

- ⇒ Local Resilience Forum (LRF)
 - ⇒ Multi-Agency Flood Plan
 - ⇒ Multi-Agency response to future flooding is critical

- ⇒ MPs – good working relationship

Northamptonshire Partnership Framework

Local Partners

- Regional flood and coastal committees
- Public Service Board
- NCC Cabinet and Scrutiny
- Local Resilience Forum

Planning and Strategy

Strategic Flood Risk Management Board

Take Action

- Local Flood Risk Operational Group
- Project Management/ Task Groups

Incident Management

- ⇒ Operational work

- ⇒ Incident Management
 - ⇒ 24/7 monitoring and incident response capability
 - ⇒ Field teams capable of responding
 - ⇒ Exercise Nimbus – 5 November 2015 – cross boundary exercise with Cams and Beds

- ⇒ EA interaction with Lead Local Flood Authorities & other partners

Section 19 Flood Investigations

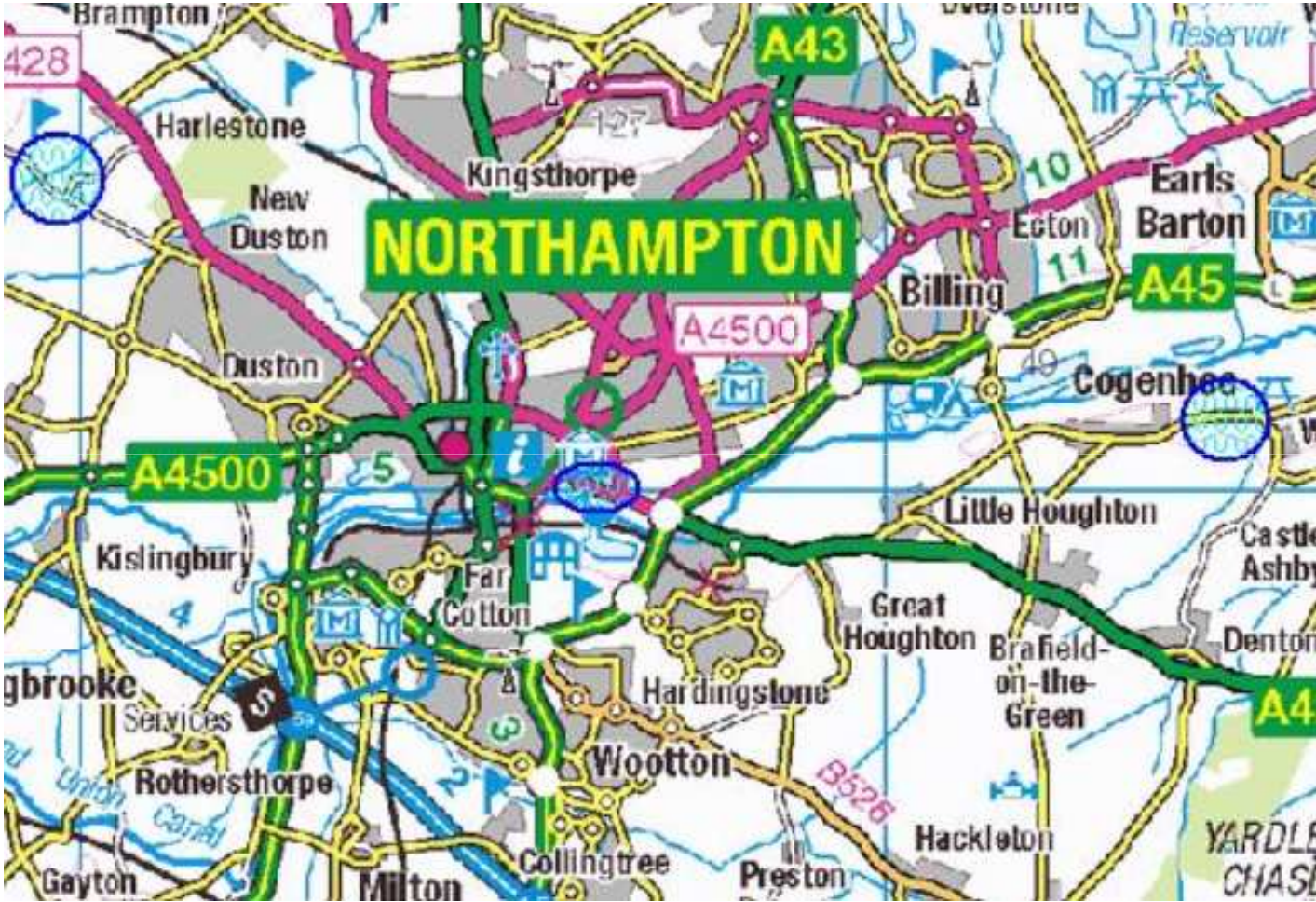
➔ Local Thresholds:

- Flooding has affected critical infrastructure for a period in excess of 3 hours from the onset of flooding
- Internal flooding of one property has been experienced on more than one occasion in the last 5 years
- Internal flooding of five properties in close proximity has been experienced during one single flood incident

➔ Desk-based investigations for those that do not meet the threshold

➔ No future amendments to the thresholds proposed

Flood Investigations Map – Flood Toolkit



Northants Flood Toolkit

www.floodtoolkit.com

The screenshot shows the Northamptonshire County Council Flood Toolkit website. At the top left is the council logo and the text "Northamptonshire County Council FloodToolkit". To the right is a search bar with the text "Your source of flood information" and a magnifying glass icon. Below the search bar is a navigation menu with links: Home, Am I at risk?, It's an emergency, Who is responsible?, How to guides, Planning & development, and Education. A prominent teal banner asks "In an emergency what should I do?" with a "LEARN MORE" button. The main content area is divided into two columns. The left column is titled "Flood Prevention" and contains four icons: a house for "HOMEOWNER", a person at a desk for "BUSINESS", a tree for "LANDOWNER", and a group of people for "COMMUNITY". The right column is titled "Are you at risk?" and includes the text "Landowner, Business, Homeowner or Community? Find out now if you are at risk of flooding by exploring our Flood Risk Map..." and a "FLOOD RISK MAP" button. Below these are three image-based sections: "PLANNING & DEVELOPMENT" with an image of a drainage grate, "EDUCATION" with an image of a child in a yellow raincoat, and "LOCAL WEATHER WARNINGS" with an image of red rain boots. The footer contains a "Glossary" link, a "Site map" link, "Website feedback", "Privacy Policy", "Terms and conditions", and "Accessibility" links. There is also a social media-style update from "sullivan @ CIRA" dated "1 day ago" about a new "river-friendly drainage" system. The footer also features the Northamptonshire County Council logo and the text "Supported by:" followed by the logo for "Department for Environment, Food & Rural Affairs".



Northampton Washlands

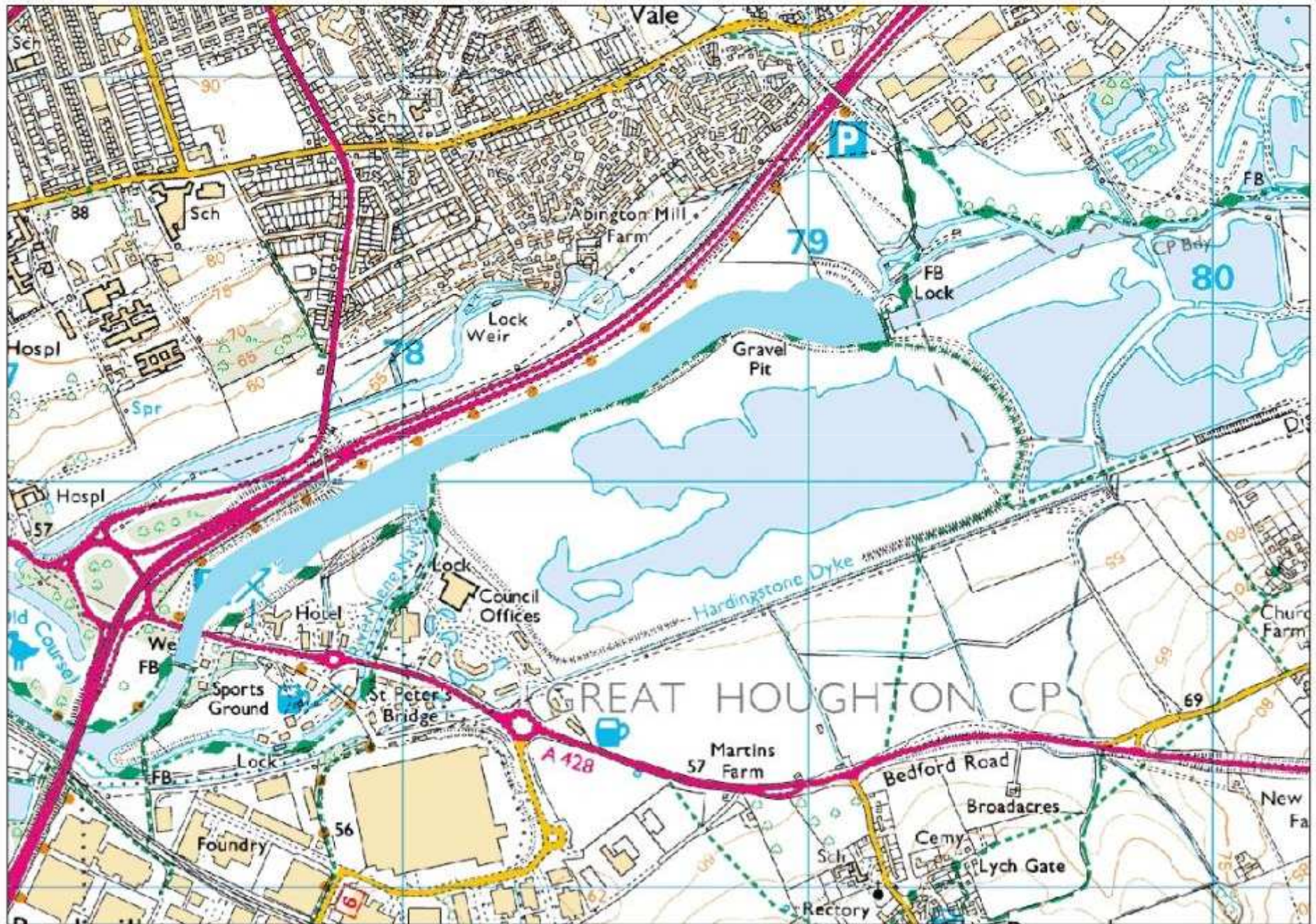
- ➔ Large FSR built in 1980s to manage SW runoff from Brackmills Industrial Estate
- ➔ Enables downstream river levels to be controlled - up to a point...
- ➔ Often misunderstood...

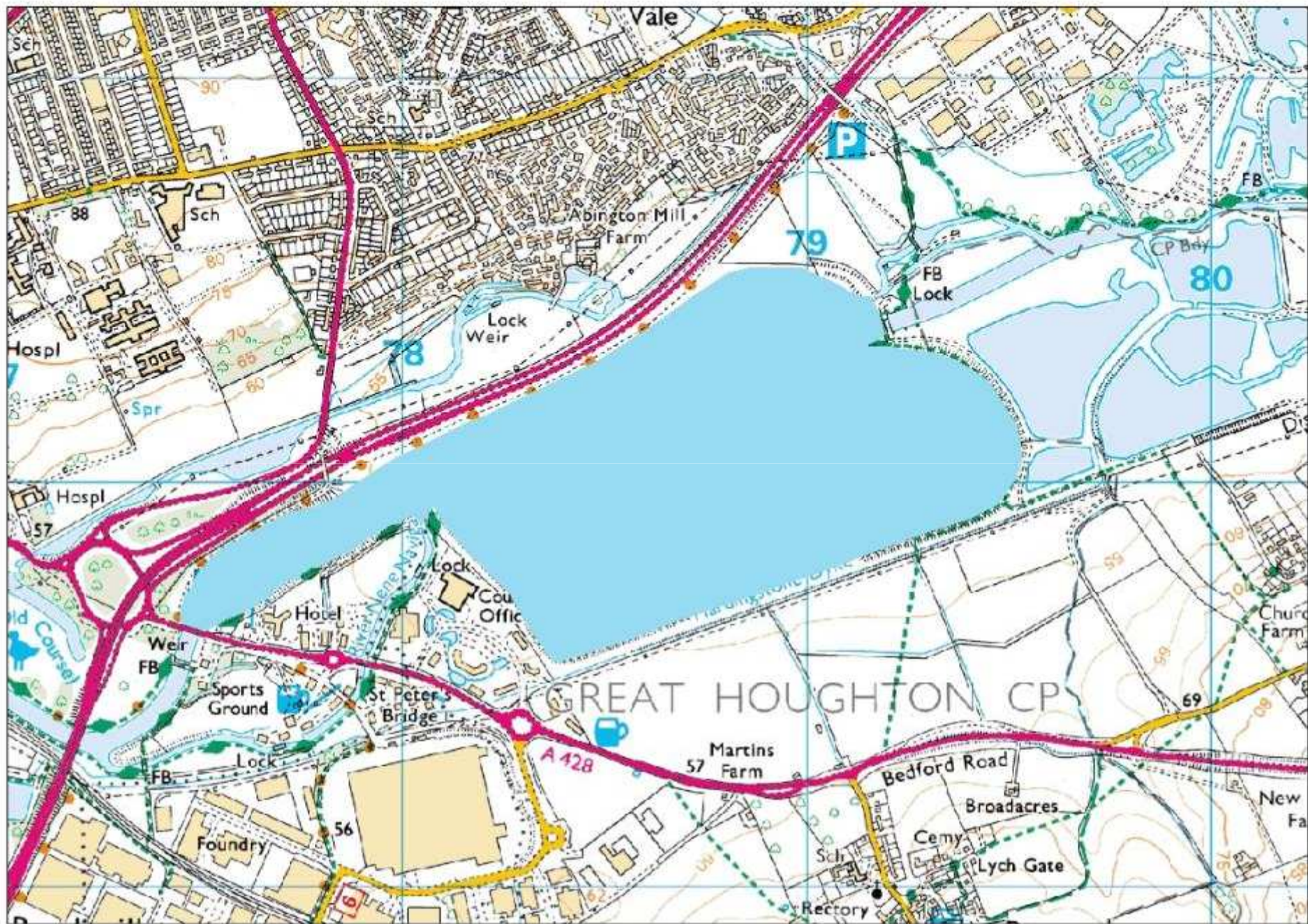
Easter 1998

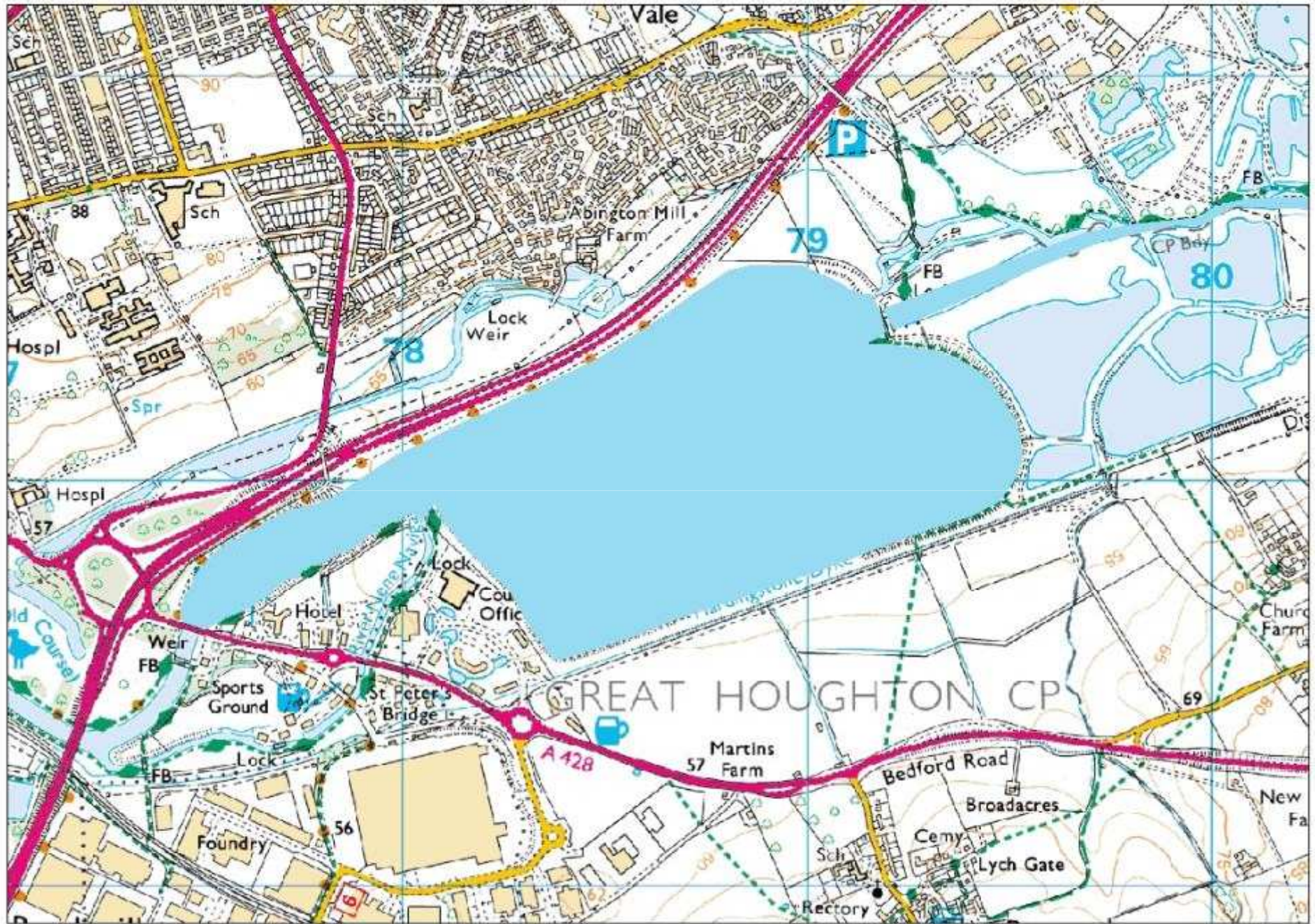


Northampton Washlands and Billing Aquadrome









Operation – View downstream



2012 Flood History

⇒ Flood Warnings Issued:

⇒ Billing Aquadrome: 3 events, 21 days

- 30th April – 3rd May
- 22nd Nov – 29th Nov
- 21st Dec – 29th Dec

⇒ Cogenhoe Mill Caravan Park: 7 events, 41 days

- 30th April – 3rd May
- 14th July – 17th July
- 1st Nov – 2nd Nov
- 4th Nov – 7th Nov
- 21st Nov – 29th Nov
- 14th Dec – 16th Dec
- 20th Dec – 1st Jan

Aerial View Billing Aquadrome: 23 November 2012



Billings Aquadrome: 22 November 2012



Any questions?

