

SOUTHERN WATER/PAN PARISH FORUM

Notes from Quarterly Meeting held 10th August 2023

Present:

Southern Water	Local Parish Councils
Nick Mills - Head of Storm Overflow Taskforce Keith Herbert - Pathfinder Lead Glenn McCubbin - Project Engineer Joff Edevane - Wetland Lead	Chris Harris - Amport (PPF Chair) Beryl Vickers - Fyfield Phil Boyes - Fyfield Richard Munday - Thruxton Sally Leech - Quarley Mike Cleugh - Monxton
Wessex Water	John Heather - Abbots Ann Peter Heslop – Upper Clatford
Ruth Barden - Head of Environment (part-time)	David Drew - TVBC Cllr Harewood Ward Janet Wright - Secretary to PPF

Apologies received from:

Maureen Flood - TVBC Cllr Anna Ward
Phil Lashbrook - TVBC Chair/Bellinger Ward
Peter Christie - Thruxton PC Chair
Will Hawkings - Byass PPF Water Quality
Floyd Cooper - SW Operational Manager Hants

1. Welcome & Introduction:

Chris Harris (CH), Chair of Amport Parish Council, and co-chair of this body, opened the meeting with the following statement:

Welcome to Wiltshire, and welcome to everyone on this quarterly meeting of the PanParish Forum, the PPF. I am Chris Harris, Chair of Amport Parish Council, and I act as co-chair of this body. It is now over two years since the PPF first met; with Southern Water (SW), we have achieved a fair amount in the efforts to control groundwater infiltration into the sewage system, but there is a long way to go.

The PPF would specifically like to welcome Glenn McCubbin who is now an SW employee [wholeheartedly supported by the meeting].

Other than our regular list of topics to address, all on the agenda, the main purpose of today's meeting is to hear from Ruth Barden of Wessex Water on the topic of Wetland Learnings. With SW, we are proposing to have at least one wetland in our catchment, and we want to hear about the positives and the potential negatives – if any – of a wetland. So I propose, after a few comments from Nick, to hand over to Ruth.

With no comments on this statement from the Parishes **CH** handed over to **Nick Mills (NM)**, SW Head of Storm Overflow Taskforce, who took the opportunity to thank **Ruth Barden (RB)**, Head of Environment at Wessex Water (WW) for giving up her time to come and share her experience of the wetlands project here at Langford Lakes.

2. Wetland Information and Site Tour (RB)

The reed bed was constructed in 2010 within the Wiltshire Wildlife Trust's Langford Lakes Nature Reserve to address high levels of groundwater (GW) infiltration being experienced within the village catchment of Wylie, Hanging Langford and Steeple Langford. RB distributed some hardcopies of Wessex Water's Hanging Langford Operating Techniques Agreement - Evidence Pack dated May 2022 (an electronic copy provided separately with these meeting notes). Unlike the Pan Parish GW infiltration from private laterals is not a concern in this 3 village catchment.

RB explained that in the past during GW season pumps at the Hanging Langford Water Pumping Station (WPS) had regularly been beaten. Even with tankering in operation overpumping into the River Wylie [a Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI)] was necessary to prevent GW flooding of properties in the catchment. However with a small window of opportunity to carry out remedial work outside of GW season WW decided upon a wetland solution which has worked better than expected. With the WPS being at the gate to the nature reserve the Wiltshire Wildlife Trust, who are responsible for the surrounding lakes, influenced the location of the wetland within its boundaries.

RB admitted that at the time this was a novel solution and knowledge and expertise in this field limited. The wetland is approximately 75 m x 30 m x 1.45 m in size, ~ 3/4 of a football pitch. The area was cleared, bunded/lined to isolate it from GW infiltration and then the reeds planted on top of a layer of gravel. The reed bed is performing well, WW have seen a 40% reduction of suspended solids and a 85% reduction of E. coli. with no negative impact on the River Wylie itself.

RB stated that WW have a Storm Overflow permit but do not as yet have a numerical permit. WW are part way through the permitting process, the parameters of which will be dictated by the data collected and presented to the EA.

RB then took everyone on a tour of the wetland. This was a little disappointing as access to the reed bed was overgrown and the PPF could really only see the input channel.

A number of questions were asked.

- How did WW keep the reed bed wet?
RB replied that a wind pump had been fitted for this purpose but up until now it had not been needed. This was because a hole in a landowners water pipe had unknowingly been doing this job and this had only been discovered recently.



Wetland input channel with reed bed to the left

- Was the WPS discharge passed through a UV filtration process?
RB replied that as the diluted discharge travels along the input channel (see photo on previous page) it is naturally exposed to UV - the input channel is 1.5 m deep.
- How long does it take for the wetland process to work, lowering phosphate and ammonia levels?
RB stated that this was dependent on flow rates but normally between 8 - 20 hours.
- Was there any smell associated with the wetland operation?
RB replied that there was no smell as sewage is always diluted with GW.
- Had there been any push back from local residents or activist groups?
RB replied none. Local residents had been relieved that a permanent solution to the flooding had been implemented. The wetland had also had the added benefit of increasing local biodiversity

RB concluded by saying that given their time again WW would have built two wetland cells rather than a single one. Its current design means that the wetland cannot be taken offline for maintenance. Improvements are planned and a second cell will be added.

The group reconvened in the meeting room and **NM** again thanked **RB** for arranging the tour and giving up her time to lead it. **Janet Wright (JW)** asked if would be possible to organise another tour as some members of the Pan Parish had not been able to attend. **RB** said yes another tour could be organised, perhaps when the site had been cleared [RB then left the meeting].

CH asked if it was SW's idea to have more than one wetland in the Pan Parish catchment, further south? **NM** replied that, by addressing GW infiltration in the north of the catchment, a second wetland would not be required, and if the relining works fully addressed GW infiltration problems, this first wetland would serve as a backup to ensure that tankering/overpumping was avoided in the future. Funding for a full Pan Parish feasibility study had been granted and this was underway and scheduled to be completed within the next 18 months. **Mike Cleugh (MC)** remarked that once the wetland had been approved it should not be a lengthy or complicated process to build it. **NM** agreed and concluded by stating that a number of wetlands were planned across the SW region. **Joff Edevane (JE)**, SW Wetland Lead, introduced himself and stated that he would be responsible for this feasibility study and all subsequent wetland projects.

NM then handed over to **KH** who presented the following agenda:

1. Intro from Chris and Nick
2. Wetland Information and site tour (RB)
3. Flow restoration update (GM)
4. Weekly Monitoring Pack and analysis (KH)
5. Programme update (KH)
6. Actions, Questions and AOB

KH said that he had prepared a series of flip charts as he thought the meeting might be conducted outside [subsequently supporting material has been added to these notes].

3. Flow Restoration (GM)

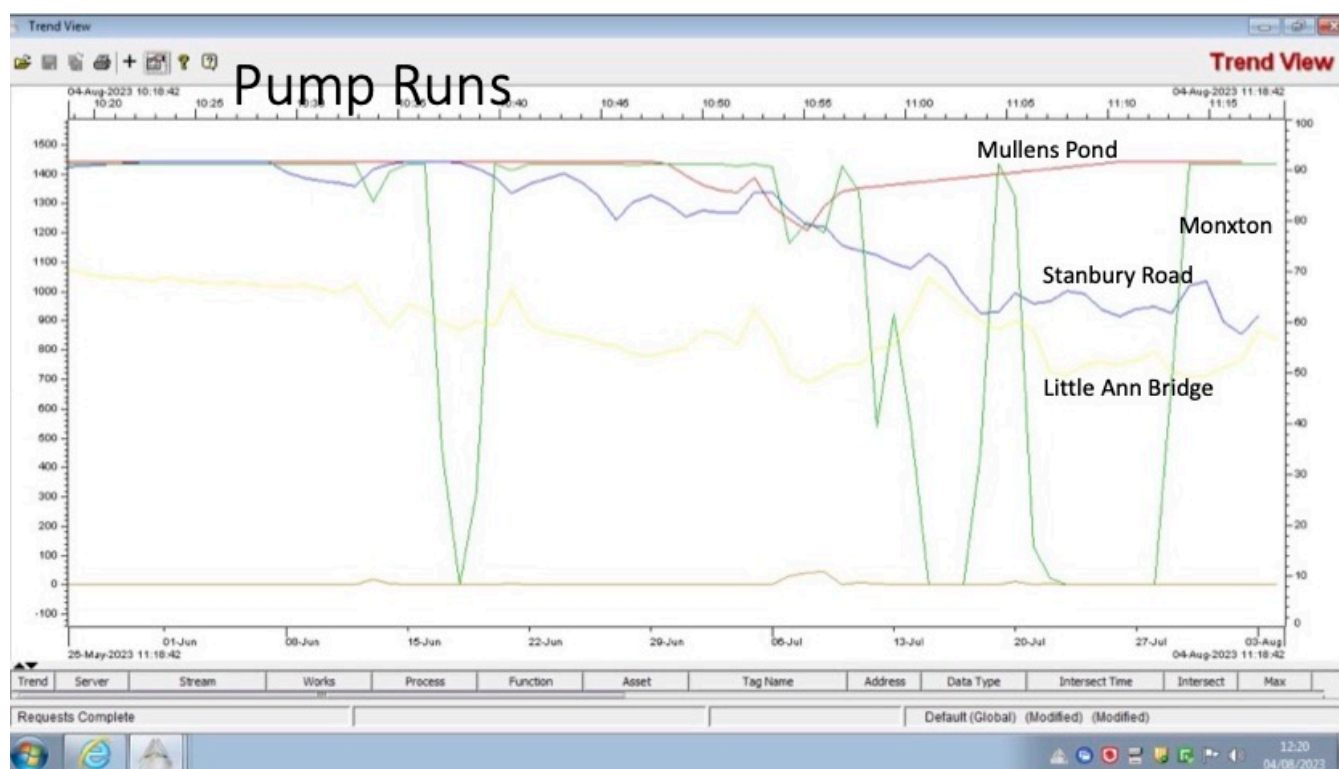
The Pan Parish catchment had been subjected to a prolonged GW season. **KH** said that relining work in conjunction with better management of the network had made a difference. During the 2021-22 GW season there had been 36 tankers in the catchment, this 2022-23 GW season only 12 tankers had been needed.

JW asked whether GW levels had dropped sufficiently for GM to address outstanding [Action QSW/PPF 25.4.3: Investigate if properties in Kimpton are pumping 'spring water' into the sewer](#) - **GM** confirmed that they had not.

4. Weekly Monitoring Pack and analysis (KH)

This pack looks at GW levels, pump runs, temperature sensors and sewer level monitor (SLM) output.

Pump runs (see below) have been dropping at Stanbury Road WPS since June.

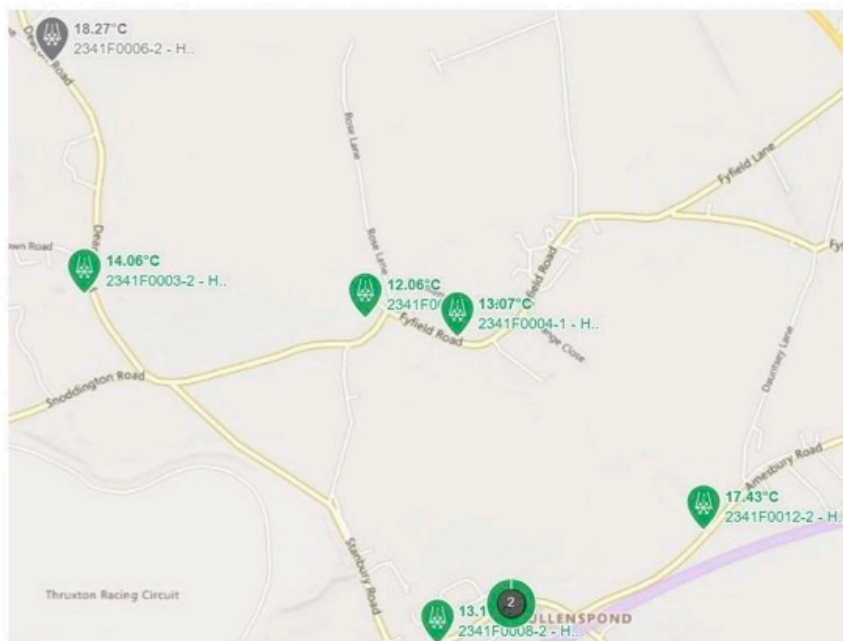


KH stated that pump behaviour at Little Ann Bridge WPS is a good proxy for what is happening further down the catchment. Pump runs here peaked in May but are now dropping and have never been beaten. SW are still have 2 tankers at Mullens Pond but it is hoped for not much longer.

Temperature sensors show where GW is still infiltrating the network (see below).

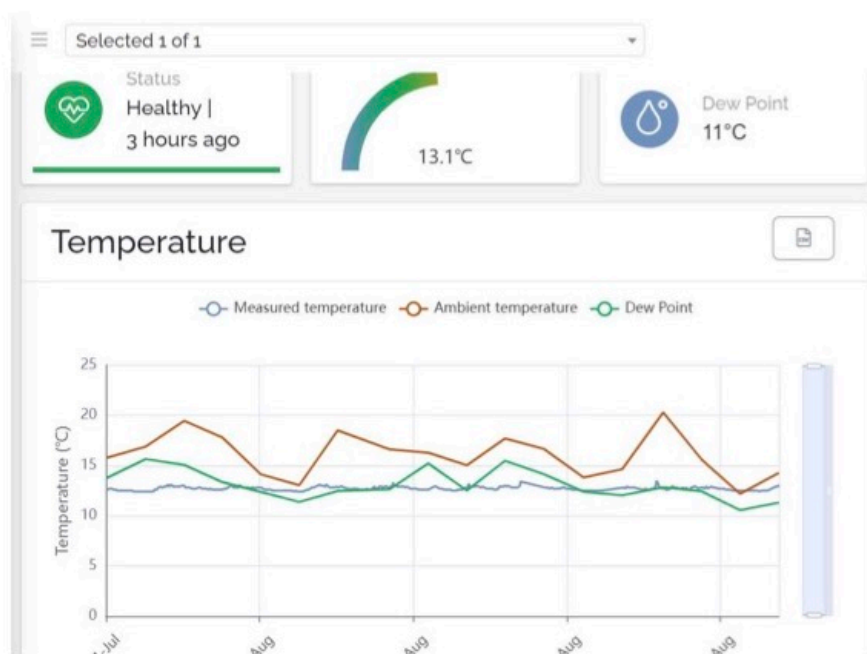
Raw sewage normally has a temperature of between 18 - 20 °C whereas GW has a temperature of 11 - 12°C.

The temperature difference from Kimpton at Deacon Road (18.27 °C) and Fyfield Road



(12.06 °C) clearly shows where GW infiltration is still occurring in the network. Drilling down into each sensor you should expect to see a clear diurnal trend, showing when mornings and evening household activity. GW infiltration is masking these trends (see blue line in graph below).

Fyfield



These sensors will help evidence the impact of the relining work, both public and private, as it progresses.

SLMs struggle to show meaningful data whilst sewers are inundated with GW (see below).

The brown line on the graph shows levels in the Fyfield sewer which the SLM is

SLM

S202002679 - SU29460502 - Fyfield Fyfield Test Valley - Last Week

Sensor Details

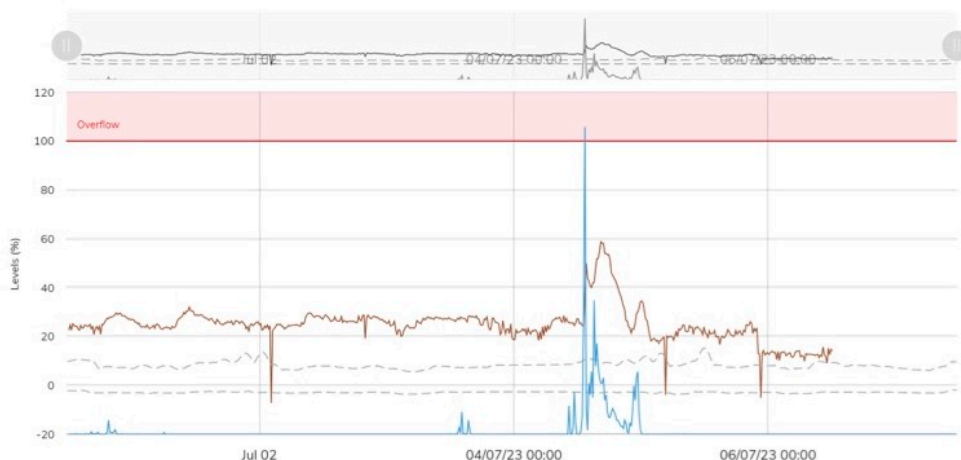
ID: S202002679

Name: S202002679

Unit: mm

Vendor: MetaspHERE

Model: MetaspHERE



predicting should be within the confines of the grey dotted line. It remains to be seen whether the SLM software can adequately predict levels in a sewer inundated with GW.

5. Programme Update (KH)

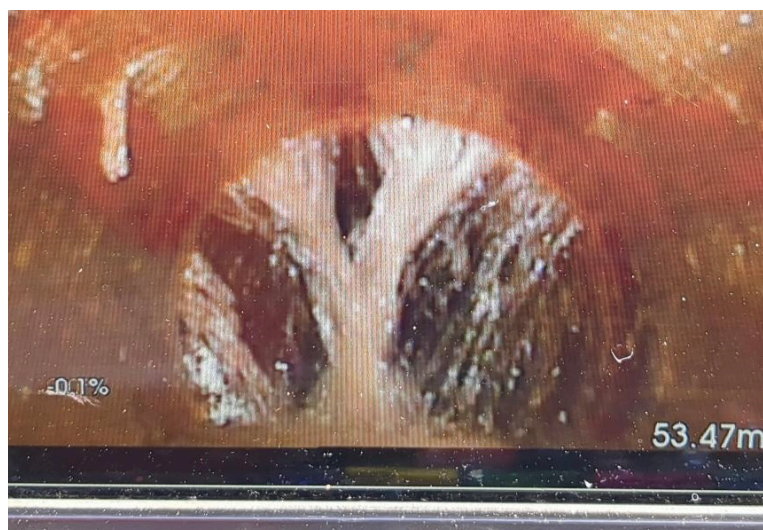
KH restated SW's intention to seal/reline everything from East Cholderton northward, both public and private, by the end of 2023 (see map below).

Option 3 Seal and investigate



This covers: 4.5 km of public sewer pipes, 134 manholes and 565 private sewer pipes.

GM distributed photos of the amount of GW infiltration SW was having to deal with at present in Thruxton area (see example below).



GW entering via a joint in the public sewer in Thruxton

This had meant a change of methodology with regard to relining. Instead of lining whole lengths of sewer pipe SW were patching every joint. This process would enable progress to be made whilst GW remained high. The team was making good progress, sealing 65 joints in the last 4 days, equivalent to approximately 50 m per day.

MC asked what was the overall length of private sewer pipes. **KH** replied that he did not have this figure but as 42% of the network was made up of private pipes he estimated ~2 km.

KH presented the current status of the private sewer pipe lining programme (see table below).

Completed Tubogel Applications (as of 10.08.23)

Village	Status	Total	Complete	Unable to Complete	Remaining
Fyfield	Aug - Oct	153	36	0	117
Kimpton	Complete	113	105	8	0
Thruxton	Oct - Dec	230	0	0	230
Weyhill	Dec	5	0	0	5
East Cholderton	Dec	64	0	0	64
		565	141	8	416

SW are using a product called Tubogel for this purpose and now that GW levels have dropped the Tubogel team are back in action and completing 10 -15 applications per week.

GM stated that he hoped to get additional teams assigned to both programmes to speed up this work but was conscious that there needed to be a balance between speeding up progress and disruption to residents.

KH stated that because both public and private relining programmes were now underway it would be beneficial to have weekly update meetings with the PPF. **JW** added that any member of the PPF was welcome to join these weekly meetings, just contact her and she would share the MSTeams details.

6. Actions, Questions and AOB

JW said that there were a number of outstanding actions still to be addressed.

Action QSW/PPF 25.4.2: Investigate SW funding of Thruxton biodiversity initiative

No progress. Richard Munday (RM) to pick up this action with Nick.

Action QSW/PPF 17.5.8: What else can be done to alleviate the “ragging” of valves at Mill Lane, Abbots Ann?

Still awaiting an engineering report on a possible solution.

Action QSW/PPF 17.5.8: Pollution Event Exercise

Has proved difficult to plan and arrange during GW season. Scoping meeting now scheduled for 28 August and it is still hoped to combine this event with a Pan Parish visit to SW’s Operations Centre to observe how emergencies are handled.

Action QSW/PPF 24.1.1: SW to get the right ecology expert to attend next SW/PPF Update Meeting to explain water quality data sets - NM by next Quarterly meeting

JW repeated that she had water quality test results from both SW and the EA. It was proving difficult to compare these results as different terminology and numerical units were used. The PPF need some expert help in understanding these results in order to define what factors and thresholds are important when assessing the ecological health of the Pillhill Brook. **JW** suggested a separate meeting on this complex topic with findings being reported back to the next Quarterly meeting. **DD** said that recent changes in legislation would make it beneficial to invite TVBC’s ecology expert to this meeting. After a short discussion this action was passed to **KH & JE** to move it forward.

Action QSW/PPF 25.4.1: Liquiline operation & abstraction licence position

The EA have confirmed that Liquiline do not have an abstraction licence nor have they applied for one. The PPF are concerned that should Liquiline be abstracting industrial quantities of GW this may, in combination with SW’s permitted abstraction, impact levels in the Pillhill Brook during drought conditions. RM stated that Thruxton PC have raised a NIRS (National Incident Recording System) with the EA’s Incident Communication Service (ICS). Action passed to Thruxton PC.

Other open actions not specifically discussed are covered below.

Actions from previous meeting

All actions are reviewed and progressed through the regular fortnightly SW/PPF Update Meetings (separate meeting notes circulated to PPF).

No.	Action	Who	By When	Status
QSW/PPF 17.5.4	SW to hold Baseline Ecology Meeting in autumn with the EA. The EA's Pillhill Brook Water Body 2019 shows a Good ecological status. Check requested by SW in response to the PPF's request to establish baseline water quality in the vicinity of Mullens Pond WPS. Lack of flow in the brook had prevented this mtg from taking place. Now scheduled for 30/31 May. Update & summary requested from SW's ecology team.	FC	Update 18/8/23	Open
QSW/PPF 17.5.8	What else can be done to alleviate the "ragging" of valves at Mill Lane, Abbots Ann? Solution will require a power supply which is some distance away. Issue currently going thru SW risk process. FC approached by engineering re valve automation Desktop & site engineering meetings with the SW Engineer. What was the result of this meeting?	FC/ GM	Update 18/8/23	Open
QSW/PPF 17.5.10	SW provided 30 minute Pollution Plan. "Pollution Event Exercise" to be held but initial ideas revisited due to operational concerns from FC. Exercise to be held at SW HQ, Worthing & combined with visit to SW Operations Centre with catchment based presence to test communication continuity within the parishes. Meeting rescheduled to 28 August.	FC	Update 1/9/23	Re-opened
QSW/PPF 17.5.11	SW to share Phase 4 public sewer relining programme with PPF. This has two parts: a) continuation of full relining north of the catchment; b) relining selected sections south of the catchment, highlighted by the electroscanning survey. CBUL has delivered a programme plan for relining in Thrupton, start delayed due to high GW levels. Work recommenced 7 August under emergency measures until HCC traffic management approval obtained. With window of opportunity shrinking rethink of relining methodology is ongoing.	KH/ GM	Update 18/8/23	Open
USW/PPF 27.6.1	Provide tanker lay-by status for Kimpton, Mullens Pond & Furzedown Ln. Furzedown Ln verge reinstatement completed 10/8/22, Mullens Pond fencing completed 30/09/22, still some reinstatement of signage TBC. Trial of mobile UV filtering system is ongoing at another location & the results will shared in due course. Kimpton - location of lay-by still under discussion with landowner.	KH/ GM	Update 18/8/23	Open
USW/PPF 11.7.3	Advise what local group(s) might benefit from a FOG presentation. Awaiting result of scoping of Pollution Event Exercise	JW/FC	linked to 17.5.10	Open
USW/PPF 6.1.1	SW Stakeholder Team to provide dedicated resource to handle SW/PPF communications during GW season. Awaiting named contact	FC	TBA	Open

QSW/PPF 24.1.1	SW to get the right ecology expert to attend next SW/PPF Update Meeting to explain water quality data sets	KH/JE	next mtg	O/S
USW/PPF 17.3.1	Request that Instrumentation Configuration & Automation (ICA) be approached to totalise Monxton pump runs Graphical display to be reviewed as these pumps are variable speed.	KH	when possible	Open
QSW/PPF 25.4.1	Investigate water abstraction operation at Thruyton Down Farm. Company is called Liquiline . 24/7/23 EA confirmed Liquiline does not have an abstraction licence nor has it requested one. NIRS (National Incident Recording System) raised with the EA's Incident Communication Service (ICS). Passed to Thruyton PC (TPC) & will await result of NIRS.	RM	Await NIRS result	On hold
QSW/PPF 25.4.2	Investigate SW funding of Thruyton biodiversity initiative	RM/ NM	Update Dec '23	Open
QSW/PPF 25.4.3	Investigate if properties in Kimpton are pumping 'spring water' into the sewer GW levels in the sewer here still too high for this investigation to be carried out.	GM	when possible	Open
QSW/PPF 25.4.5	Seek a S278 licence for reducing the speed limit and widening the road opposite Amport Fisheries FC has confirmed that SW will apply for this licence before the start of 2023-24 GW season.	FC	by start of GW season	Open
Completed Actions (will be removed in next issue but kept on file)				
QSW/PPF 25.4.4	Arrange combined QSW/PPF Meeting/wetland tour	NM/ KH	end July	Closed
QSW/PPF 25.4.6	Provide background information to contextualise SW/PPF minutes so that they can be posted on Parish websites KH provided link to SW Pathfinder Update 4/5/23. JW has annotated & distributed to PPF for comment 11/5/23. All documents collated & sent to PPF members & PC Clerks 11.07.23.	JW	July	Closed

JW suggested that the next Quarterly meeting be held in early December & this was agreed. The date and venue for the meeting will be set nearer the time.

There being no other business the meeting closed at 16:00.

Janet Wright
Secretary to the PPF