Quarterly PPF/SW Meeting

17th May 2022



Agenda

- Structure
- Problem statement and overview
- Operational Mitigation
 - Tankering
 - Overpumping
 - Plan for 2022
- Capital improvement works
 - Progress report
 - Analysis
- Plan and options



Our structure and liaison with PPF

Nick Mills Head of Storm Overflow Taskforce Simon Parker Director of Asset Management

Floyd Cooper Operational Manager Hants

Tankering Overpumping Repairs Maintenance Incidents Clicketenadertsent Pathfinder lead

> Project work Design Targeting Delivery Engagement

Glenn McCubbin Local lead

Coordination of site activities

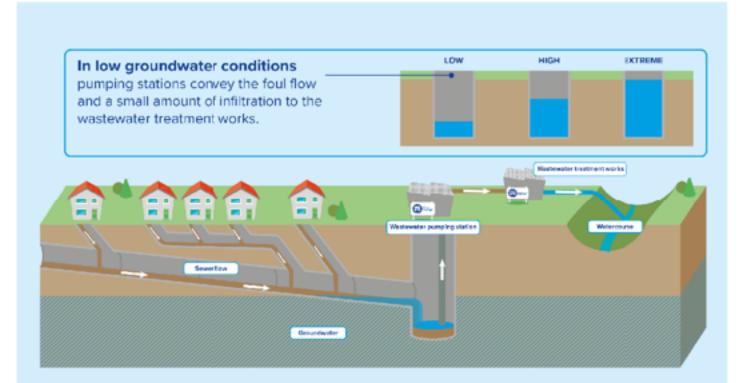


Problem statements

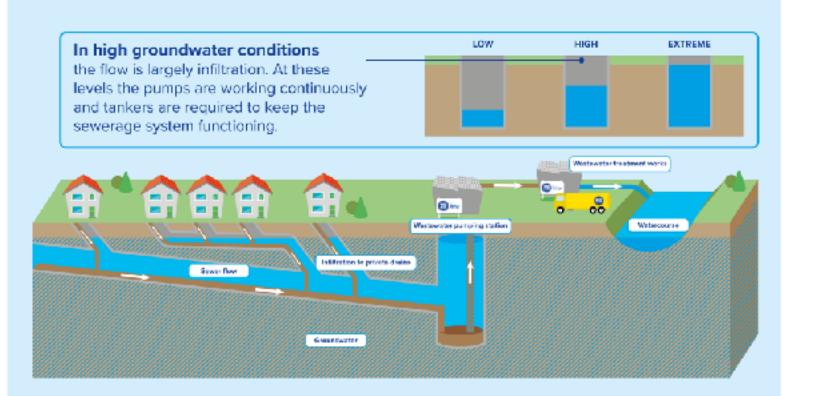
- Significant infiltration into the sewerage network.
- Excessive flow restoration costs
- Local disruption from tankering, pumping and remedial works
- Environmental impact upon chalk streams



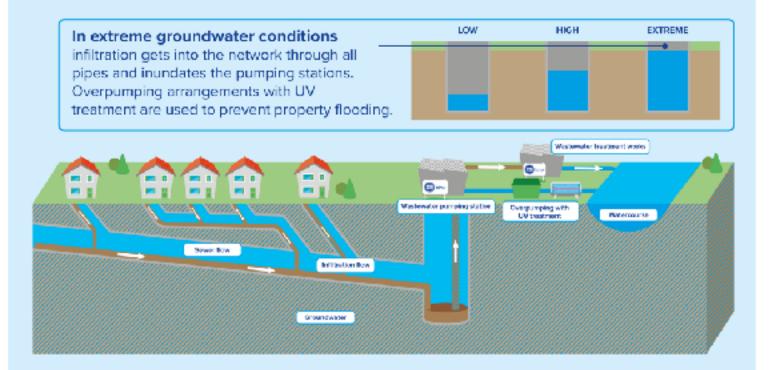














UV Over-pumping – Commitment II & IV



We are extremely pleased to report we have not needed to use UV disinfected over-pumping in the Pillhill Valley at all this year

The equipment was set up and commissioned as a preparatory measure at Mullens Pond WPS.

We didn't need to consider its use at Stanbury Road, Fyfield WPS

Consideration being given to semi-permanent installation

Treated wastewater Image: State State

New Over-pumping signs to better reflect the commitment to UV disinfection as per the agreed action.



Baseline Ecology Survey – Commitment III



- Spring invertebrate study completion by 31ST of May
- Spring Diatom survey completion by 31ST of May
- Macrophyte survey scheduled for September
- Summer invertebrate and Diatom study scheduled for September

All results will be distributed to the EA and members of the Pan Parish Forum when available, and will be available on request to other stakeholders and members of the public



Mullens Pond WPS and Stanbury Road WPS – Commitment V



Mullens Pond WPS Wear on impellers No critical spares (lesson learned) Experiments with various pumps and impellers Aim for better pass forward to minimise interventions

Mullens Pond WPS

Fencing Lighting Mains power upgrade Completed Completed 24.05.22 Completion

Stanbury Road Fyfield WPS

Mains power upgrade

With SSE locating mains cable







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Flow Management – Commitment V - VI



Plans to use past data from groundwater report and tanker presence to create a forecast model for predicted flow management interventions to assist with enhanced notice

- Tankers for groundwater management required only at Mullens Pond and Manor Farm, Abbotts Ann this season
- Proactive sewer rehabilitation work and operational incidents associated with the Little Ann Bridge rising main and a UKPN failure
- OCP comms updates
- Scoping for a fixed generator at Little Ann Bridge







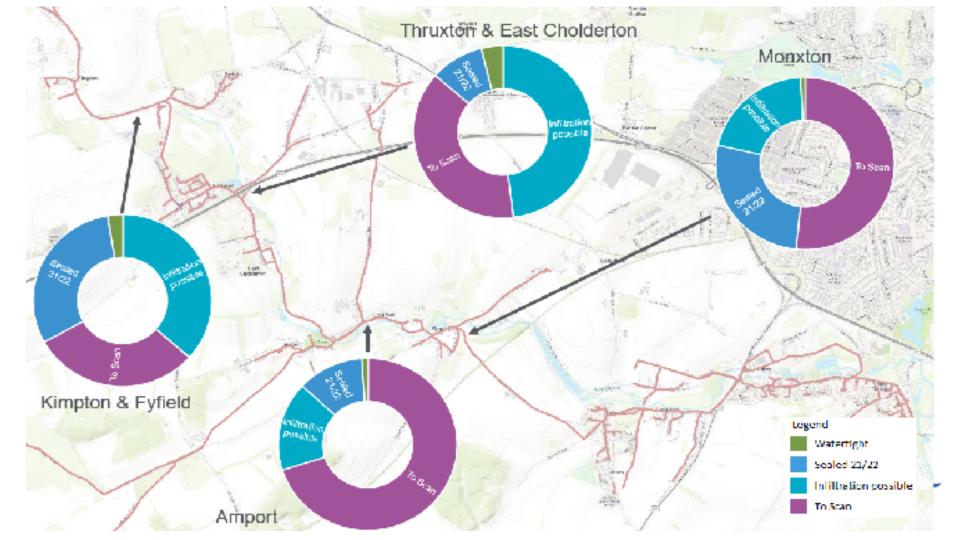


Programme with headlines

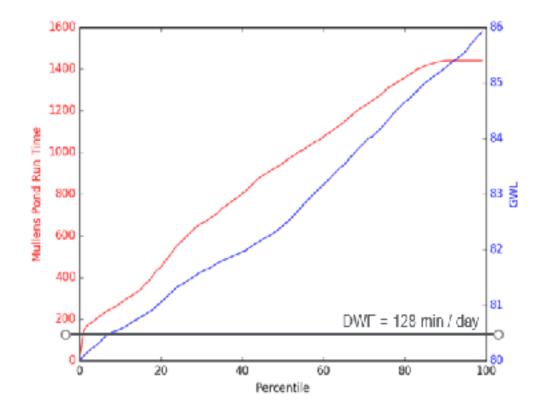
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CCTV investigation	4334	4334	m
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Manhole Sealing	2	2	nr
CIPP lining	3088	2308	m
No Dig Repair/ patches	43	43	nr
Inspect Manhole	1	1	nr
Inspect previous repair	1	1	nr

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Groundwater Vs Pump Run

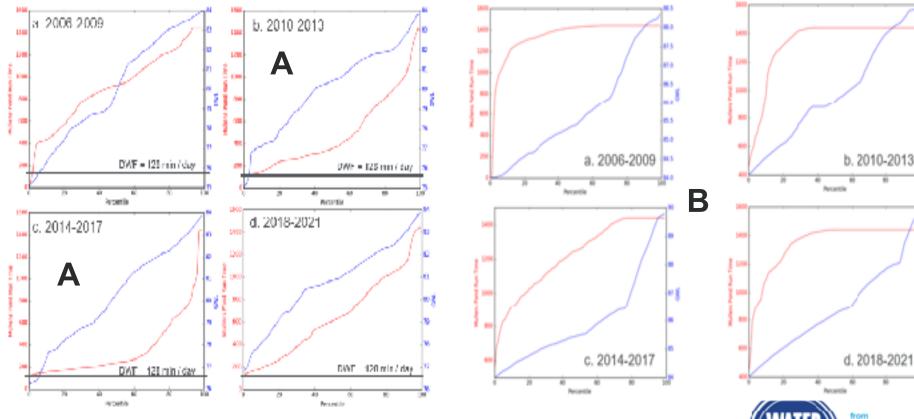




Mullens Pond <84mAOD

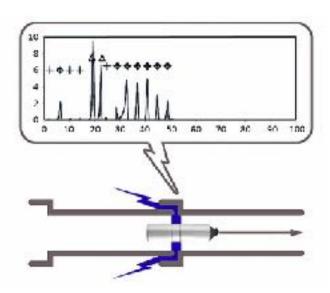
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Southern Water





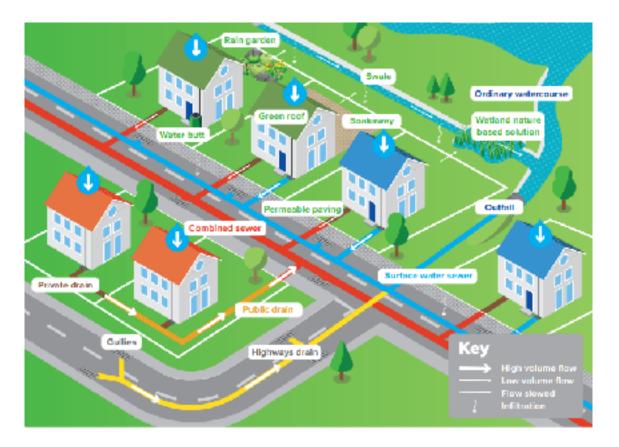
Innovation







Sewer ownership and engagement







Options appraisal





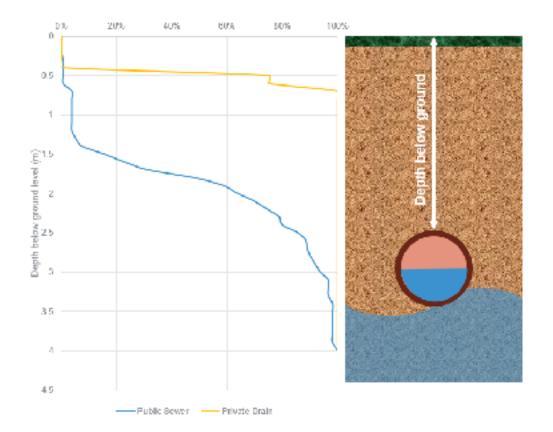


Option 1 mitigate the flow





Option 2 Manage the groundwater







Option 3 Seal and investigate



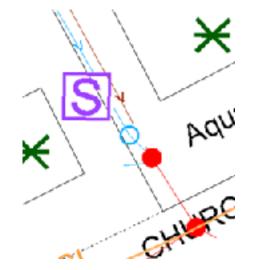




Option 4 'Slow the flow' methods and connectivity









Option 5 Treat flows with a wetland







Tarland Burn Wetland (River Dee – Aberdeenshire)

Option 5 Treat flows with a wetland







Cromhall Wetland – Gloucestershire (Wessex Water)

High level options

Option	Does it protect the Environment?	Would it stop the disruption?	Timescales to stop disruption
1 – Mitigate flow	To an extent	No	Never
2 – Manage GW level	No	Yes	Unlikely to deliver.
3 – Seal and investigate	Yes	Yes	3 years
4 – Slow the flow	Yes	Yes	5 years - won't mitigate the groundwater.
5 – Wetland	Yes	Yes	1-2 years

Next Steps

Southern Water

- Complete current programme of works
- Plan for next winter's mitigation
- Begin next phase of seal and investigations
- Joint working with HCC highways
- Subject to collaboration with PPF
- Feasibility study for wetland
- Engagement for private lateral work
- Slow the flow initiatives



