

Southern Water Pan Parish Forum

Quarterly meeting

6.9.22



from
**Southern
Water** 

Agenda

1. Welcome & Intro - Chris Harris (PPF) Simon Parker (SW)
2. Structure - Keith Herbert (SW)
3. Recap and Problem Statement - KH (SW)
4. Operational Mitigation
 - led by Floyd Cooper (SW)
 - Tankering
 - Overpumping
 - Pollution Event Exercise
5. Capital improvement works - led by KH (SW)
 - Private Lateral works
 - Phase 4 relining works
 - Nature based solution
6. Actions from previous meeting
7. AOB & date of next meeting

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

Keith Herbert
Pathfinder lead

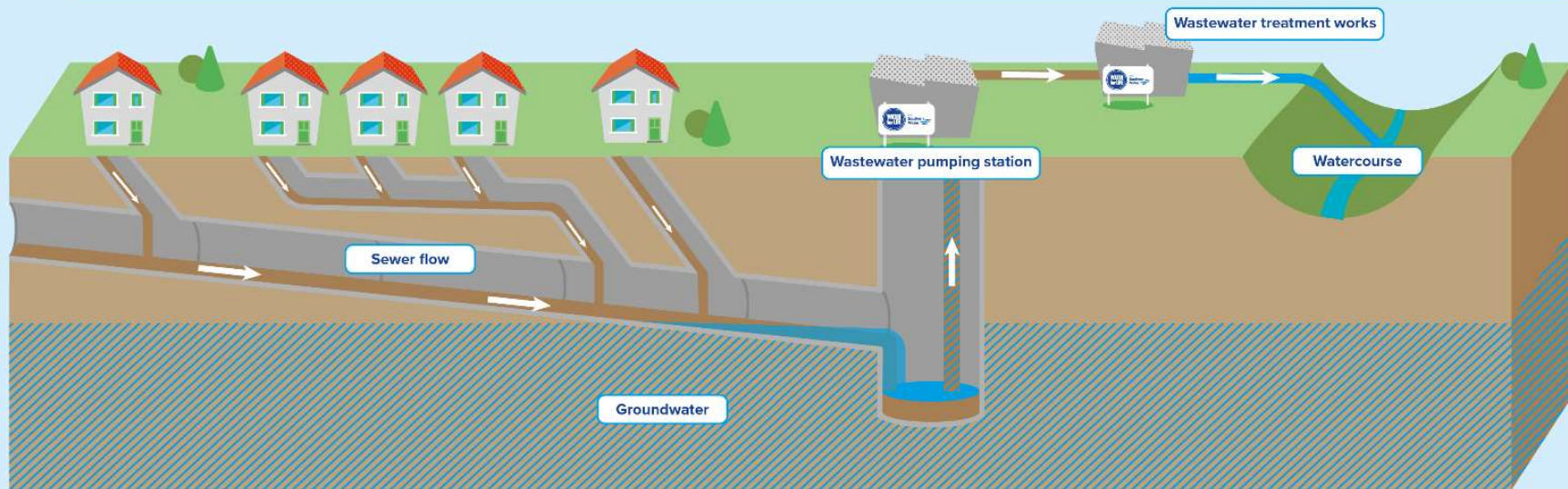
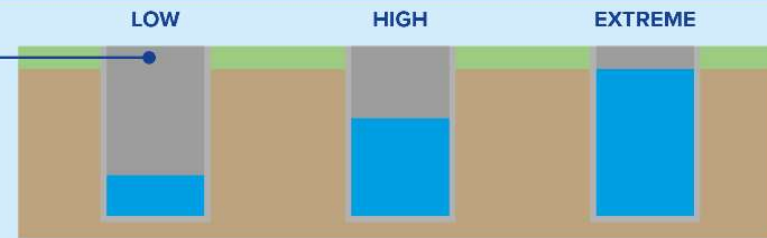
Project work
Design
Targeting
Delivery
Engagement

Glenn
McCubbin
Local lead

Coordination of
site activities

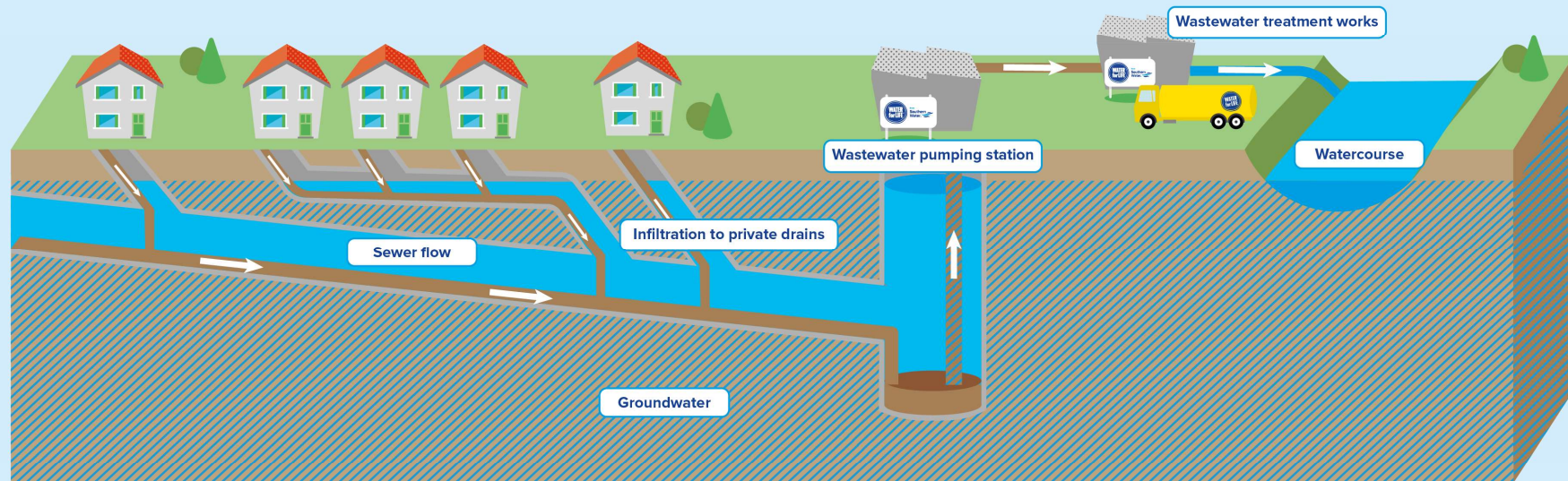
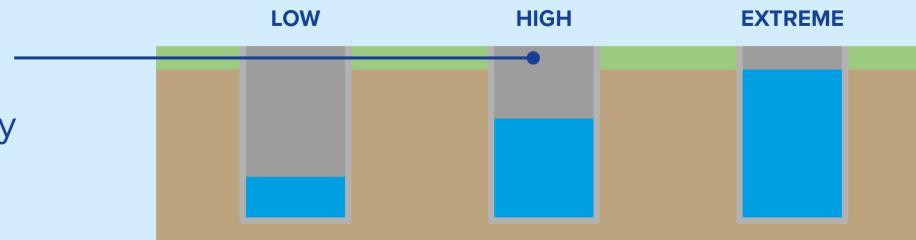
In low groundwater conditions

pumping stations convey the foul flow and a small amount of infiltration to the wastewater treatment works.



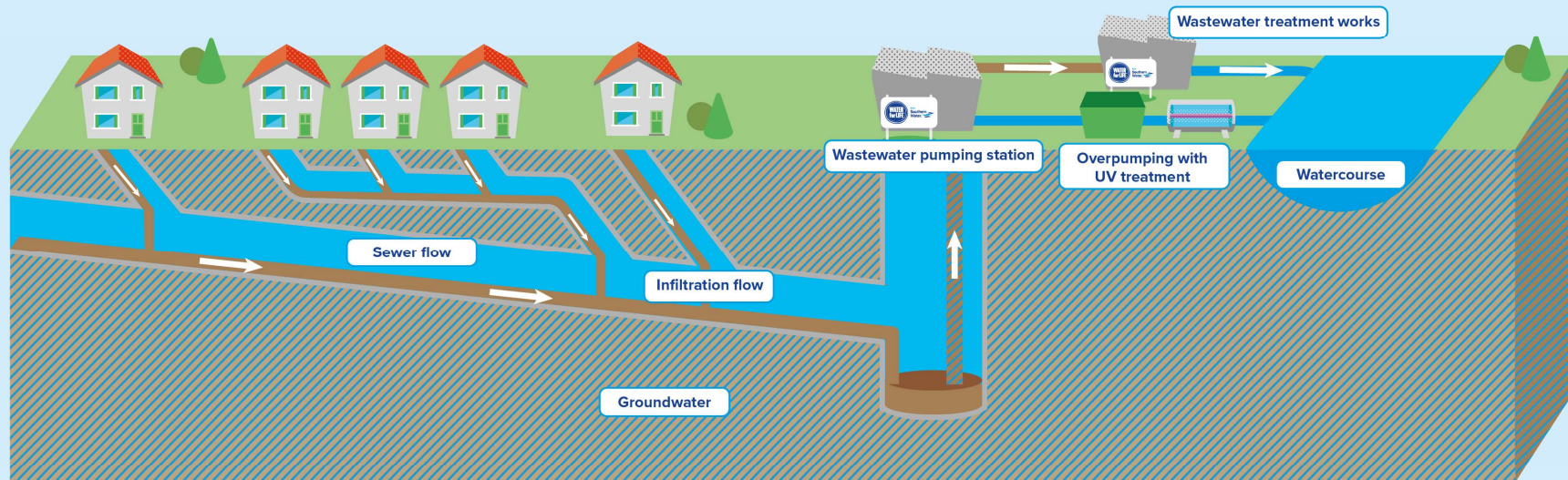
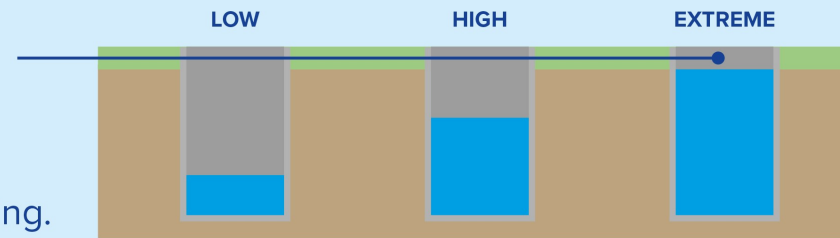
In high groundwater conditions

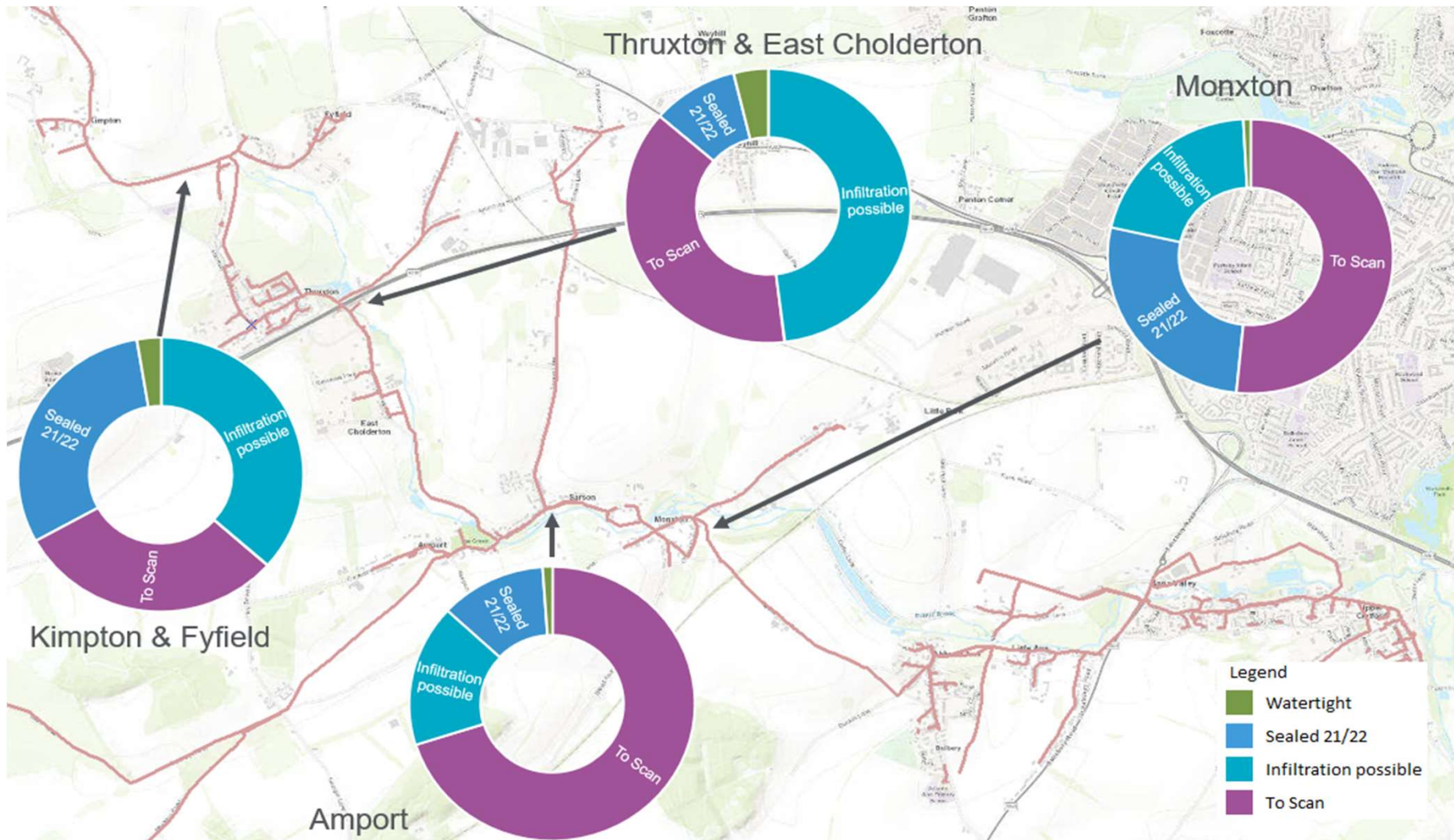
the flow is largely infiltration. At these levels the pumps are working continuously and tankers are required to keep the sewerage system functioning.



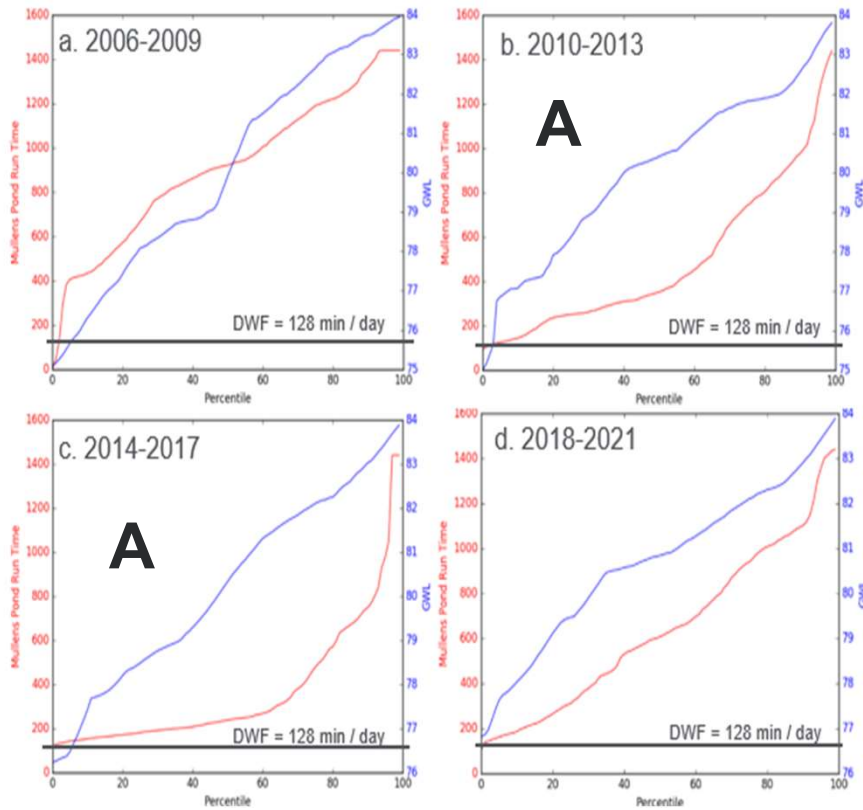
In extreme groundwater conditions

infiltration gets into the network through all pipes and inundates the pumping stations. Overpumping arrangements with UV treatment are used to prevent property flooding.

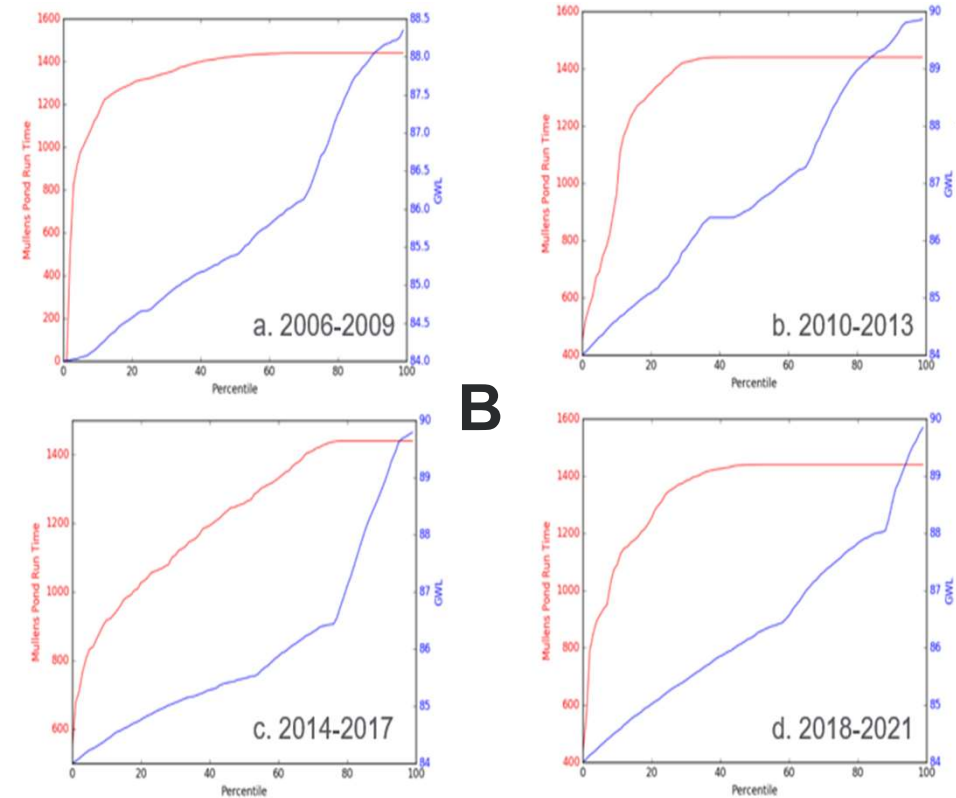




Mullens Pond <84mAOD



Mullens Pond >84mAOD



Problem statement and Objective

Problem

- There is significant groundwater infiltration into the sewerage network.
- This causes the infrastructure to become overwhelmed increasing the risk of flooding and pollution.

Objective

Our objective is to find a sustainable, permanent solution that:

- Protects the environment
- Stops the disruption and inconvenience to the community

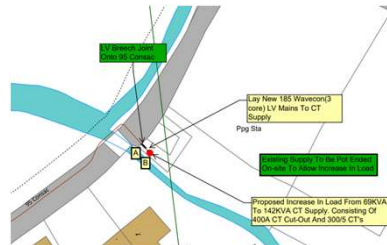


UV Over-pumping



The commissioned UV over-pumping equipment has been left in place at Mullens Pond. This is to minimize disturbance and local impact associated with its installation and de-installation

The power upgrade at Mullens Pond has been completed meaning no need for noisy diesel generators onsite or light pollution.



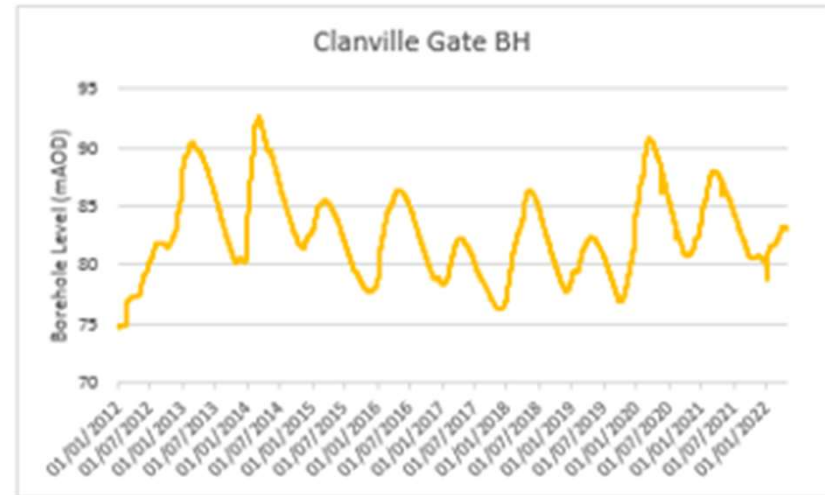
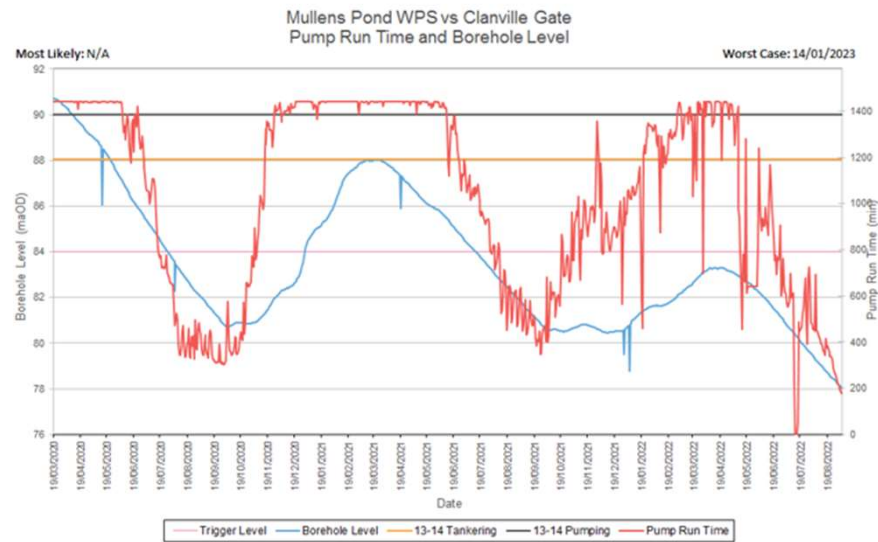
Work is ongoing with the Power upgrade at Stanbury Road Fyfield WPS



After reaching agreement on the wording, a quote is being provided so we can order a batch of signs before Winter

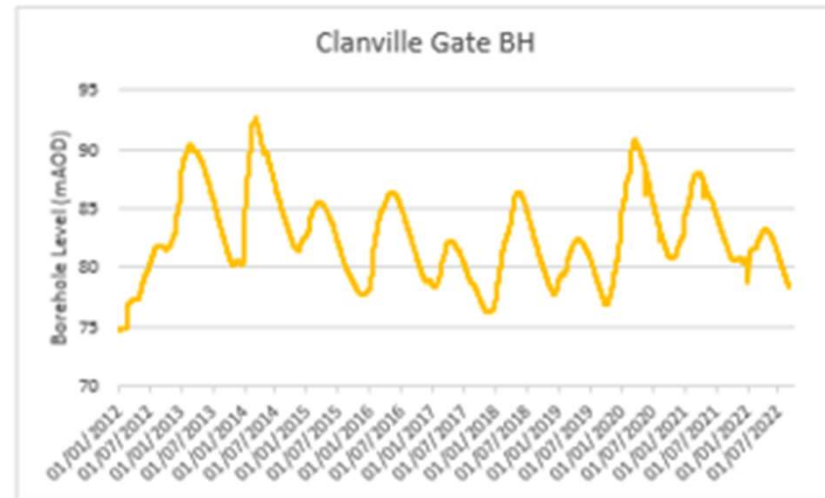
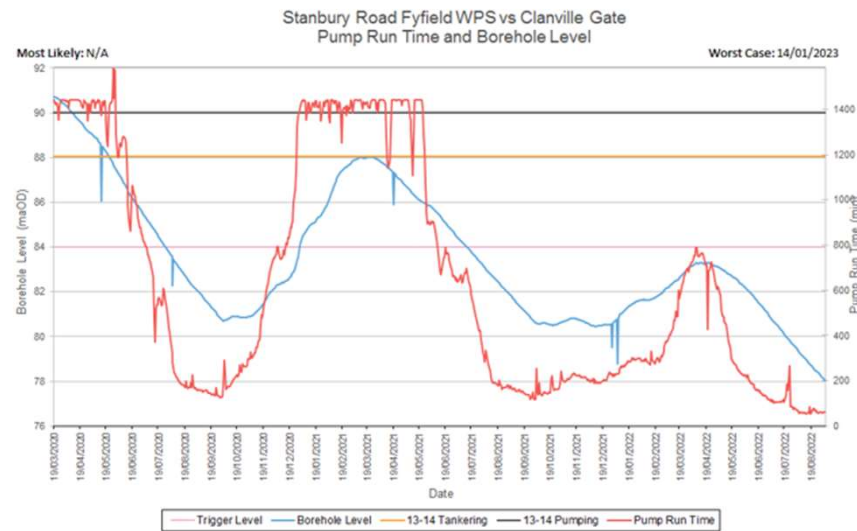
Monitoring

May '22



September '22

Mullens Pond WPS pump run vs Borehole



Stanbury Road Fyfield WPS pump run vs Borehole

WPS pre-season Health Checks



Pre season pumping station Health Checks are completed in the Month of October as a collaborative piece of work between the Operations and Asset Maintenance team. Planning is currently underway.

This covers over 32 pumping stations in groundwater affected catchments, including:

- Stanbury Road Fyfield WPS
- Mullens Pond East Cholderton WPS
- Furzedown Lane Amport WPS
- Monxton WPS
- Little Ann Bridge WPS
- Royal Oak Goodworth Clatford WPS
- Goodworth Clatford South WPS
- Goodworth Clatford Station WPS

Baseline Ecology Survey & Sampling



Ecology

- Spring invertebrate & Diatom study scheduled for completion before end of May
- Autumn invertebrate & Diatom study and Macrophyte study scheduled for completion on September 2nd
- Awaiting confirmation of results which will be shared with PPF and the EA as soon as they are available.

Sampling

- Janet has requested a sample from the Brook at Amport to give an idea of water quality at this time, this is being organised

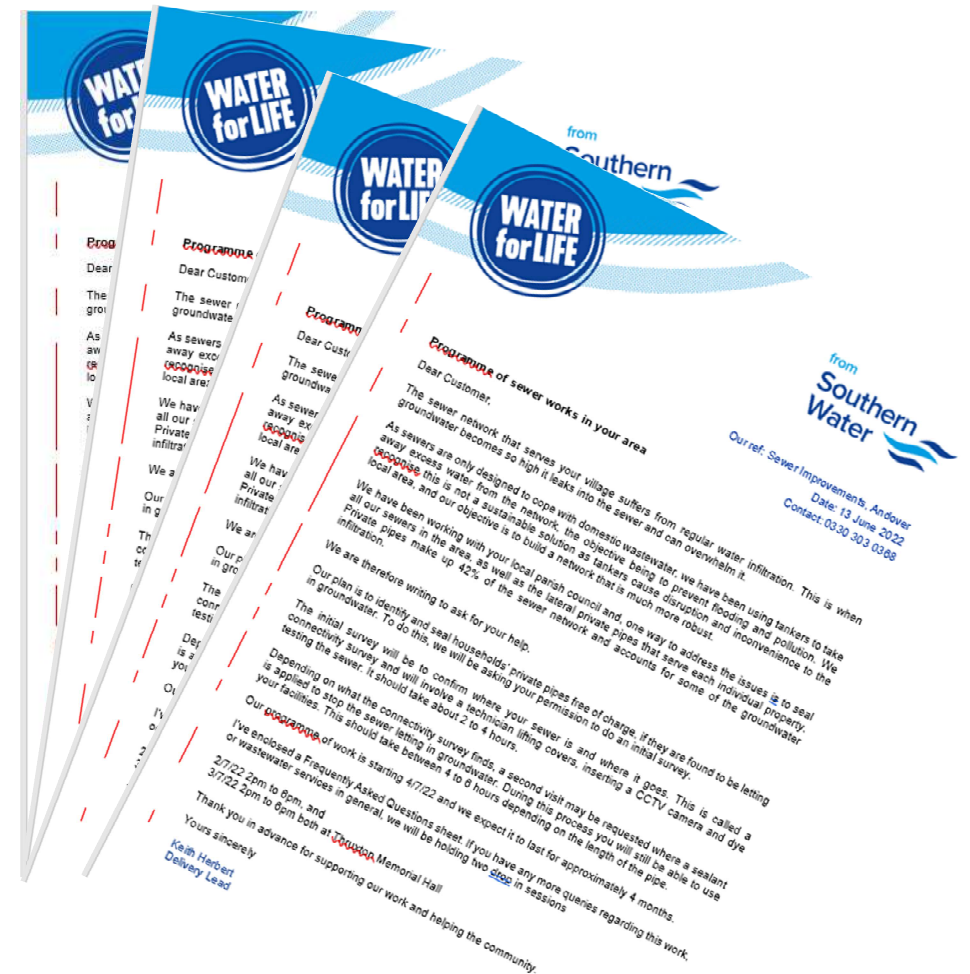


Pathfinder works

Private lateral sealing	Phase 4 relining	Nature based solution
Communications to customers complete Update required	Electroscanning works have started	Provisional design complete
Connectivity surveys $\frac{3}{4}$ complete	Public sewer relining works awaiting programme	Engagement with Environment Agency
Tubogel sealing – programme started	Monitoring works to start in autumn	Meeting with landowners
Monitoring works planned to start autumn		

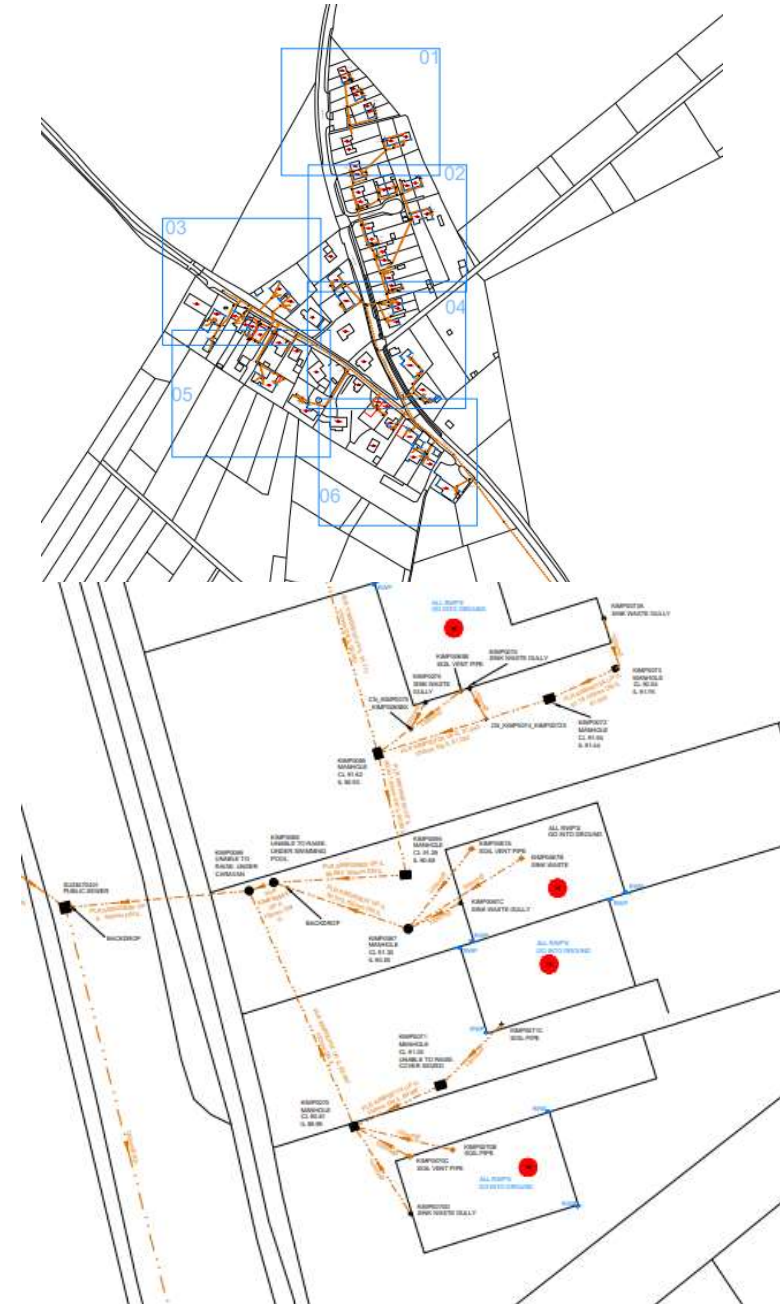
Private Lateral Sealing Works

- Mail merged 559 properties
- Ran two drop-in sessions
- Went door to door prior to undertaking any works



Private Lateral Sealing Works

- We do not hold records of the private network
- Not strictly a condition survey
- The purpose of the survey was to:
 1. Determine suitability for Tubogel
 2. Package up sections for application



Connectivity update

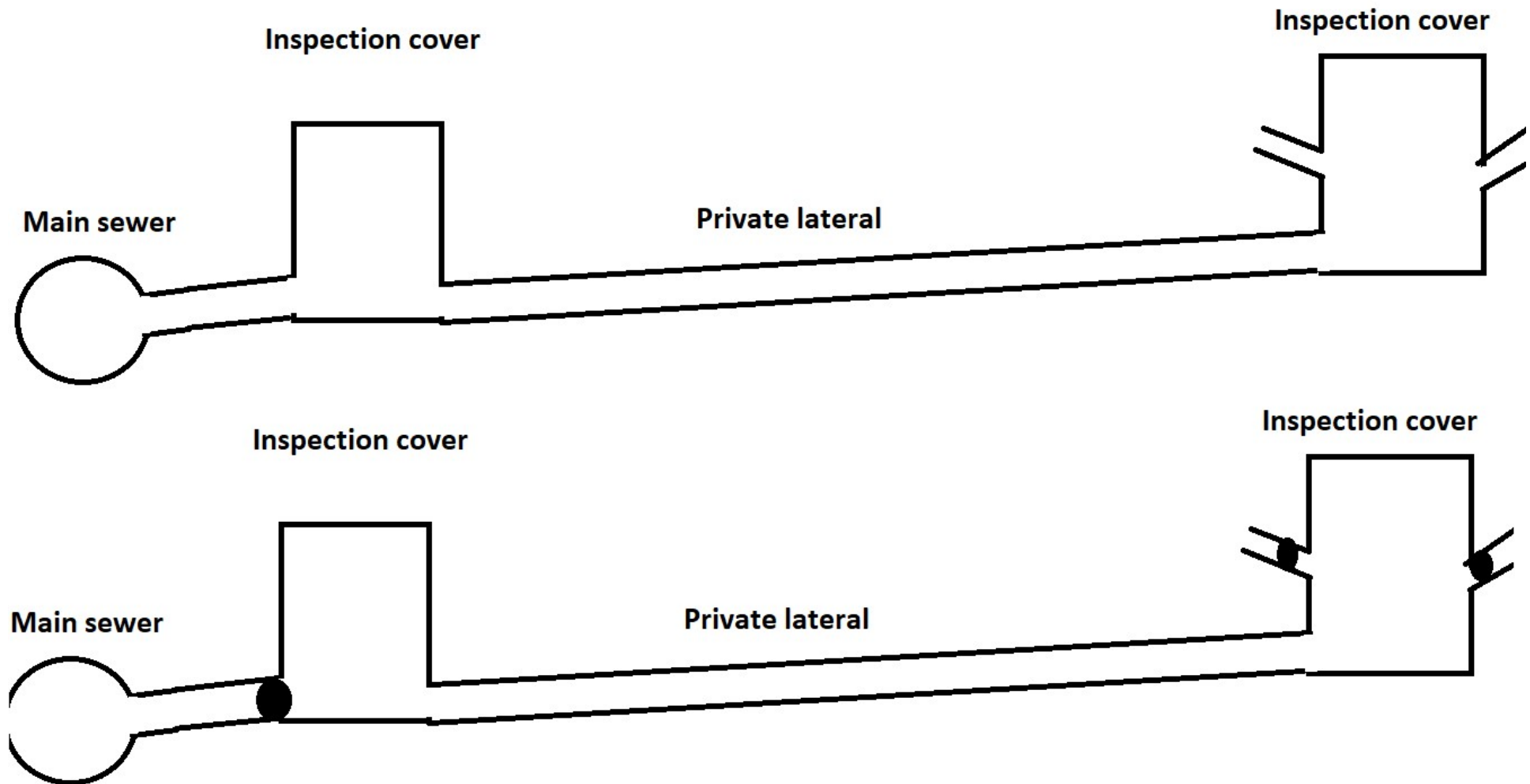
Village	Status	Total	Complete	Unable to Complete	Remaining
Fyfield	Complete	154	141	13	0
Kimpton	Complete	111	96	15	0
Thruxton	In progress	230	71	7	152
Weyhill	Not started	5	0	0	5
East Cholderton	Complete	64	60	4	0
		564	368	39	157

90% completion rate

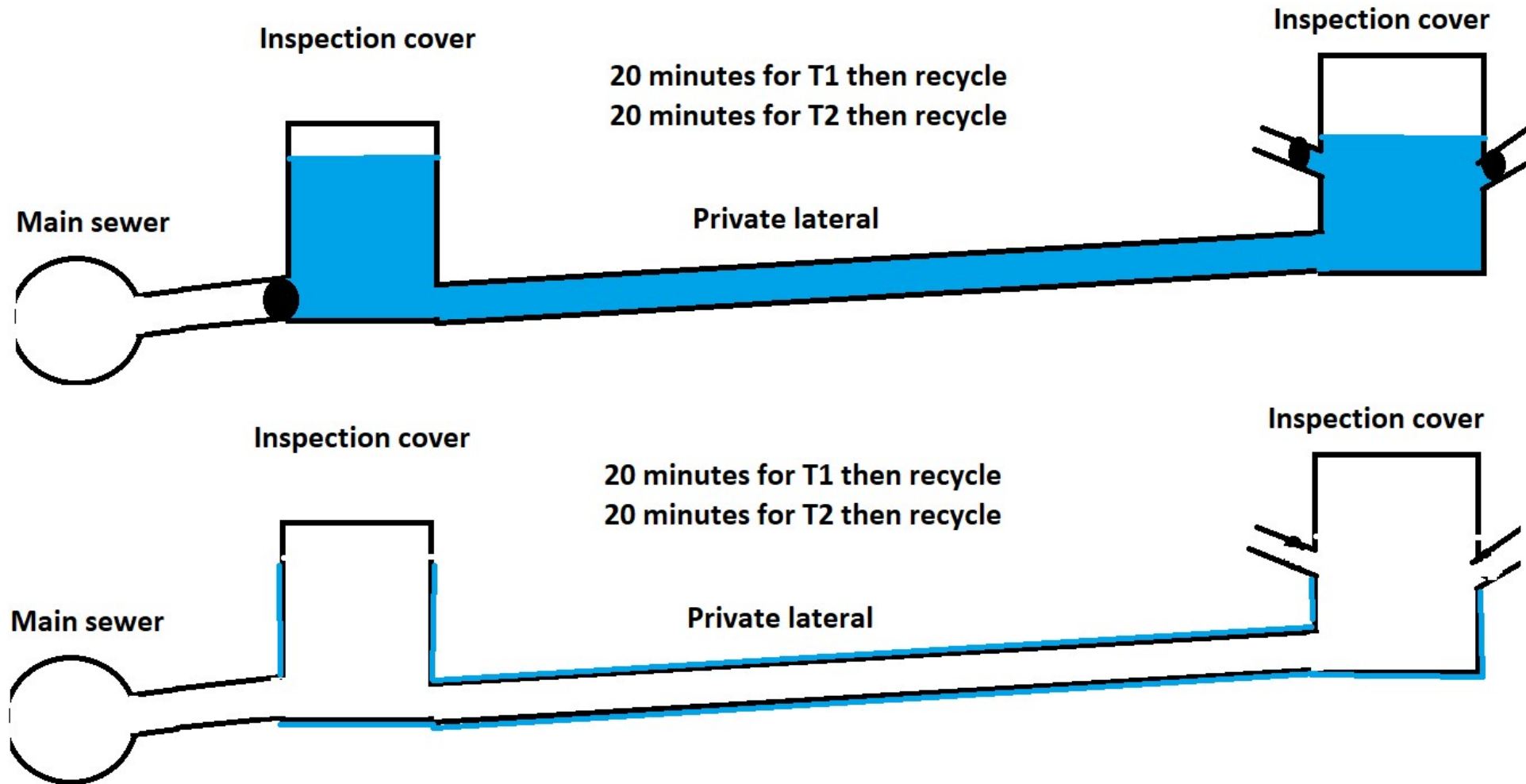
Tubogel



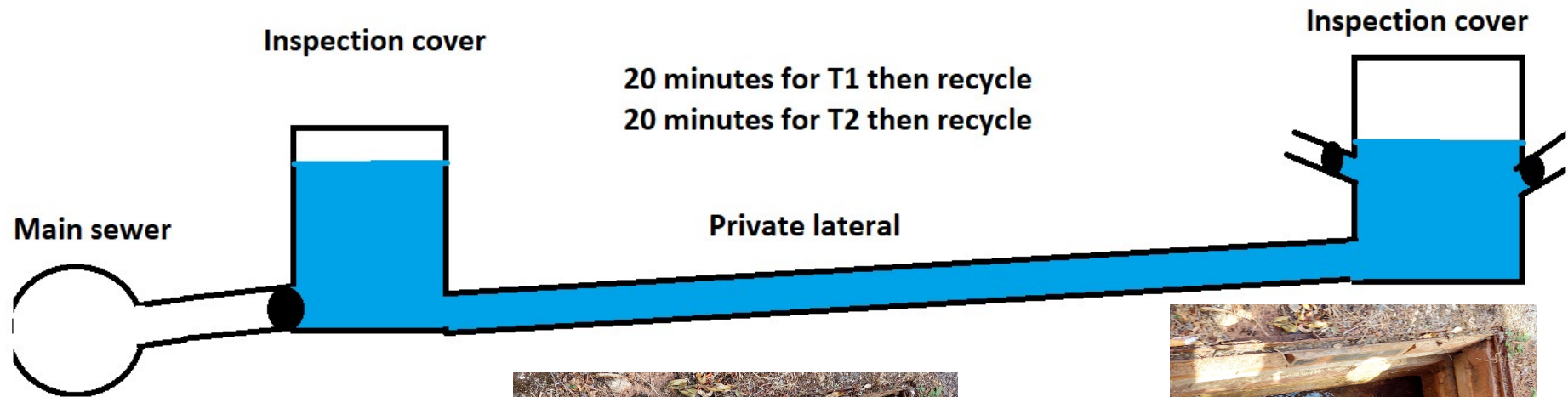
Tubogel Sealing Works



Tubogel Sealing Works



Tubogel Sealing Works



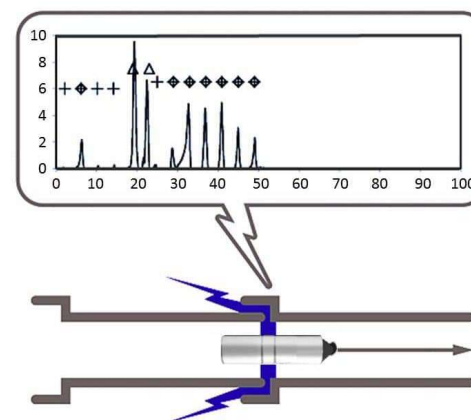
Tubogel Sealing Works

Next steps

- Mail merge all customers to thank them and detail progress
- Continue with programme
- Monitor impact

Phase 4 relining

- Electro scanning



Row Labels	Length	Pipes	Status	Length Scanned
Abbotts Ann	2,462.84	64	In Progress	
Amport	1,937.77	31	In Progress	
Anna Valley	897.14	30	Complete	764.82
East Cholderton	495.58	10	In Progress	
Fyfield	235.74	6		
Little Ann	3,384.86	58		
Monxton	281.22	8	Complete	220.65
Red Post Bridge	804.77	16		
Thruxton	43.41	2	Complete	0
Weyhill	3,826.79	54		
	14,370.10	279		985.47



Monitoring

- 26 temperature sensors have been ordered.
- 30 sewer level monitors being currently being in the area specifically for groundwater. More for blockage work
- Up to 10 monitoring boreholes to be sunk.



Nature Based Solutions Shrewton and Langford

- 28 groundwater catchments in Wessex Water region
- Similar problems and challenges to PP although biological treatment in place.
- Demonstrate exhaustion in catchment approaches
- Demonstrate effective treatment
- Our work with EA and WW



Actions update

No.	Action	Who	By When	Status
QSW/PPF 17.5.1	Expand Problem Statements (Slide 4) to include disruption to residents. PPF to suggest new wording JC to provide draft wording for PPF to review	JC/JW	6/09/22	Open
QSW/PPF 17.5.3	Share SW sample data on water quality tests with the PPF EA are custodians of water quality data. Due in the autumn SW to advise when.	FC	6/09/22	Open
QSW/PPF 17.5.4	SW to hold Baseline Ecology Meeting with the EA Date of meeting to be communicated to WHB.	FC	9/09/22	Open
QSW/PPF 17.5.5	SW Ecology <u>survey</u> ; investigate developing links with local schools SUDS grant being applied for. Timescales for this? Grant approved. Funds available Sep/Oct 22 with 80% required to be spent by Apr 23 (dependent on connectivity survey results)	KH/JW	Linked to USW/PP F 15.6.2	Open
QSW/PPF 17.5.8	What else can be done to alleviate the “ragging” of valves at Mill Lane in Abbots Ann?	KH	06/09/22	Open

AOB and date of next meeting