SW/PPPF Quarterly Meeting

27.6.24

from Southern Water

Agenda

- Welcome & Intro from Keith Herbert Pathfinder Lead and Chris Harris, PPPF Chair
- Re-brief of objectives to new members (Keith Herbert, SW Pathfinder Lead)
- Flow restoration update (Floyd Cooper SW Wastewater Networks)
- Groundwater strategy and preparedness (FC)
- Mill Lane Valve update (FC/SH)
- Layby update (FC/SH)
- Treatment updates (FC)
- Monitoring update and state of the nation (KH)
- Programme update (KH)
  - Tubogel
  - Manhole sealing
  - public sealing
- Results, next steps and AMP8 (KH)
- Ecology survey and sampling results (FC/JW)
- HCC road safety strategy and preparedness (Sarah Reglif, HCC Flood & Water Management)
- EA Issues? (Keith Broomfield, EA)
- Wider Pan Parish Communications (led by PPPF)
- Outstanding actions
- AOB

Objectives

Protect the environment and stop the disruption

- Targeting monitoring programme
- Investment into private and public apparatus
- Responsive customer service
- Community engagement and communications

Playbook Content

Pan Parish – Operational Playbook DRAFT

Playbook Content

1 Background

1.1 Pan Parish Catchment

The Pan Parish refers to a collection of villages, consisting of Kimpton, Fyfield, Thruxton, East Cholderton, Quarley, Amport, Monxton, Abbots Ann and Clatford within the catchment of Fullerton. The sewer catchment of these areas serves a population of 6,300. The public sewer network of these sub-catchments is 64,340m in length, with flows within the Pan Parish catchment starting in Kimpton, gravity-fed to Stanbury Rd Fyfield WPS, Mullens Pond East Cholderton WPS, to Furzedown Lane Amport WPS, to Monxton WPS, to Little Ann Bridge WPS and then to the terminal pumping station of Anton Lane WPS, ending up at Fullerton WTW for treatment.

1.1.1 Stanbury Road Fyfield WPS sub-catchment

2.1.1 MHs that will require manual checks:

Kimpton

MH1701 – W3W ///tiger.strapping.look
MH1601 – W3W ///clips.copy.huddling
MH2601 (SLM) – W3W ///universes.marsh.offline
MH1501 – W3W ///wand.instead.disarmed

2.3 WPS Health Checks

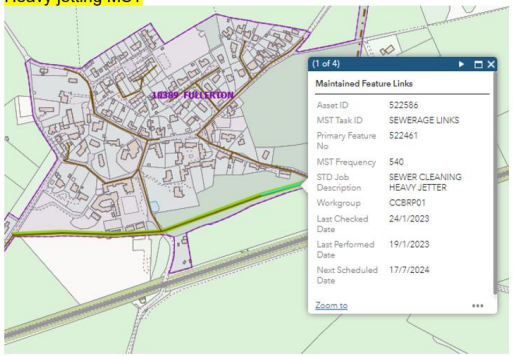
Pre-groundwater season health checks will be raised by the Proactive Control team from the end of August planned in by P&S (Planning and Scheduling) into the weekly operators plans throughout September and October with a deadline of 31st October.
The affected WPS in the catchment are as below:

- Stanbury Road Fyfield WPS (H21)
- Mullens Pond East Cholderton WPS (H21)
- Quarley WPS (H21)
- Grateley Station WPS (H21)
- Grateley Village WPS (H21)
- Monxton WPS (H21)
- Cattle Lane Abbots Ann WPS (H21)
- Little Ann Bridge WPS (H21)
- Anton Lane WPS (H21)
- Anna Valley WPS (H21)
- Royal Oak Goodworth Clatford WPS (H21)
- Church Lane Goodworth Clatford WPS (H21)
- Goodworth Clatford South WPS (H21)
- Goodworth Clatford Station WPS (H21)

Playbook Content

2.4.2 Grateley Village WPS

Heavy jetting MST



3.2 Sewer Level Monitor (SLM) Monitoring

SLMs in the Pan Parish area which should be checked due to having history with MH levels going high as either a result of GW infiltration/rainfall or hydraulic overload:

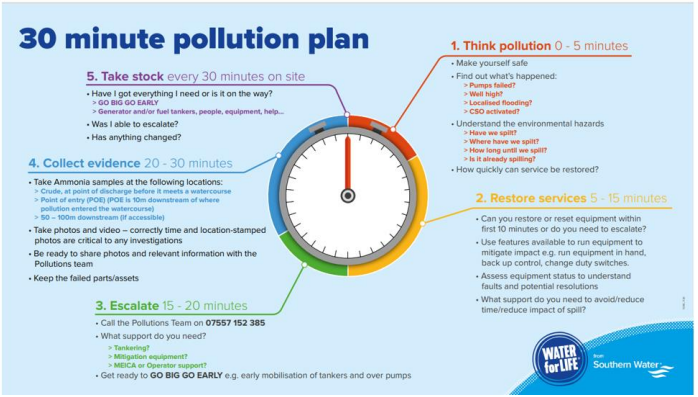
MH9402 - ///headers.warmers.greeting
MH7601 - ///operating.steers.blotchy
MH1702/1704 - ///picked.spider.adults - ///slide.chats.bench
MH3602 - ///worth.cages.vivid
MH7601 - ///swift.copies.transfers considerable risk of ingress and infiltration
MH1901 - ///noises.assist.chop - med risk
MH1903 - ///device.trim.shirts

Equipment required for tankering at Kimpton

- S100 Super silent Betsy pump
- 4-inch Bauer pipework
- 1-6 x 4k tankers
- Valve snifter to allow suction for tanker
- Fuel cube
- Heras fencing
- Acoustic soundproofing
- Traffic management as Deacon Rd will require closing to allow movement of tankers

Initial order requirements as above, however in response to flow levels, additional units may need to be requested with the original form updated.

The loading points for the tankers are:
Kimpton Village Green - MH1701 – W3W ///tiger.strapping.look



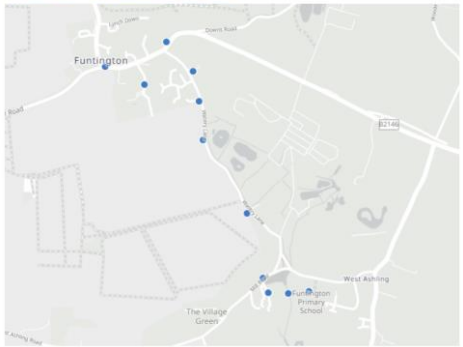
Playbook Content

4.1 Anti-flood devices

Below is a list of anti-flood devices (AFD's) within the Pan Parish area which have been installed in response to customers historically being flooded as a result of groundwater infiltration:

[redacted]

Figure 3.2.1 – Live SLMs in Funtington



7 Stakeholder Requirements

Southern Water to maintain a collaborative relationship with stakeholders within the Bosham area through proactive communication and regular updates.

7.1 Parish Council

The Parish Council must be kept updated of all tankering and flow management and investigation activity. The Hampshire Groundwater team will engage with the Stakeholder Manager through defined weekly call structure to send out proactive comms.

Funtington Parish Council - Parish Councillors - Funtington Parish Council (funtingtonpc.org)

7.2 Local Council

The Groundwater Stakeholder Manager will also seek to proactively communicate with the local council - Chichester City Council – The Parish Council for the City of Chichester

7.3 Environmental Agency

There will be weekly calls set up with the Environment Agency. These will be a platform for any escalations that need to be communicated and to provide updates.

WPS Health Check Checklist

Site name:			Date Completed:	
Checks	All OK? (Y/N)	Work Required (Y/N)	Photo Taken (Y/N)	Comments (Follow on raised/work carried out)
NON RETURN VALVES: Inspect NRV's for Rag/Grit build up, check operation of NRV's (Are they Opening/Closing), Check pipework is clear				Photo Mandatory
GATE VALVES: Check gate valves are fully open, check gate valves are operational (Do they open & isolate ok?)				Photo Mandatory
AIR RELEASE VALVES: Strip & clear ARV's, check pipework is clear into ARV & check pipework is clear from ARV to wetwell				Photo Mandatory
SOCLA BALLS: Inspect/replce SOCLA balls within ARV				Photo Mandatory
HIGH LEVEL FLOAT (CLEAN?/E2E TEST) Carry out an E2E test, clean float(s), check float(s) is clear of obstruction				Photo Mandatory
LEVEL CONTROL: Check Milltronics head/float(s) are clean & operating pumps are set at parameters				Photo Mandatory
DUTY SELECTOR SWITCH OPERATION: Do the pumps switch over when Pump failed/isolated/not available				
LIFT/INSPECT PUMPS: Check for blockage, Impeller/wear plate condition checked, any sign of leaks? (Mech seal/volute/inspection covers)				Photo Mandatory
PUMP GREASING/LUBRICATION: Grease pumps, change auto greasers, check grease points				
START/STOP LEVELS MONITORED (CORRECT LEVELS?): Check if pumps are pumping the level down too low, are pumps starting at a high level backing up into network?				
WET WELL CONDITION (CLEAN REQUIRED?): Scrape wet well of any fat buildup, is an MTS clean required?				Photo Mandatory
PIPEWORK CONDITION: Check inlet, delivery & rising main pipework for leaks, corrosion and general condition				Photo Mandatory
DRY WELL CONDITION: Check sump pump operation, clear water and debris from dry well to avoid access issues				Photo Mandatory
STORM TANK? (EMPTY/CLEAN?) Check storm tank is empty and clear/clean if required (IF APPLICABLE)				Photo Mandatory
FLOW METER? MEETING PERMIT REQUIREMENT? The flowmeter reading? Is the PFR flow within Permit?				
***PHOTOGRAPHIC EVIDENCE DATE & TIME STAMPED OF ALL CHECKS CARRED OUT SENT TO FPM**				
***RAISE FOLLOW ON WORK ORDERS AS REQUIREDFOR ASSET MAINTENANCE & REPORT TO FPM WITH WO NUMBERS.**				

Summer readiness

Ops Ar	Catchment	WPS / Net	Site	Location	/// What3words	Action	RAG	Due date	Owner
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Onsite CCTV		30/09/2024	FC
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Critcal spares - Pump			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Critical spares impeller			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Flow Meter			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Skim loading installation			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Welfare assessment	NA		
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Welfare upgrade	NA		
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Customer assessment			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Customer measures			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	TM/Access/Parking assessment			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	TM/Access/Parking measures			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Site safety/security assessment			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Pre season health check			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Health check actions			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Pre-season wet well clean			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Perm pump upgrade			
H21	Pan Parish	WPS	Furzedown Lane Amport WPS	Wet well	///salaried.unleashed.expressed	Temp pump upgrade	NA		
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	Skim loading installation			
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	Welfare assessment			
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	Temp welfare plan			
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	Customer Assessment			
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	Customer plan			
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	TM/Access/Parking assessment			
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	TM/Access/Parking plan			
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	Site safety/security assessment			
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	Pre-season jetting defined			
H21	Pan Parish	Network	Manor Farm Abbots Ann	MH 0800	abolish.stubbed.increment	Pre-season jetting completed			

Updates from 03 May 2024 Meeting

- Overpumping Regulatory Requirement & Triggers – FC
- Road Reparations
  - Mullens Pond – Awaiting Planning Permission.
  - Furzedown Lane – Work Order Raised to “Make Good.”
- Automation of Mill Lane Valve
  - Currently in the Scope and Quote phase. Potential suppliers engaged.
  - The system is intended to be battery powered and mains if available.
  - Full remote control and powering.
- Manor Farm Signage. In Progress with GM.

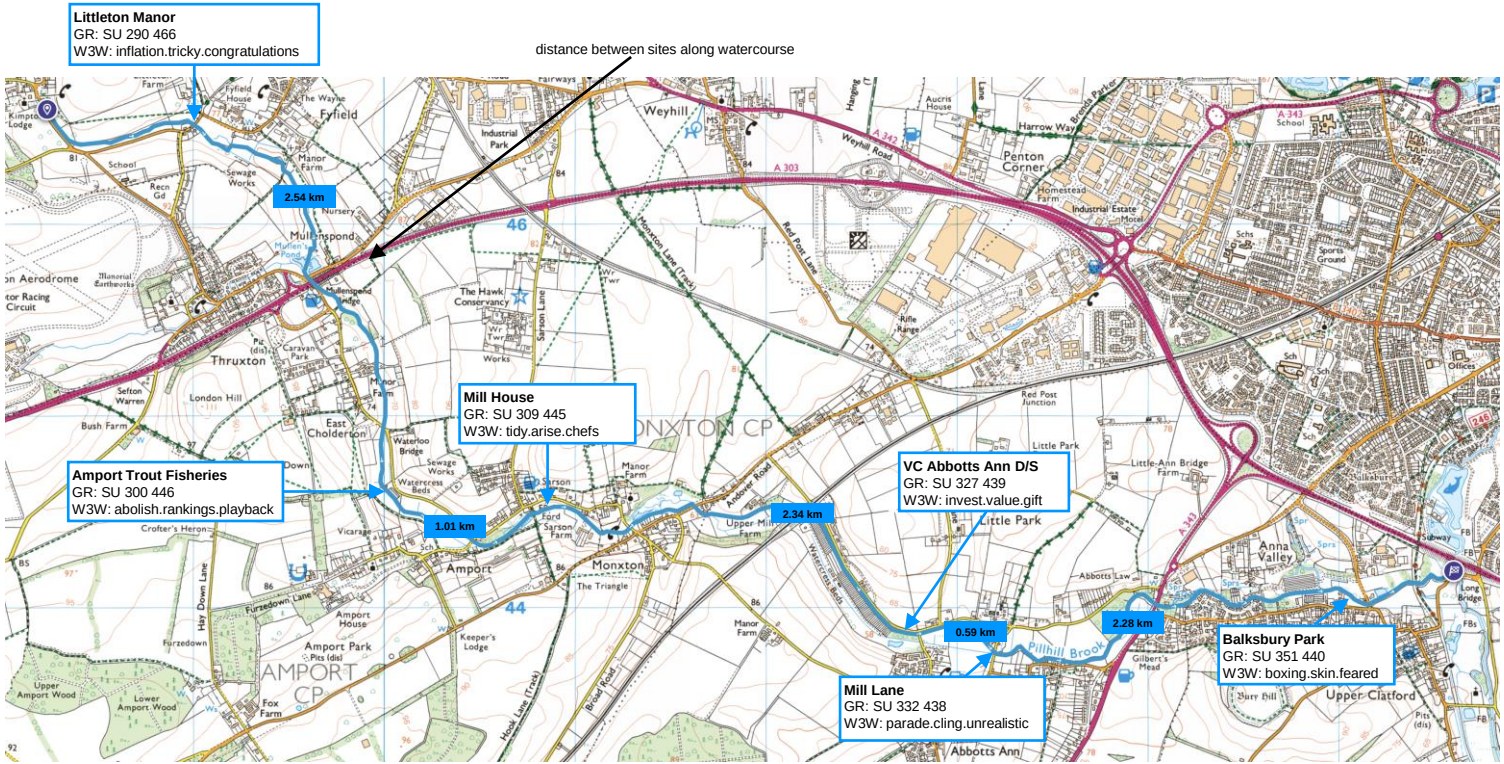
Foundry Farm Project

- 22nd April – 21 June 24
- Sludge Removal (300 – 600mm)
- Full Collaboration with the EA
- Fish Recovery and Daily Sampling

Ecology survey and sampling results update

Pillhill Brook Association
June 2024

6 Monitoring Sites



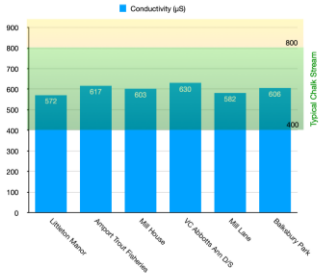
May Results

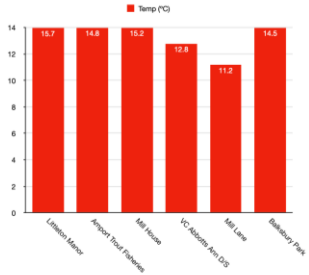
Invertebrate Counts for May 2024

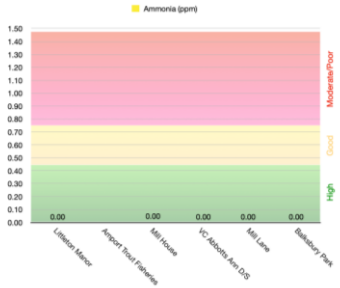
Invertebrate Score	Littleton Manor	Amport Trout Fisheries	Mill House	VC Abbotts Ann D/S	Mill Lane	Balksbury Park
Cased Caddis	124	350	50	17	1	225
Caseless Caddis	0	5	0	1	0	0
Mayfly (Ephemeridea)	1	0	1	0	0	51
Blue-winged Olive (Ephemerellidae)	25	20	150	7	1	67
Flat-bodied Stone clinger (Heptageniidae)	1	0	0	1	0	1
Olive (Baetidae)	18	120	300	221	28	230
Stoneflies (Plecoptera)	4	1	1	0	0	0
Freshwater shrimp (Gammaridae)	0	1000	90	63	18	460

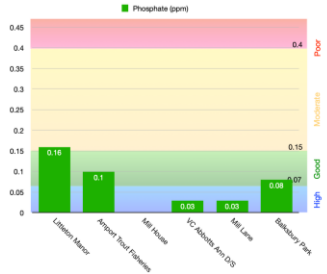
Water Quality Results for May 2024

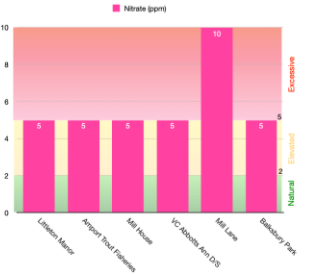
Site	Conductivity (µS)	Temp (°C)	Phosphate (ppm)	Nitrate (ppm)	Ammonia (ppm)
Littleton Manor	572	15.7	0.16	5	0.00
Amport Trout Fisheries	617	14.8	0.1	5	0.00
Mill House	603	15.2	0.00	5	0.00
VC Abbotts Ann D/S	630	12.8	0.03	5	0.00
Mill Lane	582	11.2	0.03	10	0.00
Balksbury Park	606	14.5	0.08	5	0.00











What next?

- Establish Pillhill Brook ecological baseline
  - monthly monitor invertebrate abundance and water quality along length of brook
- Gather other ecological data for comparison
  - Wild Fish SmartRivers data
  - SW biannual ecology data
  - EA data
- Build plan to care for and protect what we have

Accelerated Funding

Option (CapEx - £m)	Number of overflows in scope	Outcome Annual spills reduction (base year average of 2020 & 2021)	Output		
			Non-permeable Area Managed (hectares)	Number of wetlands (#)	Sewer relining (km)
£35	30	420	50 - 80	4	5 - 7

Objectives

Pan Parish Forum. Protect the Environment and stop the disruption.

WATER for LIFE from Southern Water

Seal Everything

Thruxton, Kimpton, Fyfield & East Cholderton

Aim: no tankering from these villages

Scope:
Seal leaky public sewers – 4.5km
Seal public manholes – 134
Seal private drains – 559 properties (~8.4km)
Scan remaining public sewers – 1.9km

Aspiration: completion by Nov '22

Expectation: Seal Thruxton and Kimpton by Nov '22, follow with Fyfield & E Cholderton by Nov '23

Seal Public Defects

Amport & Monxton

Aim: no infiltration into the public network. Learn from "seal everything" villages and monitoring.

Scope:
Seal leaky public sewers – 1.4km
Seal public manholes – 65
Scan remaining public sewers – 3.2km
Monitor impact of upstream work
Plan future private drain sealing if required

Aspiration: sealing completed by Nov '22

Expectation: TBC

Investigate Everything

Weyhill, Abbotts Ann & Little Ann

Aim: understand how much infiltration can occur into the public network. Learn from monitoring and other villages.

Scope:
Scan public sewers – 10.4km

Aspiration: scans completed by Nov '22

Expectation: scans carried out between May '23 and Nov '23 (TBC)

Monitoring

All villages

Aim: Improve understanding local groundwater levels. Improve understanding on where infiltration is entering the network. Improve speed of reactive maintenance. Evidence suitability of sealing technique.

Scope: Observation boreholes and improved groundwater model
Temperature sensing
AMP cycle electro scan programme

Aspiration: Monitoring in place for Nov '22.

Groundwater Levels

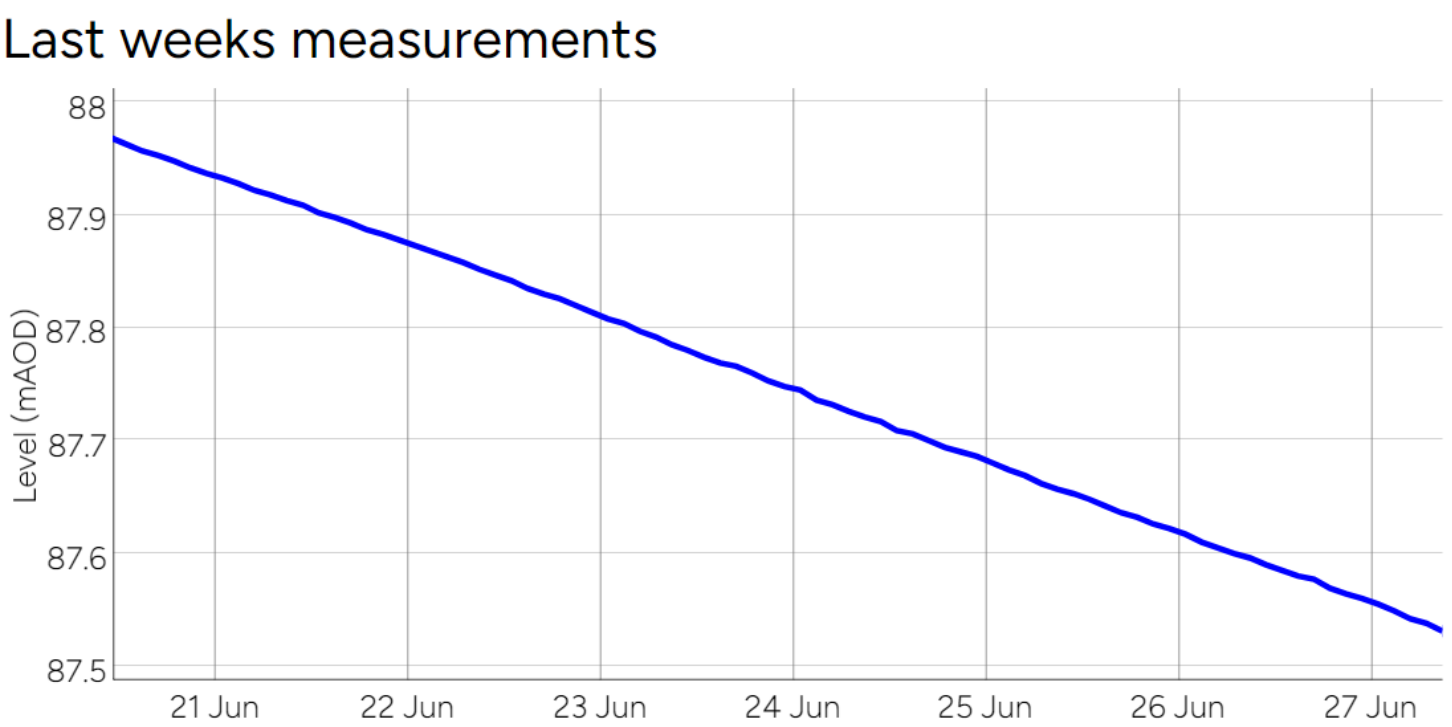
Monthly GW levels (m AOD or Above Sea Level)

Week	Amport Rainfall (mm)	Clanville Gate* (101.55 AOD)	Change	High View Kimpton	Change	Stanbury Road (76.63 m AOD)	Change	Mullens Pond (69.35 m AOD)	Change	Monxton (62.52 m AOD)	Change
6/1/23	22.0	81.07	↑	82.71	↑	-	-	-	-	-	-
3/2/23	88	85.55	↑	85.30	↑	76.11	-	69.03	-	61.80	-
3/3/23	6.2	85.45	↓	84.88	↓	76.04	↓	68.96	↓	61.68	↓
7/4/23	97.0	86.31	↑	85.75	↑	76.11	↑	69.06	↑	61.74	↑
5/5/23	59.2	86.87	↑	85.88	↑	76.14	↑	69.07	↑	61.81	↑
2/6/23	33.0	86.97	↑	85.50	↓	76.14	=	69.02	↓	61.75	↓
7/7/23	42.3	85.46	↓	84.00	↓	76.10	↓	68.93	↓	61.60	↓
4/8/23	135	84.58	↓	83.50	↓	76.05	↓	68.89	↓	61.57	↓
1/9/23	40	83.66	↓	83.83	↑	76.00	↓	68.87	↓	61.56	↑
6/10/23	90.5	82.68	↓	82.73	↓	75.94	↓	-	-	61.65	↑
3/11/23	212.6	84.27		83.85	↑	76.21		-	-	61.94	
1/12/23	84.0	86.77	↑	86.00	↑	76.22	↑	-	-	61.92	↓
5/1/24	190	90.03	↑	87.25	↑	76.34	↑	-	-	61.98	↑
								Haydown Fm (75.4 m AOD)			
2/2/24	42	90.68	↓	86.88	↓	76.33	↑	74.12	↓	61.89	↓
1/3/23	128	91.05	↑	87.21	↑	76.33	↑	74.13	↑	61.94	↑
5/4/24	149.2	91.33	↑	87.40	↑	76.36	↑	74.19	↑	62.00	↑
3/5/24	50.5	90.59	↓	86.83	↓	76.27	↓	74.10	↓	61.91	↓
7/6/24	49.5	88.74	↓	86.03	↓	76.16	↓	73.80	↓	61.75	↓
14/6/24	4.0	88.34	↓	85.81	↓	76.15	↓	73.74	↓	61.74	↓
21/6/24	7.0	87.92	↓	85.54	↓	76.13	↓	73.68	↓	61.71	↓

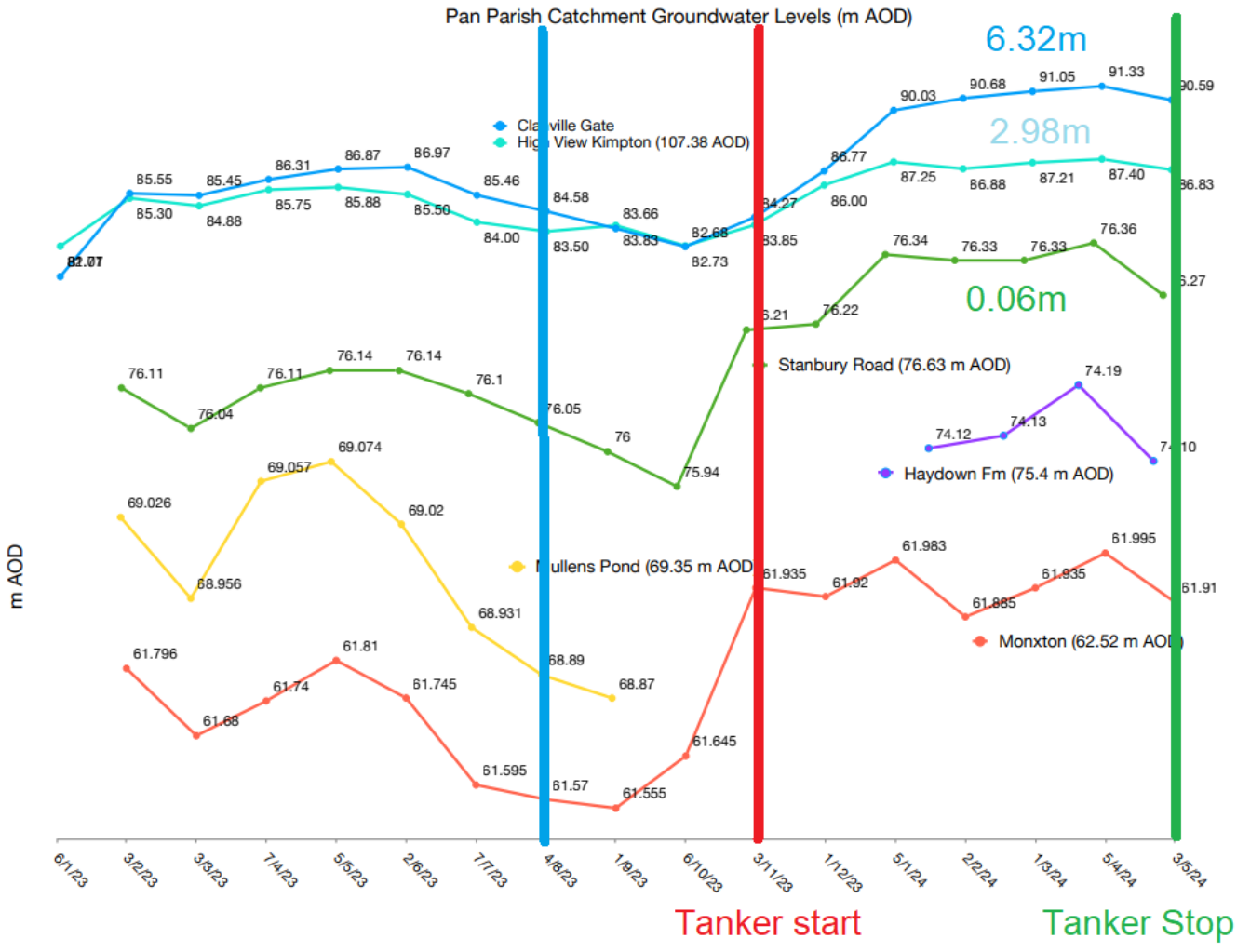
from Southern Water

Clanville Gate – Trigger 84m

Current Level: 87.53 m



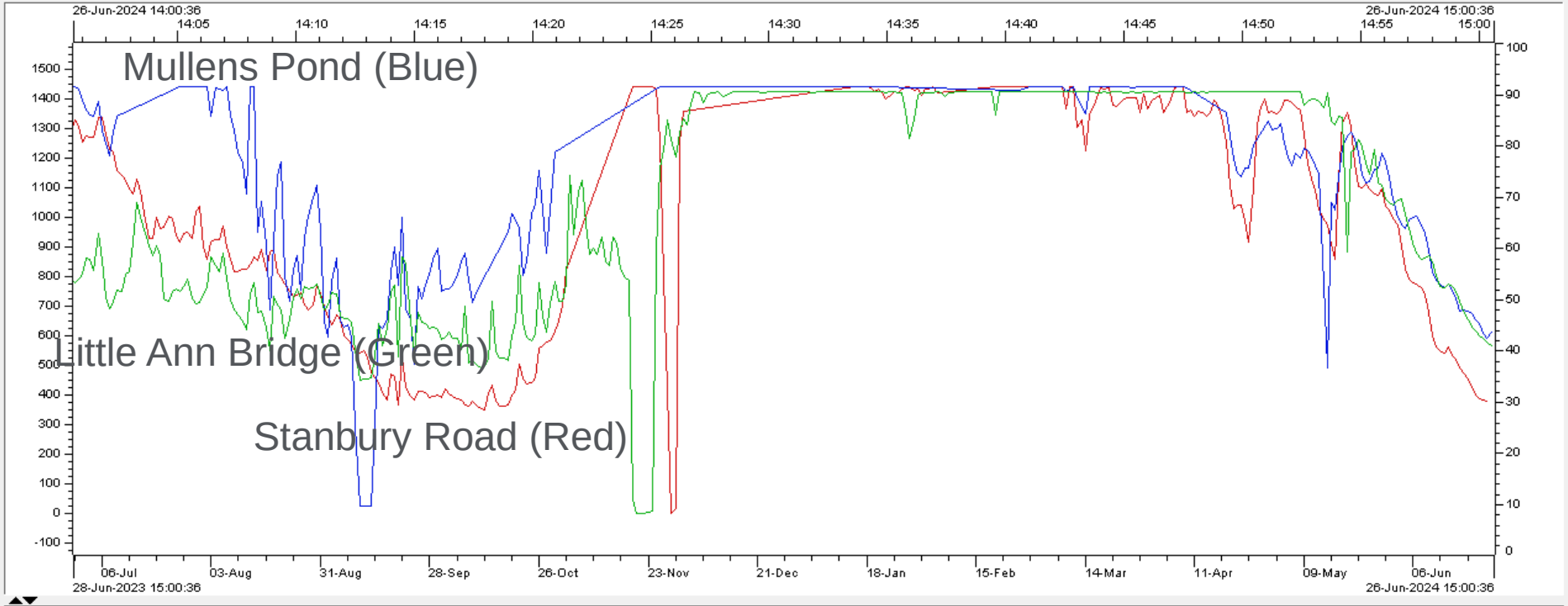
from Southern Water



from Southern Water

Trend View

Trend View

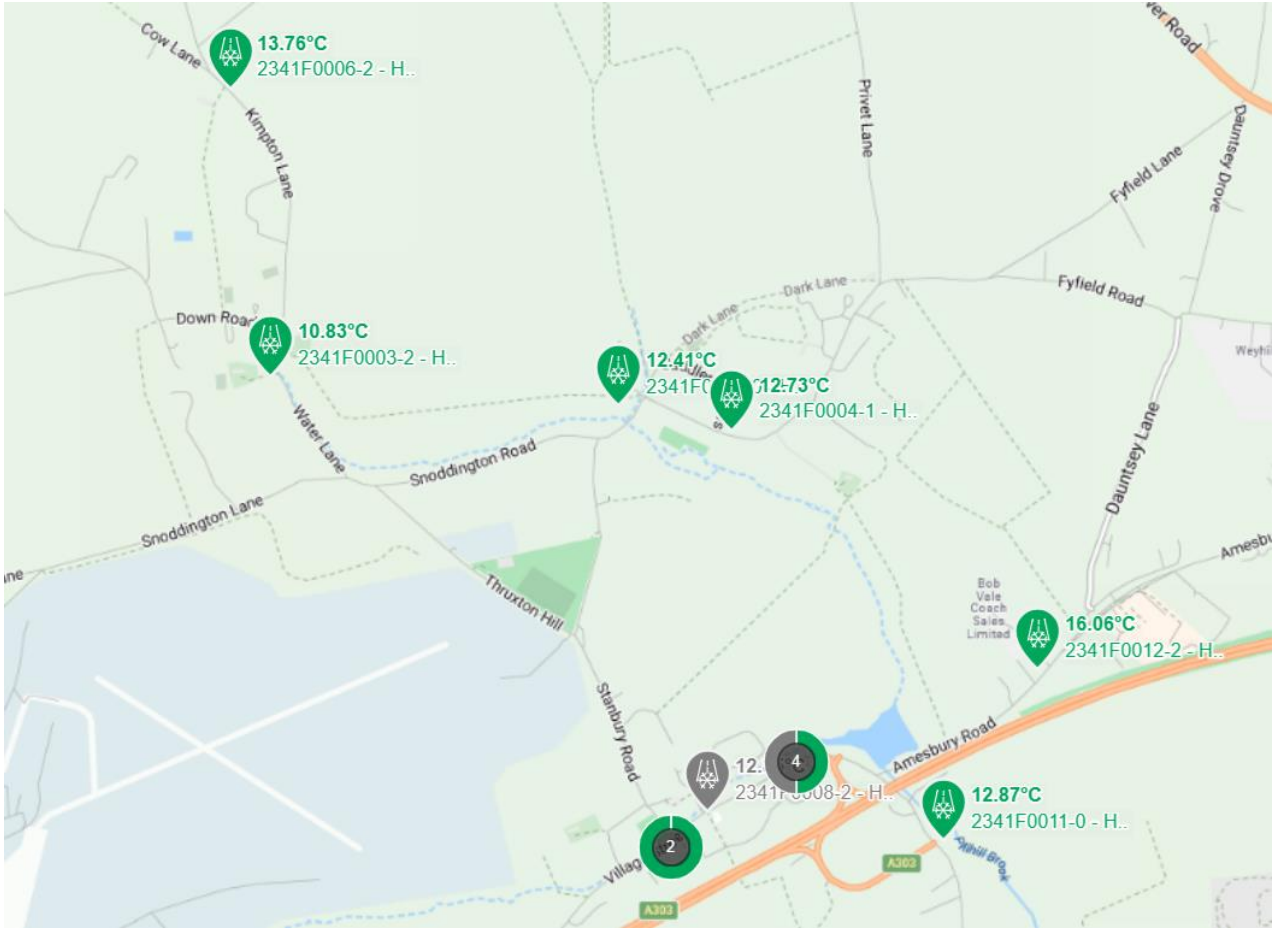


Trend	Server	Stream	Works	Process	Function	Asset	Tag Name	Address	Data Type	Intersect Time	Intersect	Max
	otterbarh	OTTERB E_VALUE	STANBURY ROAD FYFIELD ...	DRAINAGE	PUMPING|CONDI...	DAILY TOTALS	STRDFYFIWPS OP STATUS ...	E2098	Raw Data			
	otterbarh	OTTERB E_VALUE	MULLENS POND EAST CHOL...	DRAINAGE	PUMPING|CONDI...	DAILY TOTALS	MUPOECHOWPS OP STATU...	E2574	Raw Data			
	otterbarh	OTTERB E_VALUE	LITTLE ANN BRIDGE WPS	DRAINAGE	MONITORING|CB...	DAILY TOTALS	LANNBRIDWPS OP STATUS ...	E13802	Raw Data			

Requests Complete

Default (Global) (Modified) (Modified)

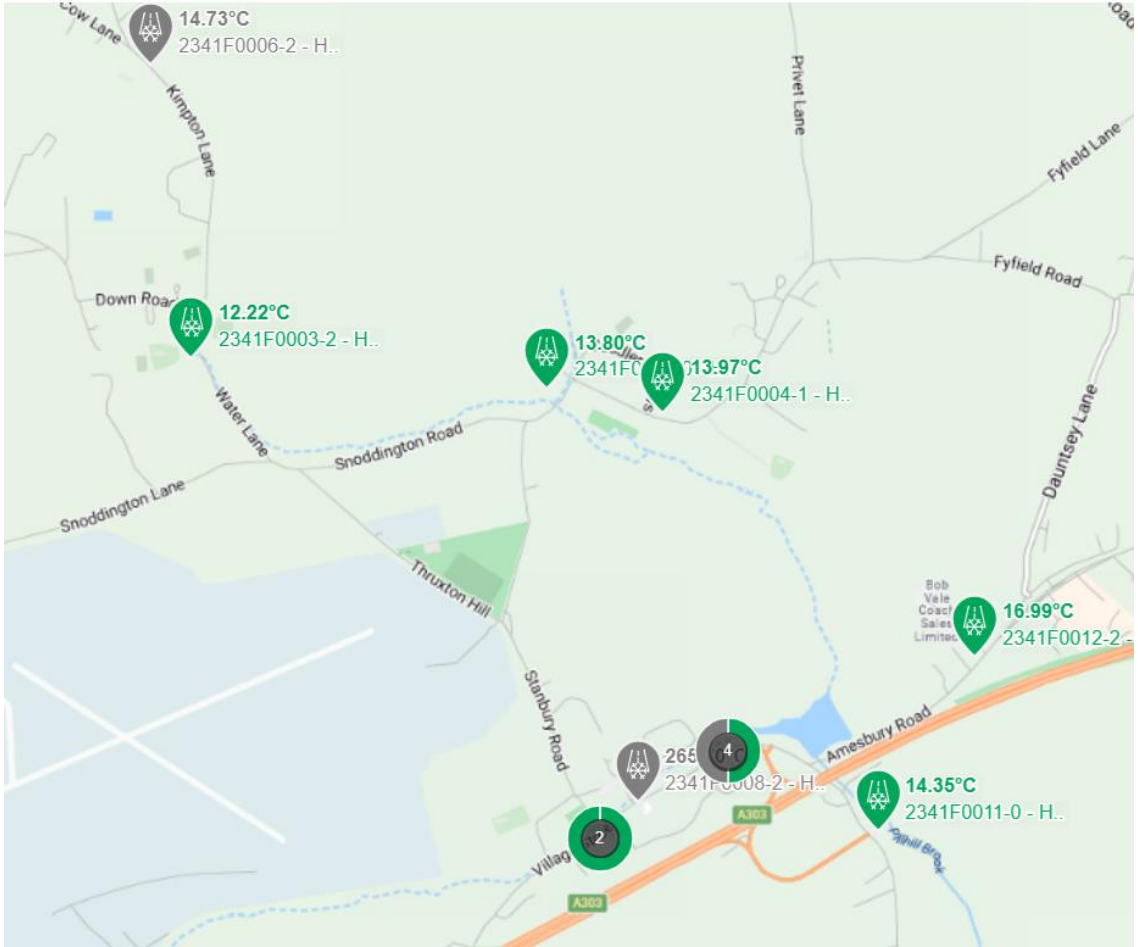
Temperature sensors north 3.5.24



WATER for LIFE

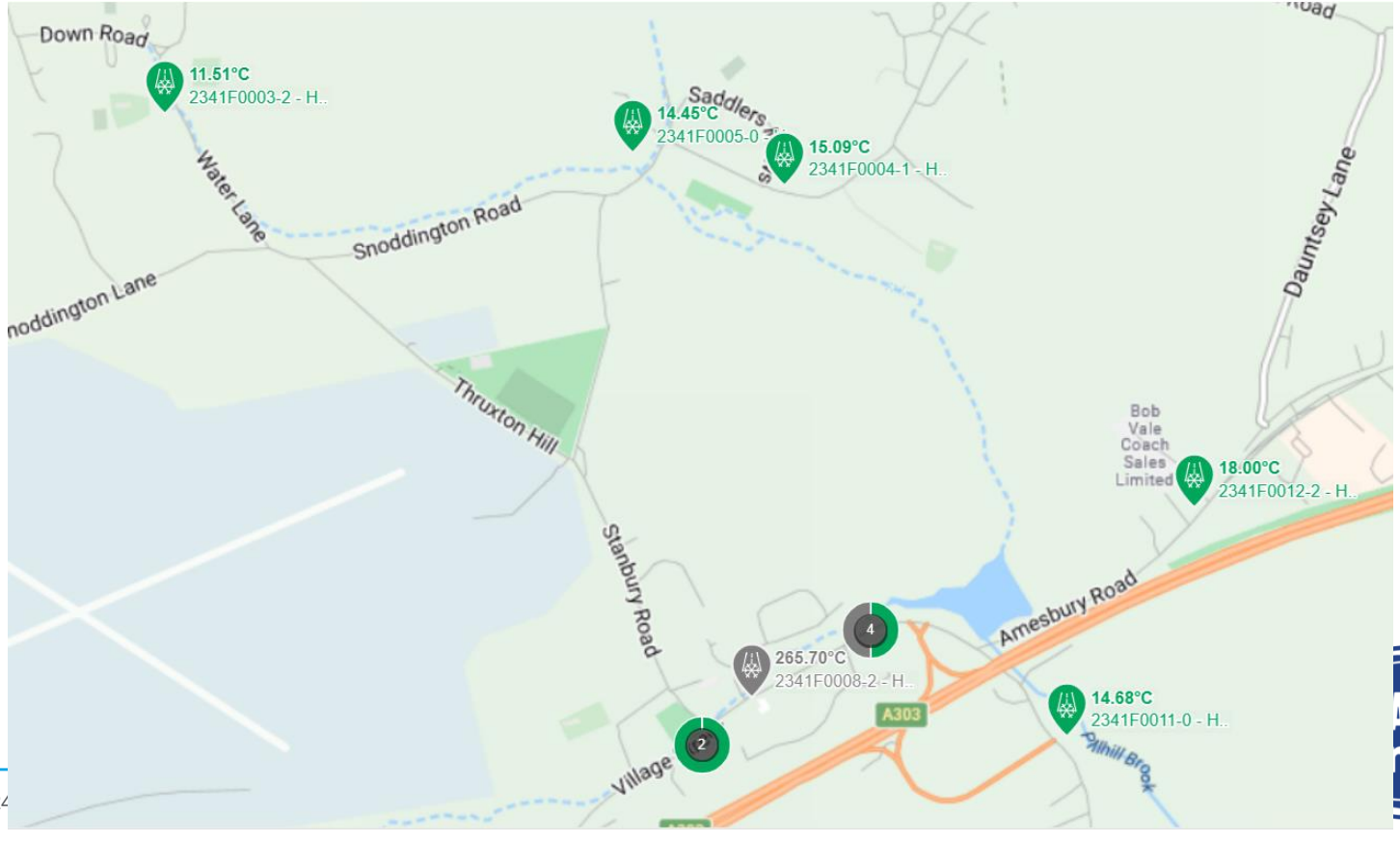
from Southern Water

Temperature sensors north 7.6.24



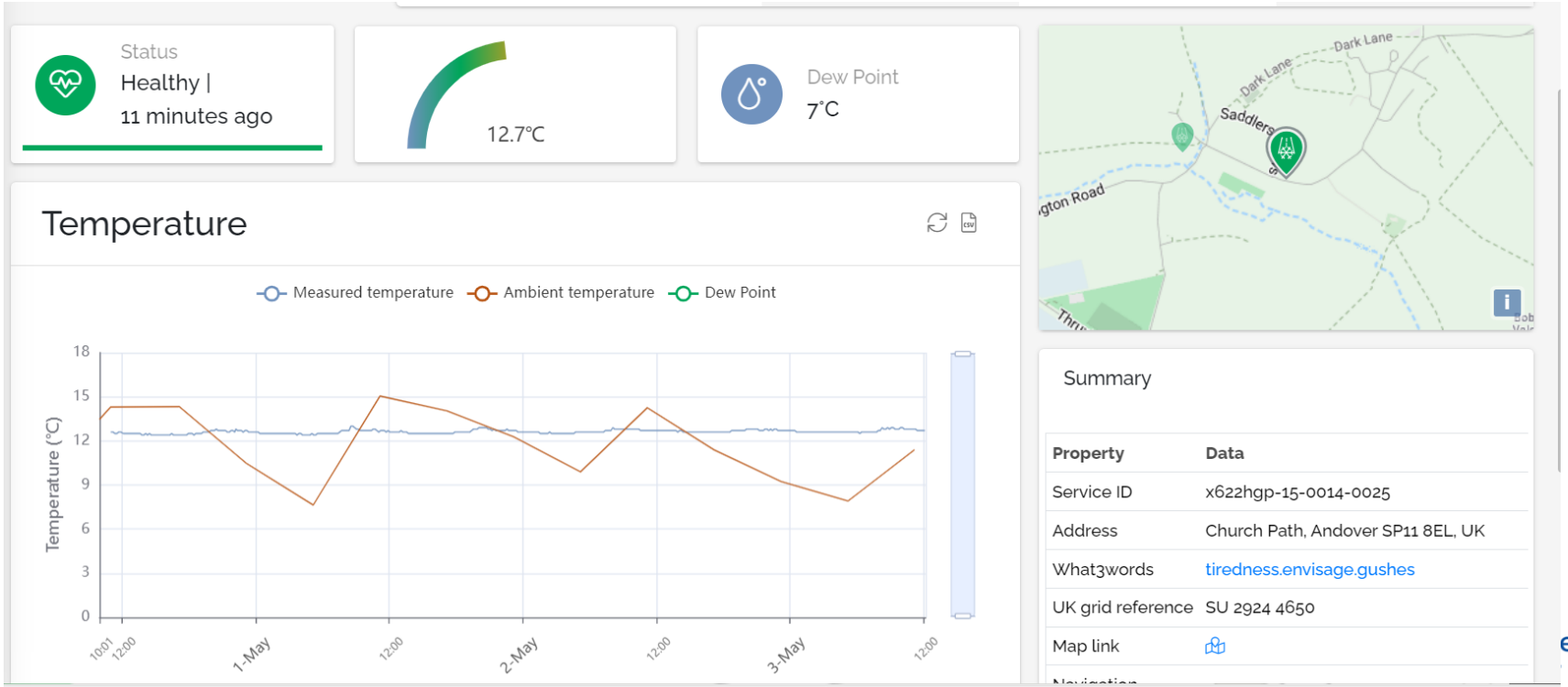
from Southern Water

27.6.24



from Southern Water

Fyfield 3.5.24

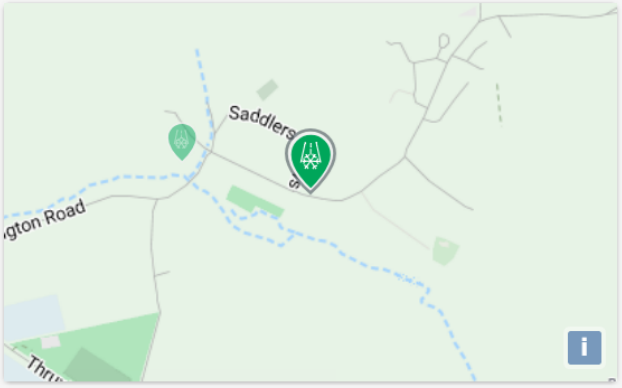


Fyfield 7.6.24

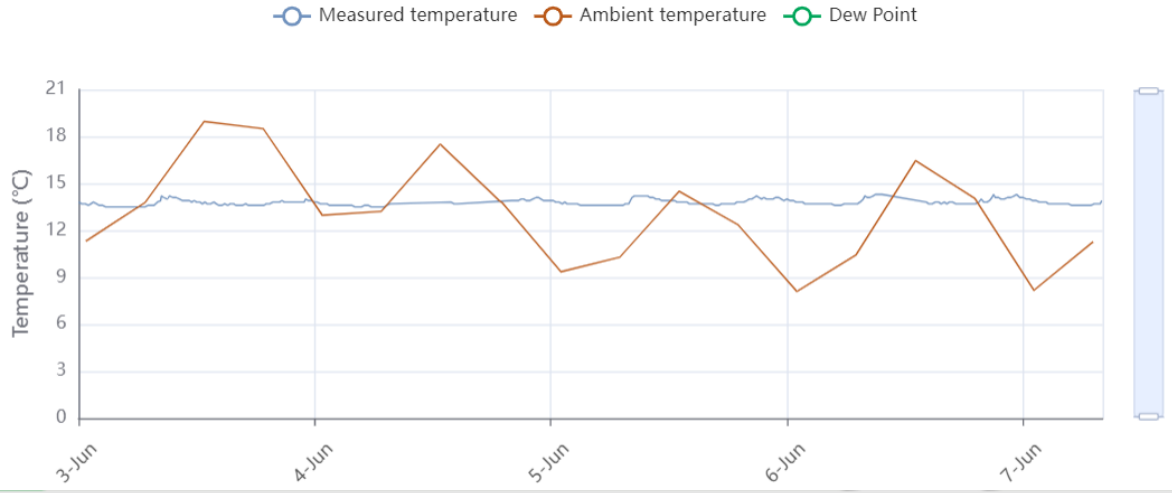
Status
Healthy |
1 hour ago

13.6°C

Dew Point
9°C



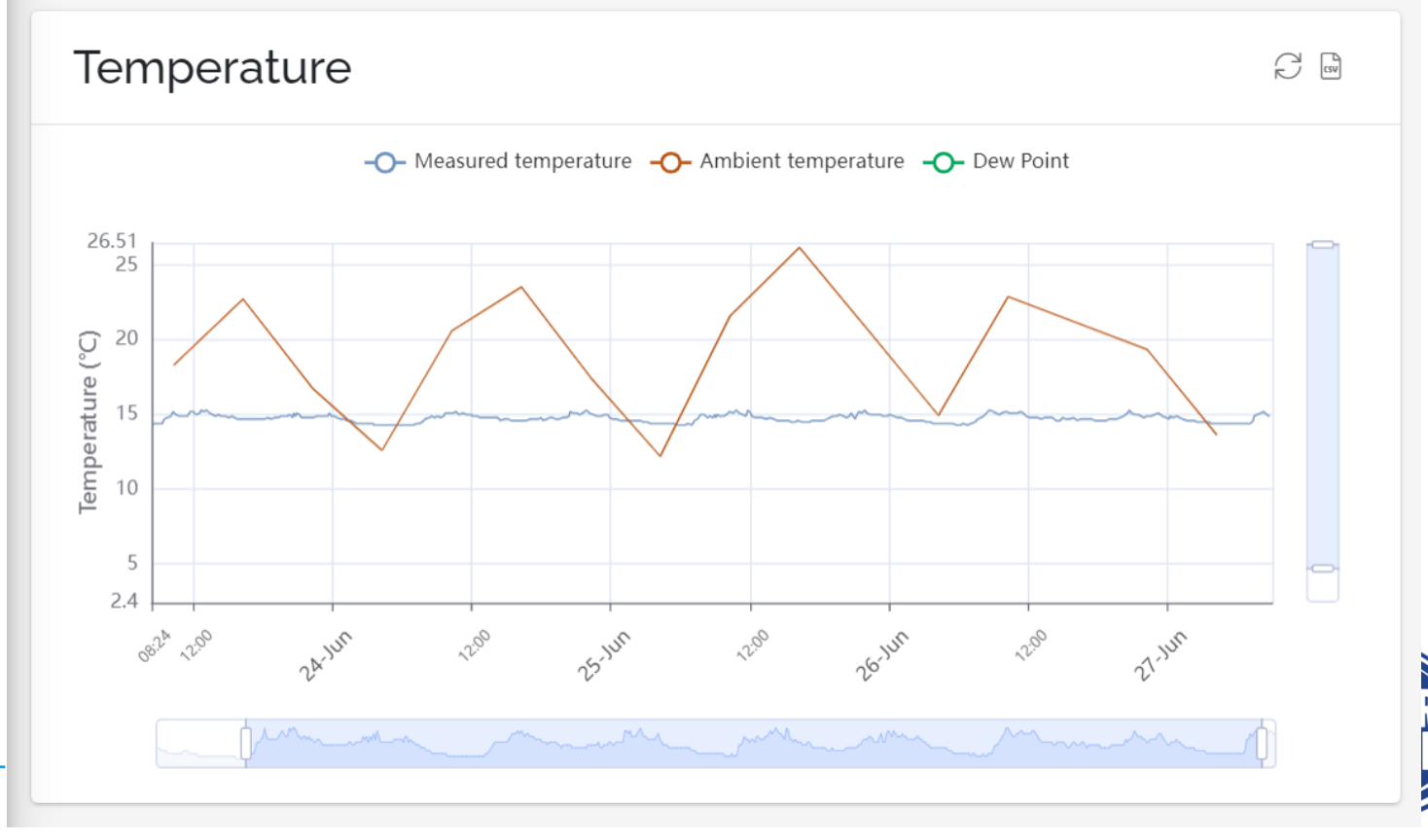
Temperature



Summary

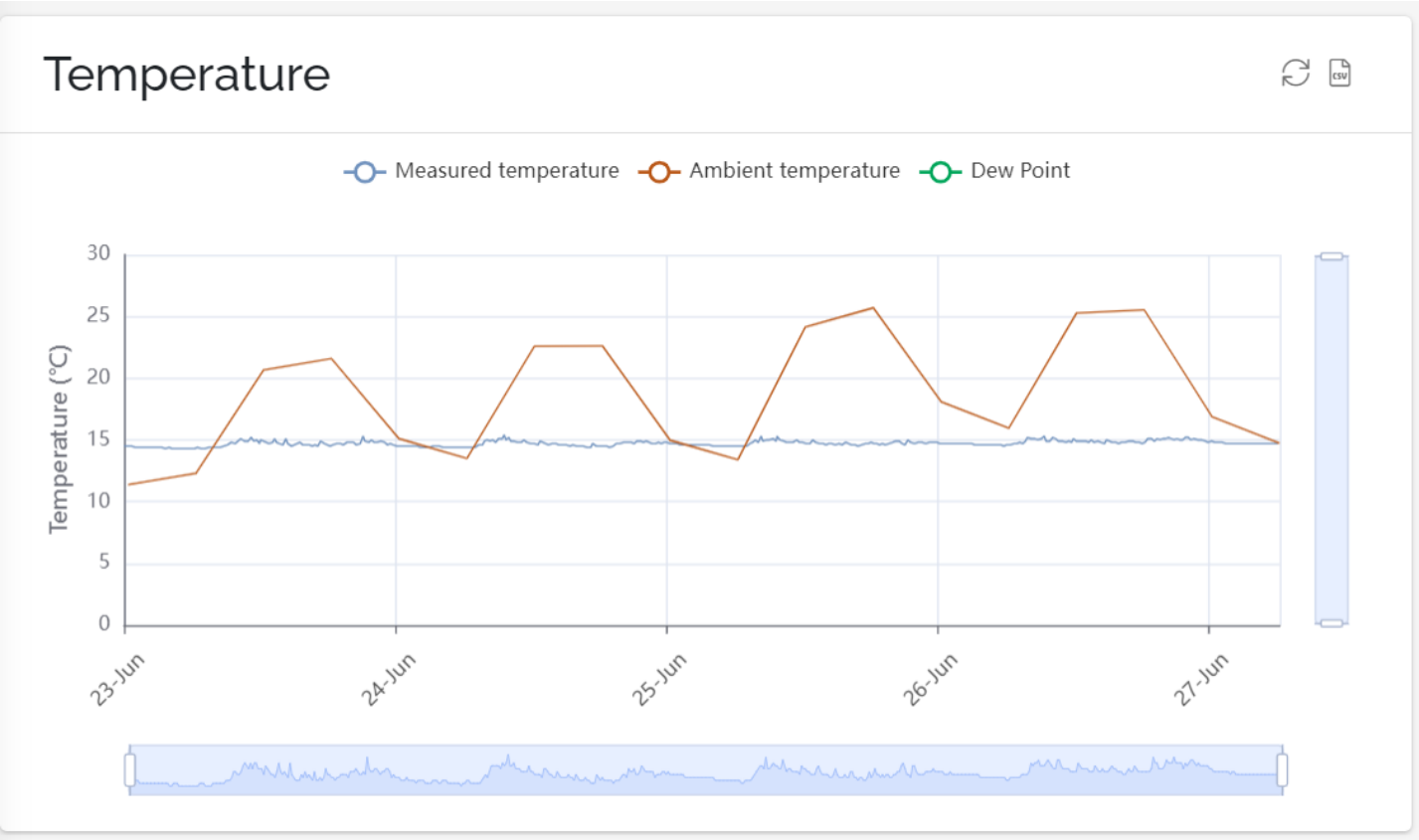
Property	Data
Service ID	x622hgp-15-0014-0025
Address	Church Path, Andover SP11 8EL, UK
What3words	tiredness.envisage.gushes
UK grid reference	SU 2924 4650
Map link	

Fyfield 26.6.24



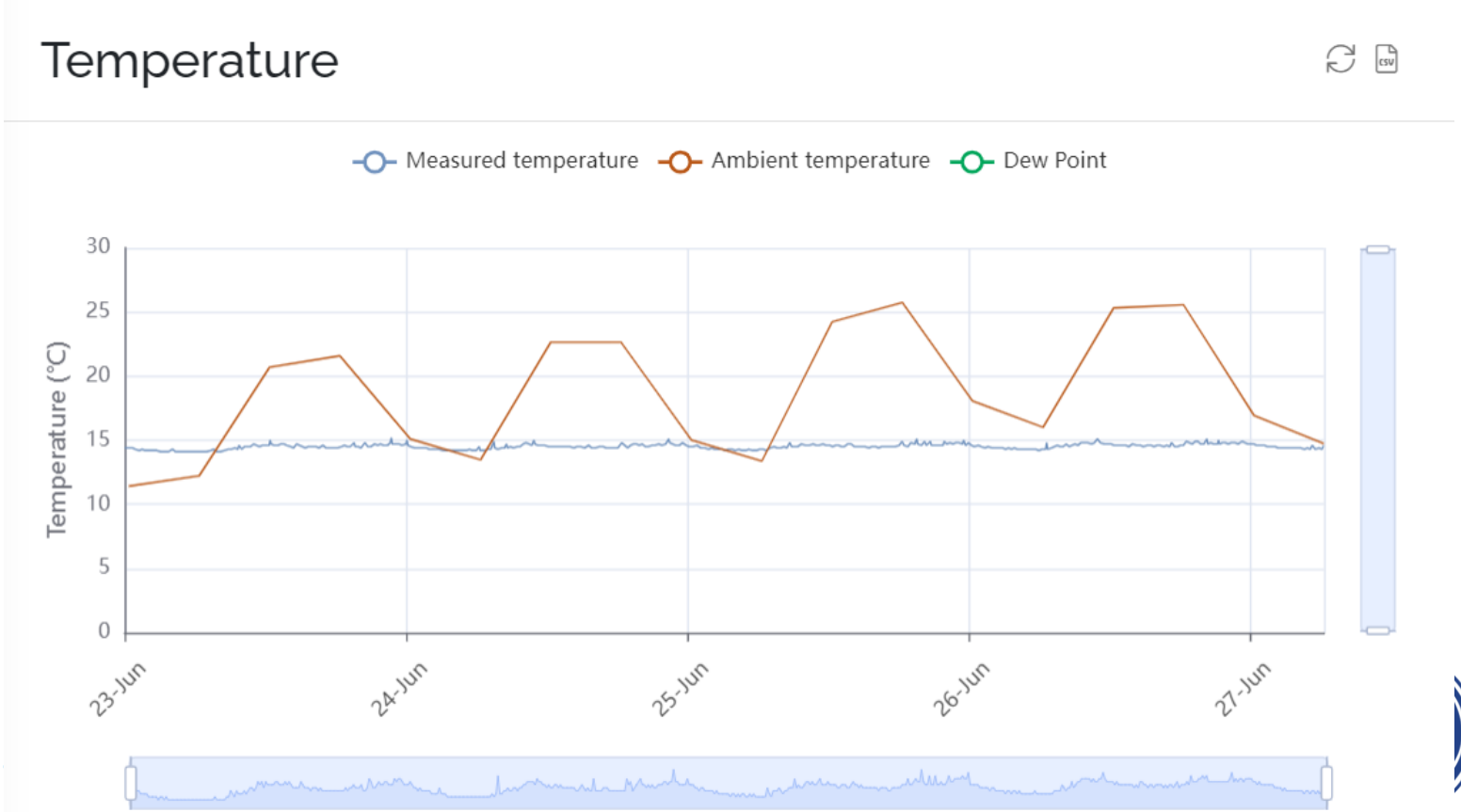
from Southern Water

Mullens Pond



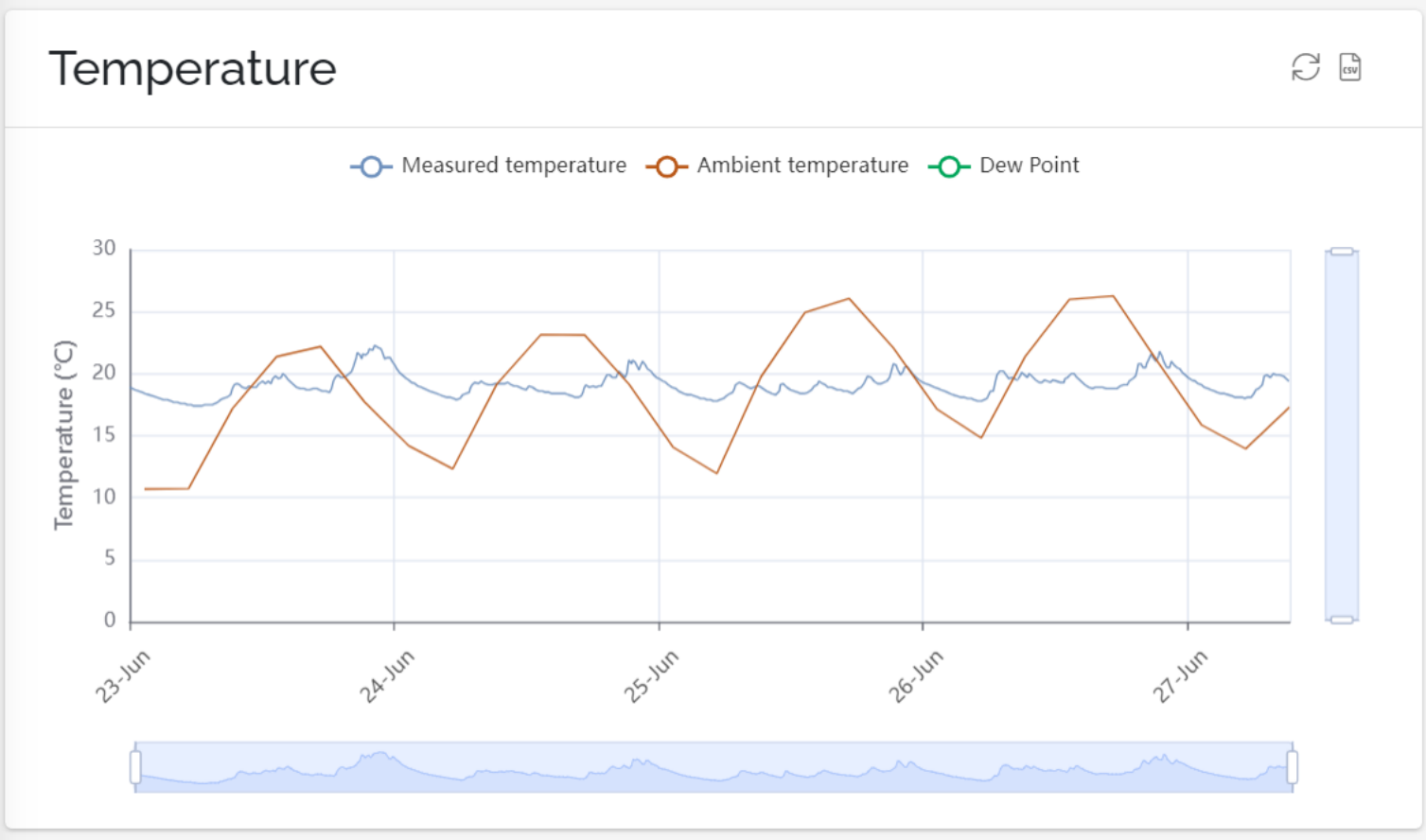
from Southern Water

Monxton



from Southern Water

Control in Quarley

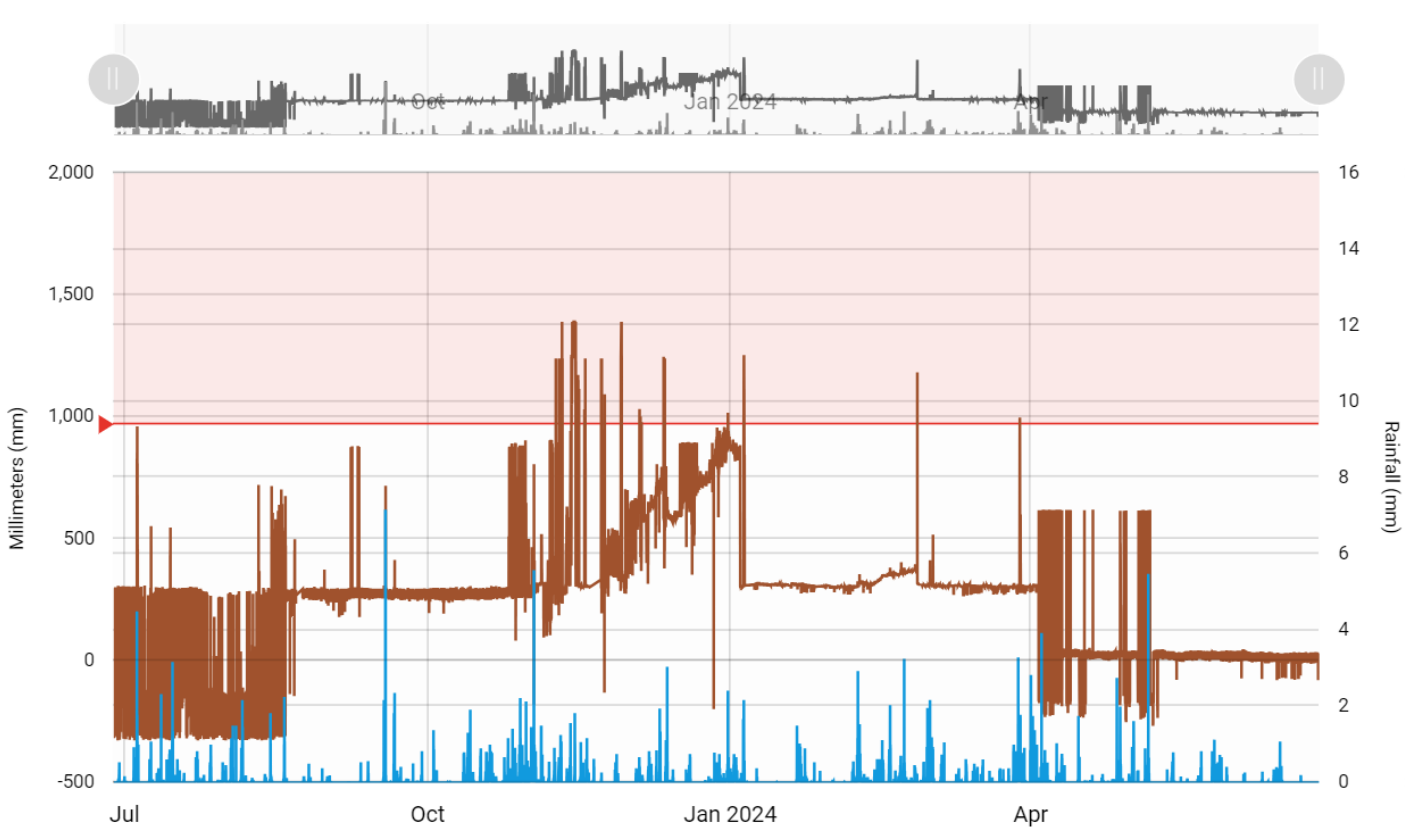


from Southern Water

Sewer level monitor data Kimpton

from Southern Water

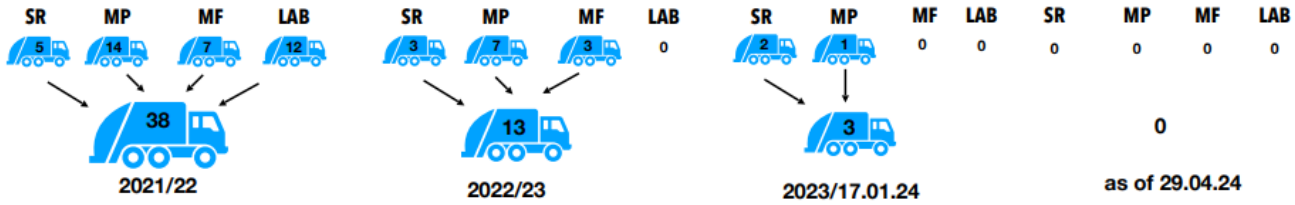
Thruxton



from Southern Water

Area	Action	How many	Specifics	When	RA
Pan Parish	Tubogel	Kimpton Fyfield E. Chold Thruxton **Total**	97/113 props 795/955m 128/146 props 1027/1187m 19/21 props 196/206m 57/178 props 439/1501m **301/458 props 2457/3849m – 112 props left**		
	Public sealing	Kimpton Fyfield Thruxton E. Chold Weyhill Monxton	570m 632m 1125m 39m 0 175m		
	Inspection cover sealing	120/134			
	GW level peaked at 91.5. Tankers stopped at 90.6 Vs trigger of 84m Total 4998m of sealing works. Ofwat target 5-7km				

Pillhill Pan Parish 3 yr Reduction in Tanker Deployment



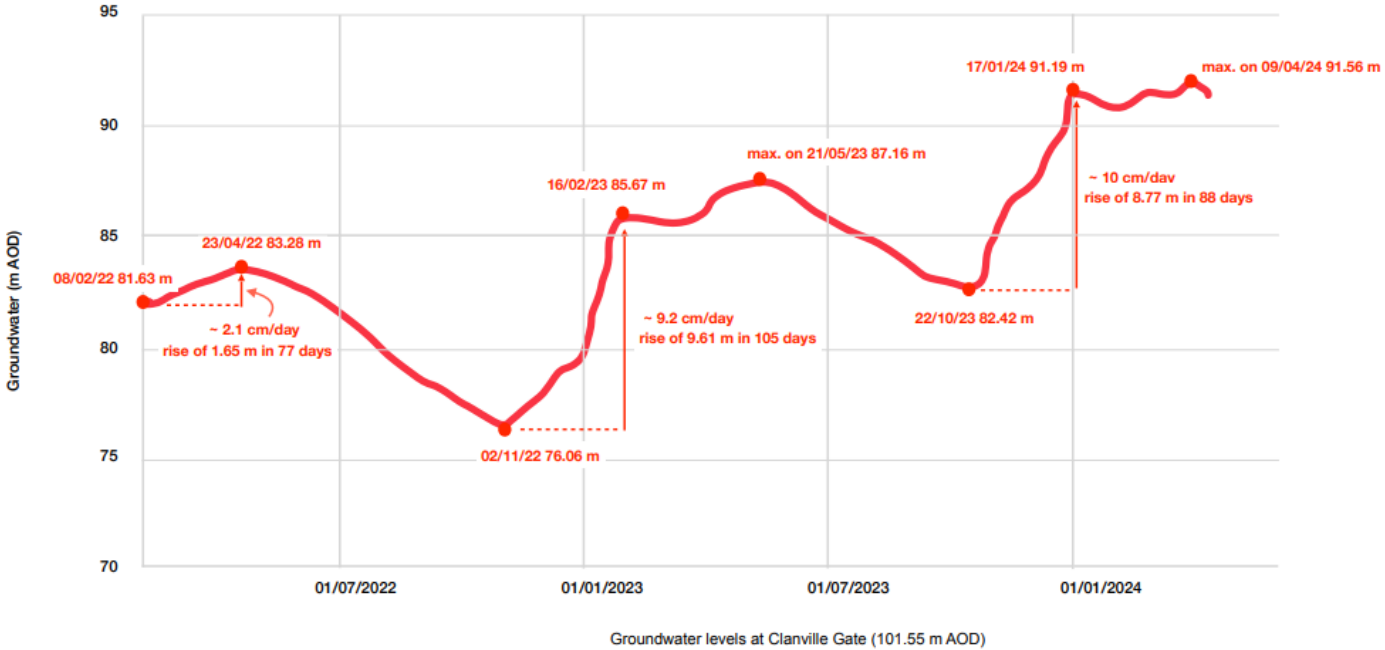
Tankering Sites

SR - Stanbury Road WPS

MP - Mullens Pond WPS

MF - Manor Farm Bell Valve

LAB - Little Ann Bridge WPS



What Happens Now?

- We share our learnings and change best practice
- Prepare a business case, financial, customer and environmental
- Monitor, learn and react
- Handover day-to-day responsibilities
- Wait for 84mAOD winter 2024.
- Thank the people who have supported us.

WATER for LIFE from Southern Water

PR 24 and AMP 8

- Purdah and election
- Revised timescale
- Our plans
- How PPPF has informed these plans