

IN-PERSON EVENTS | Involving. Informing. Inspiring

CIWEM Urban Drainage Group Annual Conference 2022

8 – 10 November 2022

Hilton Birmingham Metropole

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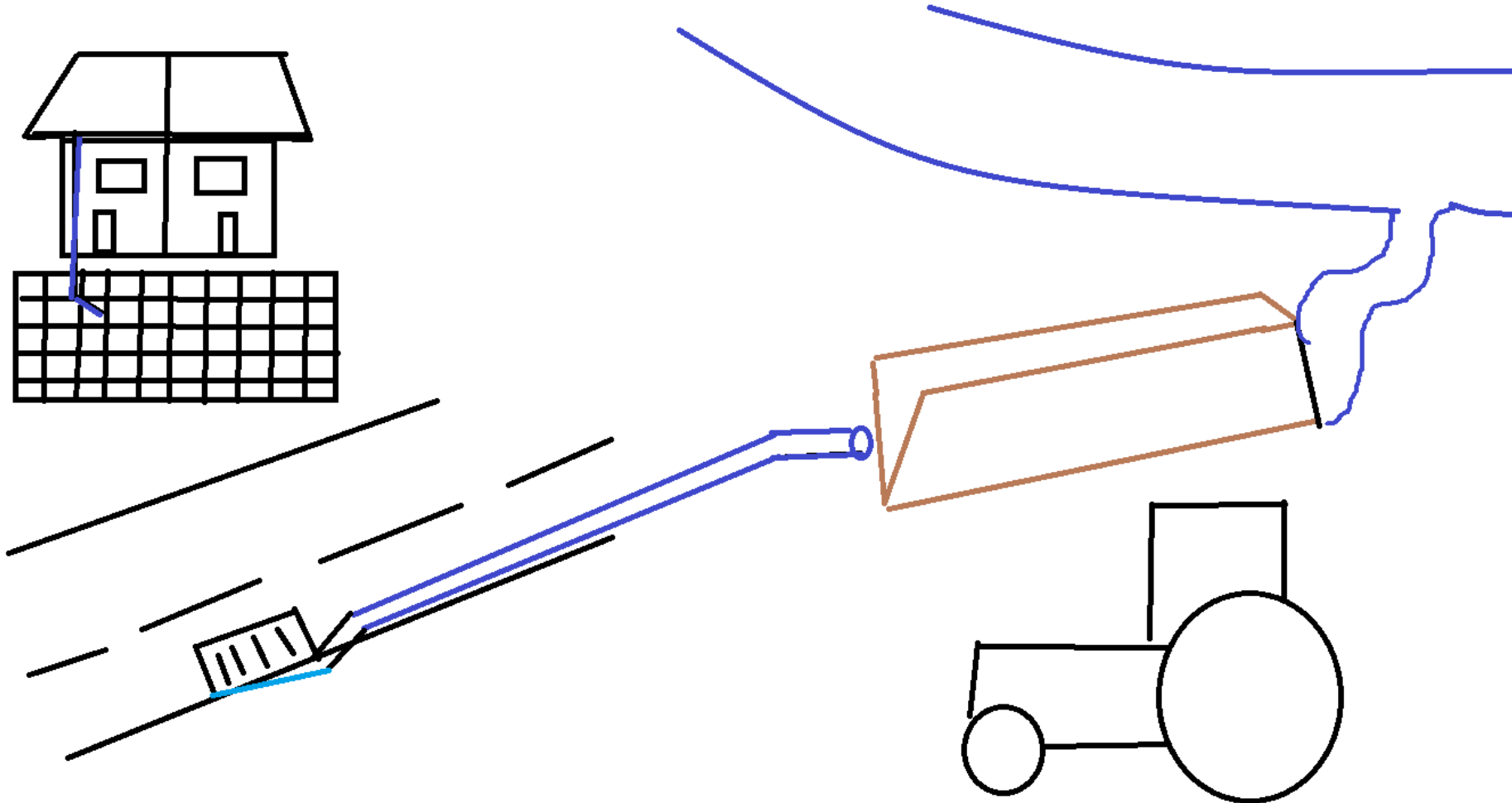


Collaborating to create a green, more sustainable tomorrow

Keith Herbert, Clean Rivers and Seas Task Force



Drainage ownership – a refresher

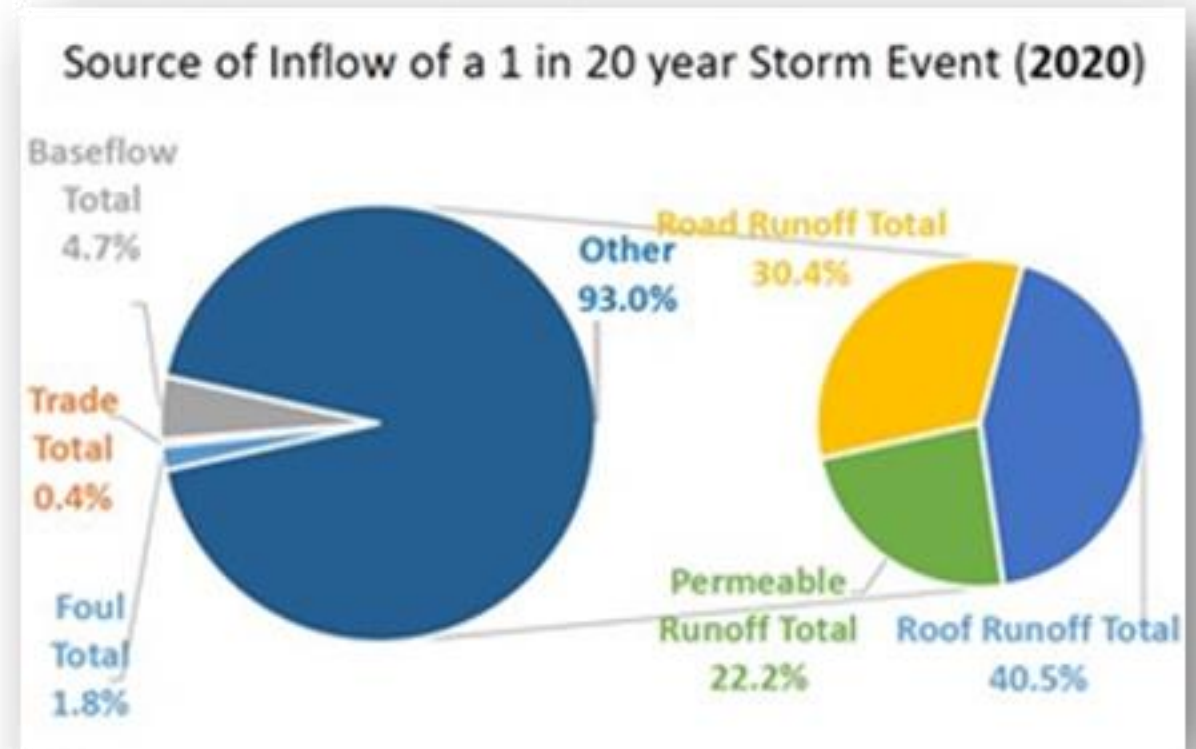


Basis for change

- Outdated and obscure ownership models
- A lot is going to be asked of water companies – do they have the powers to deliver?
- Is everyone going to have to play their part in stormwater management?

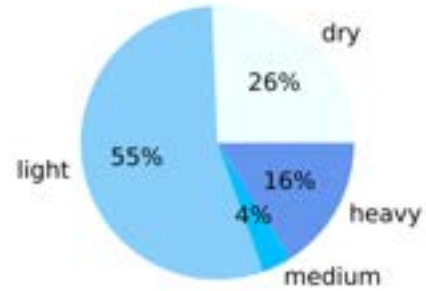
Facts regarding CSO discharges

- Our research has shown that discharges are over 90% rainwater
- Of this, 30% of flow comes from roads, 40% comes from roofs and 15% comes from gardens and open spaces.
- If we remove 40% of the stormwater, we can reduce CSO discharges by 80%.

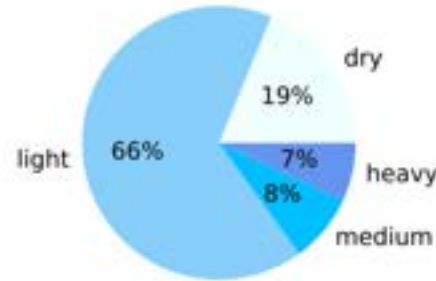


CSO Targeting

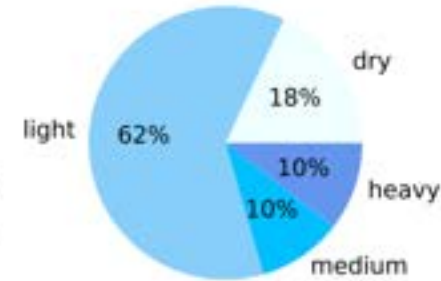
WOODVALE TRANSFER CSO
duration 2081.8 h, 527 events, 46 spills



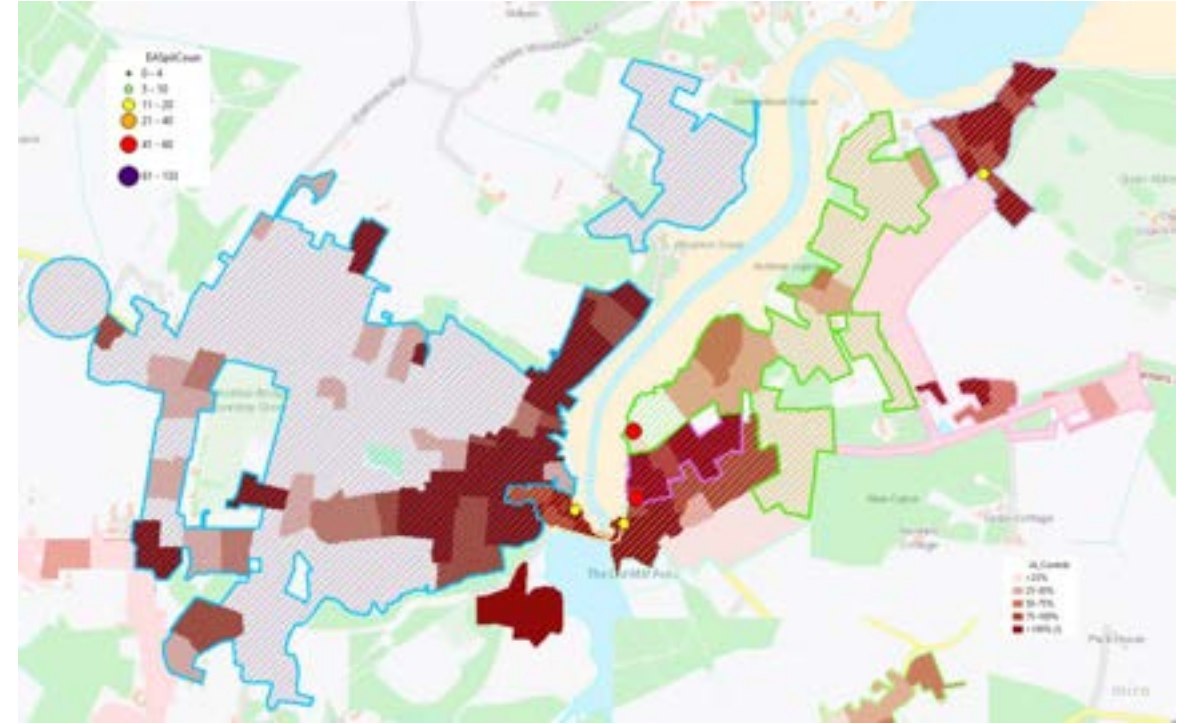
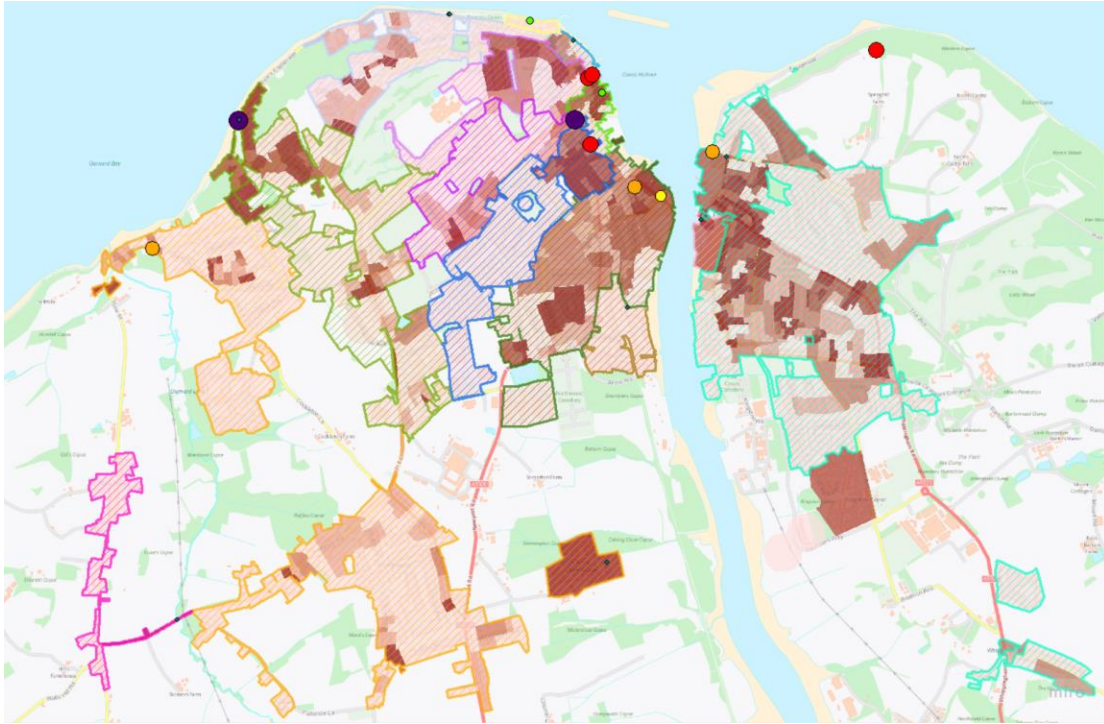
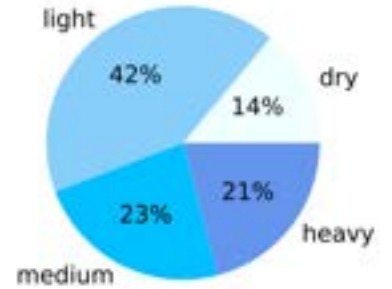
SPRINGHILL COWES TRANSFER CEO
duration 1023.0 h, 160 events, 45 spills



TERMINUS ROAD COWES CSO
duration 872.7 h, 278 events, 79 spills



MARSH ROAD GURNARD CEO
duration 358.7 h, 43 events, 27 spills

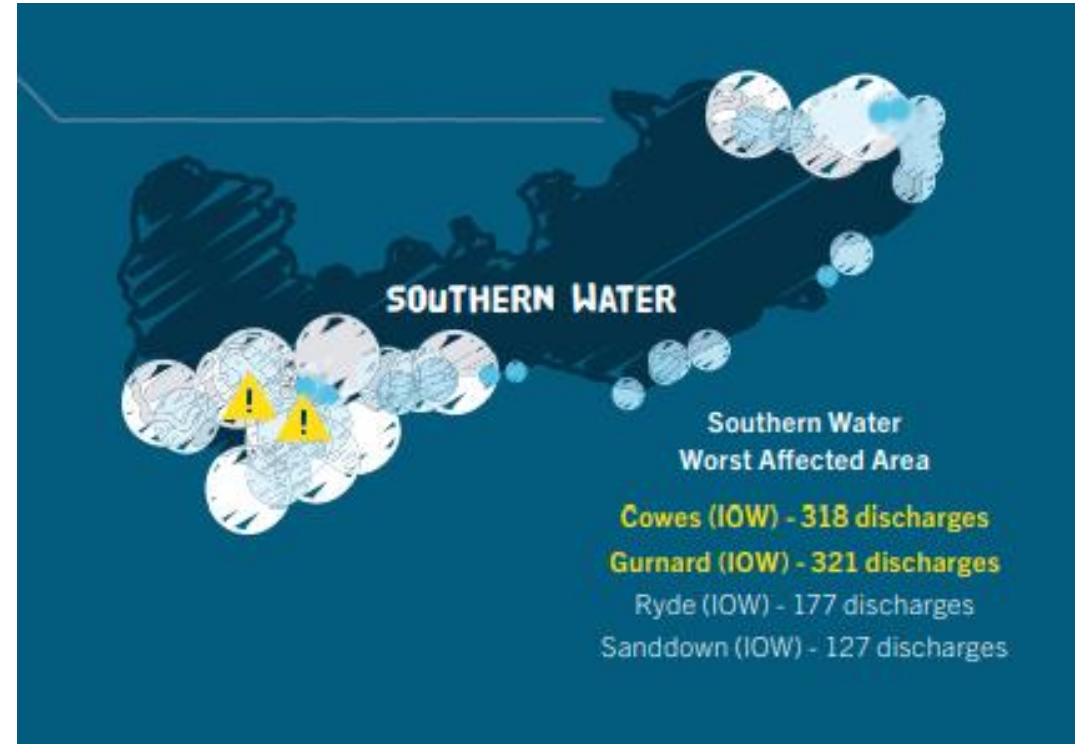


Contrast with 'End of Pipe' solution

Gurnard – a worked example...

Pathfinder Process

1. Optimisation
2. Misconnections
3. NHH SuDS
4. Highway Schemes
5. Household SuDS
6. Monitor



Gurnard – a worked example...

Pathfinder Process

1. Optimisation

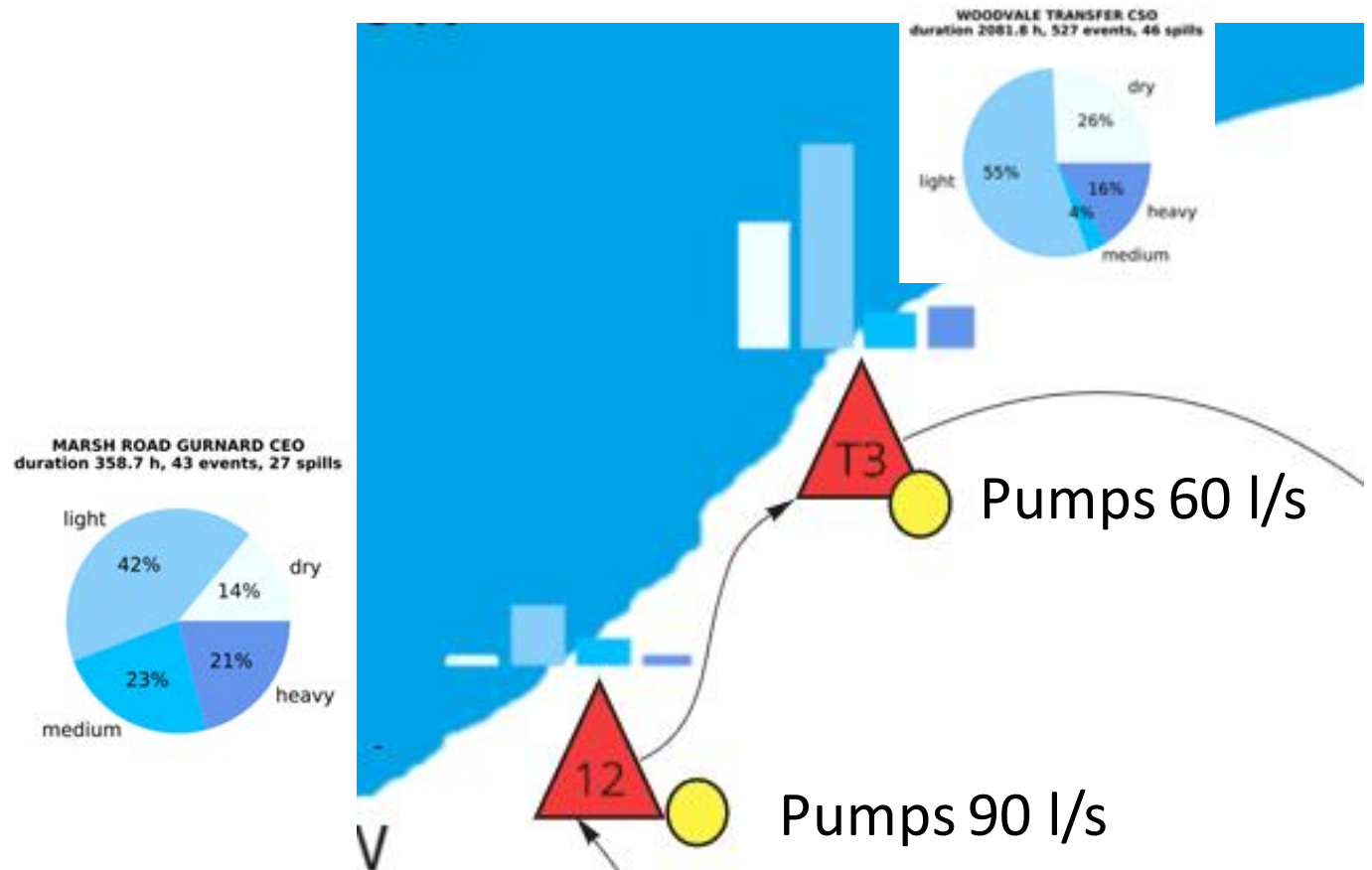
2. Misconnections

3. NHH SuDS

4. Highway Schemes

5. Household SuDS

6. Monitor



Gurnard – a worked example...

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- 15 NHH 'red roofs'
- Connectivity survey
- Options from brochure

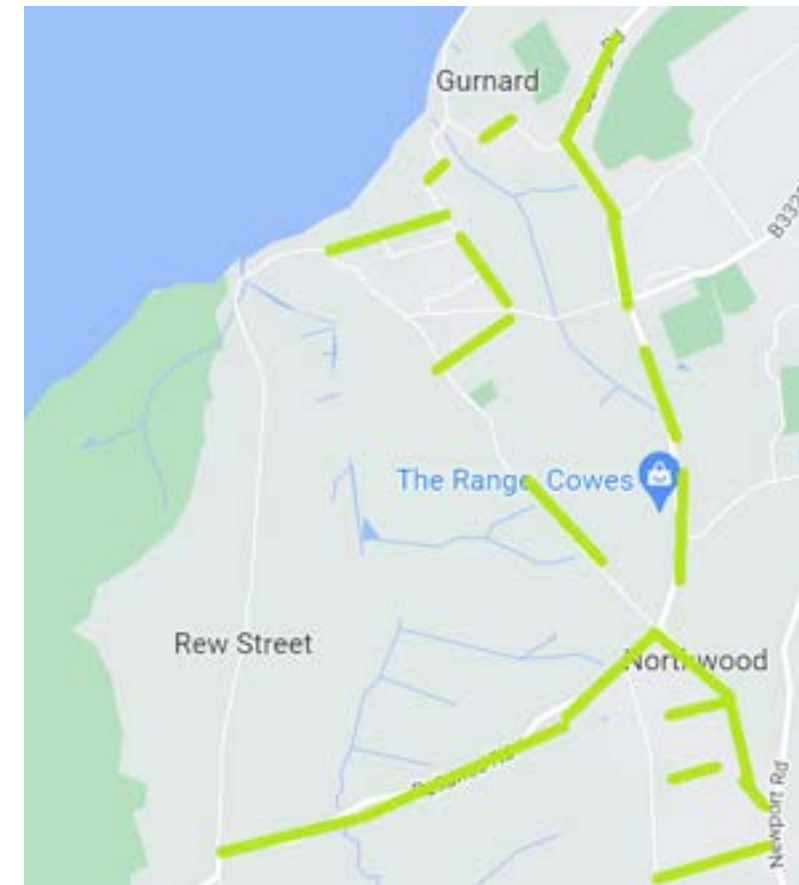


Gurnard – a worked example...

Pathfinder Process

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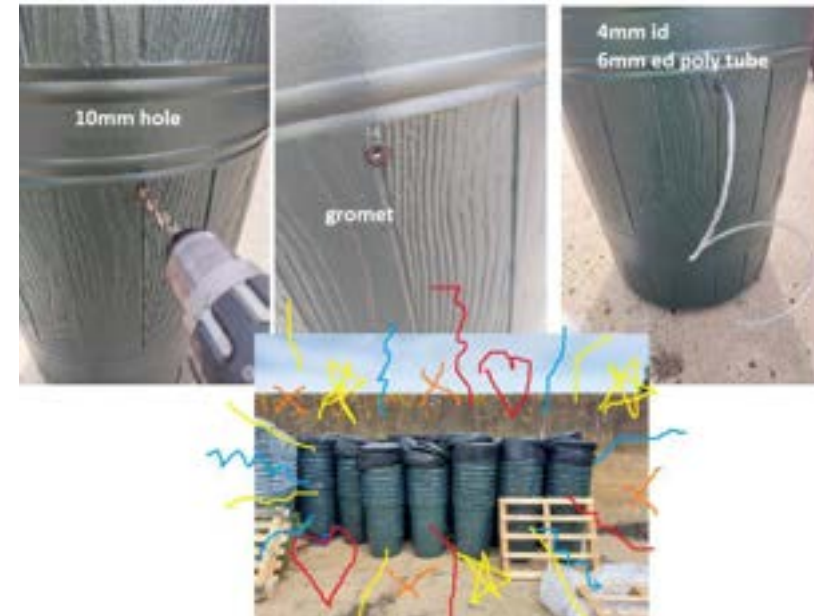
- 12 highway schemes to present to the LA



Gurnard – a worked example...

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Gurnard – a worked example...

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6. Monitor

- Temperature sensors
- Sewer level monitors
- Pump run data
- Flow data
- Rainfall data
- Customer acceptance
- Hardstanding removed

Spill data!

Other activities

- Public Realm schemes
- Planning policy
 - Offsetting schemes
- Driveways
- Surface water charging



Summary

- Previous ownership/funding models drive bias towards end of pipe solutions.
- Over 90% of the flow can come from private storm connections
- Removing, attenuating and utilising water can leave communities more resilient and more attractive.

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Q&A Session

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Urban Drainage Group

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