Staveley with Ings Parish Council: Sewage and Flooding Task Group

Interim Community Sewage Statement, June 2021

Overall Summary

This report provides an overview of the sewage discharge problem experienced in Staveley. It was accepted by the Parish Council at its meeting on 5.7.21.

The report sets out the long standing problems of sewage discharge from manholes, experienced particularly in heavy and persistent rain; it identifies the causes and dangers and the necessary solution. The report also raises concerns about other potential inadequacies of the waste water system and proposes the work needed to resolve these. In the light of this, it offers advice to the Council on its consideration of future development applications and recommends specific action should there be no assurance from United Utilities of a clear commitment to an agreed and resourced plan to rectify the problems.

1.0 History, Location and Context

1.1 Staveley is a village of some 1700 residents. It sits within the Lake District National Park, now a World Heritage Site. It is a lively and vibrant community close to the south-eastern approach to the Lake District and enjoys a wide range of services and local facilities. The village has become a popular place for residents and increasingly for visitors, particularly those seeking walking or mountain biking activities.

1.2 Staveley was designated as a Rural Service Centre by the National Park. As such, it both offers facilities to its wider hinterland and is recognised as a location suitable for further development. Since the year 2000 the village housing stock has increased by around 125 properties, a rise of some 18%.

1.3 The village lies at the confluence of the rivers Kent and Gowan and is positioned in a shallow basin surrounded on all sides by low lying fells from which surface water flows in heavy rain. Historically, both rivers have been used to provide water power for numerous mills. In particular the Gowan, flowing through the village centre, has been channelled so that it lies close to properties, now converted to residential or business use.

1.4 The Lakes Railway Line lies to the south-west of the village where it cuts through previously undulating farmland. In order that surface water from nearby higher ground is not impeded several culverts and streams channel water under the railway and into the rivers or the village waste water system.

1.5 More recently in 1987, the village was by-passed, again to the south-west and similarly, surface water had to be channelled both from the new roadway and beneath it.

1.6 The lower part of the village has historically been subject to periodic flooding, mainly caused by the swollen rivers, inadequate culverting from Lily Fell and poor highway drainage unable to cope with excess water. In December 2015, Storm Desmond caused extensive damage to infrastructure and river banks, most significantly the destruction of one of the village bridges, deemed to be beyond repair.

2.0 The Sewage Problem

2.1 In some parts of the village surface water is directed straight into one of the rivers but the main infrastructure for the removal of waste water through most of the village is a combined system of surface and foul water. This pipe crosses under both rivers at the lower end of the system. The Kent crossing is at a point where all the village waste water is in the system. This is then transported across agricultural land to a Waste Water Treatment Works (WWTW) alongside the River Kent, about half a mile downstream.

2.2 In heavy rain conditions, surface water adds significantly to the volume of water in the system causing a 'back-up' of foul waste which emerges from several manholes at the lower end of the system. The force of the water lifts the manhole covers causing solids and paper waste to be discharged on to the highway, into gardens and on walkway routes around the village.

2.3 This discharge is particularly evident at the Stock Bridge Farm/Caldrigg Fold entrance on Kendal Road where it is likely also to be affected by excess channelled from road drainage on the A591 and in Gowan Terrace by the footbridge over the river. Less frequently, it also occurs at other manholes along Kendal Road and other locations.

2.4 In all these incidents, foul water contaminates the highway, prior to entering the adjacent river, which is within a few metres of the manholes in each case.

2.5 Discharges from a manhole also take place at the Beck Nook/Station Road junction but as this links to a culvert emerging from under the railway, it is not known whether this is foul water at this point. They are therefore not included in section 4.4.

2.6 It is known that several private properties have also experienced discharge of foul water from manholes serving their properties. One-way valves have been fitted at least at three locations to avoid the problem of sewage backing up during periods of heavy and persistent rain. While such incidents are equally serious, they are not the direct subject of this report for privacy reasons.

3.0 Assessment of the Problem

3.1 Following Parish Council intervention, in 2019 United Utilities (UU) assessed the problem and concluded that it is caused by a constriction in the pipe work as it crosses under the River Kent. At the time, UU concluded that it required major infrastructure work costing over £1 million. The Parish Council was offered little if any hope that the scheme would be forthcoming as it was unlikely to compete with other UU priorities across the region. No alternative was offered to remedy the problem.

3.2 While some minor repair work of the combined system has been undertaken in three specific areas and a further exploration is planned post-Covid at some private properties in the Gowan Terrace area, UU has agreed that these will not resolve the problem.

3.3 The discharge is unsightly, unpleasant and unacceptable. It constitutes a serious health and safety hazard and causes a dangerous hazard on the highway. The emissions at the foot of Caldrigg Fold occur where pedestrians, including school children, need to cross the road to access the riverside path. Vehicles have no alternative other than to drive through the foul water. Those along Gowan Terrace spill out across the road by the bottom of a footbridge.

3.4 In addition, the emissions along Kendal Road and Gown Terrace are within two to three metres of the Gowan and Kent rivers, both of which are designated SSSIs (Sites of Special Scientific Interest).

4.0 **Evidence of Worsening Problem**

4.1 The discharge of sewage from manholes in Staveley during periods of heavy and persistent rain date back to 2000 and earlier. Some local records are available from 2000 but following Storm Desmond in 2015 the Parish Council has maintained a log of such incidents.

4.2 Yearly recorded incidents of sewage discharge from manholes on to the highway from 1991 to June 2021 are shown below. These have been collated from local recording and parish information and from the records requested under Environmental Information Regulations (EIRs) from UU and the Environment Agency (EA). In this summary every manhole discharge observed by the parish has been recorded separately.

4.3 The manholes covered include those at Stock Bridge Farm/Caldrigg Fold entrance, along Kendal Road and by the footbridge on Gowan Terrace. Some of the very early records may have only recorded discharges on private property at Stock Bridge Farm, which have now been fully rectified. Highway discharge at the foot of Caldrigg Fold remains.

4.4 Yearly summary of sewage discharges

Year	Reported by resident or parish	Recorded in UU's EIR response+	Recorded by EA*+	Notes
1991	1	1		
2004	2	2		
2005	1	1		Early recording less comprehensive, likely to be Stock Bridge Farm only
2006	1	1	1	
2007	1	1		
2008	4	2	2	
2009	2	1		
2011	2	2		
				Usual person not resident during these dates
2015	19	8	10	New owner at Stock Bridge. A year of more extreme weather
2016	5	3	3	
2017	7	2	1	
2018	3	1	1	
2019	9	3	1	It became clearer around this time that UU combine together incident reporting

				rather than treating every one separately
2020	13	4	Not known	
2021	3	2	Not known	

Note (see *): It is understood that the EA should be informed whenever sewage discharge is liable to affect a water course.
Note (see +): Information taken from UU EIR response

4.5 Significant points to note:

- While local records have been collated more systematically since 2015, the records show a clear indication that the incidents are occurring more frequently
- The records do not show how long each incident lasts. Although there is no comparison available with earlier records, local experience is clear that discharge now lasts longer than previously
- While it is accepted that changes to the climate will have an effect on the frequency and severity of very heavy rainfall, it is maintained that the extent of the discharge must be significantly affected by the considerable increase in development feeding into the system in recent years. (See sections 1.2 and 8.0)

4.6 Notes on the figures:

- At times, there are discrepancies between local reporting and UU's records. One reason is that UU combines incidents when occurring around the same time and does not record those from individual manholes. This gives a false indication of the number of manholes affected and the extent of the problem.
- Some local incidents may have been logged but not reported to UU
- UU recording appears to be done by postcode so is not as specific as that done locally
- It is feared that many residents are under the impression that these discharges are surface flood water and unaware that they contain raw sewage.
- There is concern regarding incident reports from residents being accurately interpreted and validated when followed up by UU's operatives.

5.0 Infiltration of Surface Water

5.1 The capacity of both the combined waste system in Staveley and the WWTW is directly affected by surface water infiltration. Rainwater in the form of ground and surface water flows onto our roads principally from surrounding fells during heavy rainfall. The accumulations are extensive, occurring on the highways at the bottom of Caldrigg Fold, along Kendal Road, Station Road, Kentmere Road, Brow Lane and Windermere Road. In these locations it mixes with foul water which causes a hazard to pedestrians and motorists and ultimately pollutes the rivers and streams.

5.2 The problem is particularly severe at Stock Beck where water from the A591 road flows through inadequately sized culverts and causes significant flooding along Kendal Road. As an example of future hazards, plans for Crookfield 3 indicate that the whole of the site will be drained via a detention basin into this same stream. This will cause further difficulties in the roadway, Stock Beck and River Kent with potential damage to the habitat of white clawed crayfish. These issues need to be addressed by Cumbria County Council as the Lead Local Flood Authority and Natural England in relation to any further development

5.3 The field on the far side of the River Kent is regularly used as a flood plain to mitigate flood issues downstream. The EA has not yet completed their flood management proposals for this area. The main sewage pipe work route from the village to the WWTW, together with a number of manholes, lie within this flood plain. UU has no information on the either the ingress into the waste water system or egress of sewage over the flood plain. This needs to be resolved by UU and EA before any further demands are made on the capacity of the sewage network

6.0 Action taken by the Parish Council

6.1 Following Storm Desmond in 2015, a joint group with representatives from interested and responsible statutory organisations was set up locally to consider its impact and plan for the future. This resulted in a local partnership project, funded by DEFRA (Department for Environment, Food and Rural Affairs), to establish a community response which more recently has morphed into the local draft Community Plan.

6.2 As a result UU was drawn into discussions specifically to examine the problem of sewage discharge and, following representation from the Parish Council, an assessment (as outlined in 3.1 and 3.2 above) was undertaken of the village waste water system. This was first reported to the Parish Council in Spring 2019.

6.3 The assessment determined that the problem of sewage discharge in heavy and persistent rain was caused by a constriction in the pipe work at the point of crossing the River Kent resulting in a 'back up' of waste water prior to the constriction.

6.4 The Parish Council was further given to understand that Staveley was not a priority for UU and unlikely to be for some time.

6.5 As indicated in section 4.5, not unexpectedly, discharge has continued with increasing frequency prompting the Parish Council in 2021 to set up a specific Task Group on sewage as part of its more general attention to flood management and resilience.

7.0 Action taken by the Task Group

7.1 In order to gather evidence about Staveley's waste water system and UU's plans for its future, a wide-ranging EIR request was submitted on 5th May 2021. Although several questions remained, a detailed response was obtained on 2nd June 2021 and made available to councillors. (See appendix 1). Statistics given in this report are based on this response.

7.2 After some delay establishing a meeting, the Task Group met with UU on 27th May 2021, when it was confirmed that Staveley's sewage emissions had been formally considered within UU's referral system. The scheme would now cost in the region of £2 million and was not considered cost-efficient. Other than the minor works mentioned earlier, no alternative was offered and no timescale given for any resolution.

7.3 An alternative suggestion to install an additional pipe under the River Kent was made by the Task Group but was largely rebuffed. This would not only operate in peak conditions to relieve the pressure on the constriction but would also offer an alternative back-up should the current system break down completely.

7.4 The Task Group also urged that an holistic approach should be considered, with work undertaken on the system alongside flood management work planned for the village. Such cooperation was likely to be both more economically efficient and less disruptive but again this was not met with any interest. Information was also provided about arrangements for surface water collection, particularly in relation to the proposed Crookfield 3 development.

7.5 The Task Group expressed disappointment and dissatisfaction with UU's stated position but has sought a further meeting, planned to take place shortly.

7.6 Initial discussions have also been held individually with partner organisations variously responsible for waste water emissions, pollution and planning to ensure that they were aware of the full extent of the sewage discharge problem and to seek advice and support on its resolution. All the conversations have been positive and supportive.

7.7 These discussions involved:

- Cumbria County Council, as the Local Lead Flood Authority
- Environment Agency, responsible for flood management and river pollution
- South Lakeland District Council, responsible for Environmental Health
- Lake District National Park Authority, under the auspices of responsibility for planning and infrastructure

A discussion with Natural England, responsible for pollution in SSSI areas has been agreed but not yet taken place.

8.0 Advice on Local Development

8.1 Given this on-going situation and until a solution can be permanently found, in response to the Parish Council's request for advice on future development, the Task Group considers that the problem raises such serious concerns that questions about further housing or business developments within the village need to be considered.

8.2 Discussions, both with UU and partners, have indicated that, during heavy and persistent rainfall, the proportion of additional foul water in the system from a new development in comparison to surface water will be much lower. From previous applications and most recently from preliminary discussions seen by the Task Group between Castles & Coast Housing Association (C&C) and UU, it seems clear that this is taken as a 'green light' for development for Crookfield 3. This, coupled with the fact that a large development would need to make alternative arrangements to avoid surface water entering the combined system, seems to lead to the conclusion that, at the point of entry into the system, the pipe work is adequate to take the additional flow and as such offers no evidence of concern.

8.3 While the Task Group accepts the proportionality and also the likelihood of adequate pipe capacity at entry, it strongly contests that this automatically leads to this conclusion.

8.4 The density of solid sewage waste, both into the system and at discharges, will be directly proportional to the residential or business population. Furthermore, the significant increase in recent home working, daytime business and tourist footfall all add to pressure on the system.

8.5 In determining its advice the Task Group is very mindful of the clear priority that has emerged in the widely consulted Community Plan (ratified by the Parish Council on 5.7.21) to take action on sewage discharge. The Plan states that the sewage problem *'is a huge*

issue for our community. The public health concerns of sewage overflow and the personal and economic impact of flooding tell us that ensuring maintenance of infrastructure and reducing additional burdens on both natural and engineered systems are key.'

8.6 The Task Group also takes cognisance of the proposed Community Plan priority on planning that in accordance with statutory requirements, there should be *'agreed local (planning) priorities that include flood prevention and safety of the sewage system and the protection of significant local assets.'*

8.7 In assessing future planning applications in the context of a failing waste water system, the Parish Council is advised to consider the following:

- United Utilities has confirmed that the current waste water system is failing in conditions of heavy and persistent rain
- The distinction offered between the proportions of foul and surface water in the system is essentially irrelevant. Once a combined system is in existence, all water within it is contaminated
- When a system is failing, the point of entry into it is not the only factor to take into account when considering development
- Adding any additional business or residential development to a failing system can only have the following results:
    - the failure will last longer and
    - the density of the contaminated water discharged will increase
- It is only relevant to assess the impact of additional foul water on a proportional basis from a development when the system is working properly. It would then and only then be tenable to consider whether the system can cope with the additional input or not.
- Such an assessment is not appropriate when the system is failing. It will simply continue to fail, as indicated above
- Although, understandably, emphasis on the impact on the combined system is considered more carefully when a group development is under consideration, it is inevitable that additional single/small group developments will have a similar cumulative impact
- Such additional small developments will tend to go 'under the radar' without the same restrictions for surface water being made as those now required for a larger development
- The accumulation of surface water entering the system in Staveley's location will have a massive impact during periods of heavy rain
- The WWTW lies upstream of a popular picnic and bathing area on the Dales Way. When waste water discharge enters the river in dry conditions at this point (see section 9.8) it presents a direct health threat to those involved.

8.8 In particular the Task Group advises that:

- Until a clear resolution to the problem is agreed with an acceptable timetable for delivery agreed with the Parish Council, a moratorium on all additional development should be introduced unless there is a demonstrable need established or other exceptional circumstances. For example, where a proposal includes a fully sustainable waste water treatment and surface water soak away.
- The Council should take this opportunity to work actively with partners to inform them of the seriousness of the problem, establish the moratorium and seek a resolution
- The moratorium should apply to both residential and business development

- A thorough survey of the inflow and impact of surface water from the surrounding area should be undertaken and all opportunities explored to divert this into the two rivers, rather than the combined system
- Until a resolution is found, smaller extensions and in future single/small group developments should be required to use private SuDS (Sustainable Drainage Systems) to ensure no additional surface water enters the system
- In making any representation both generally or specifically on an application, clear evidence of the impact on sewage and flooding should be provided

9.0 Latest concerns arising from the EIR response and partner discussions

9.1 The run-off from the highway discharges without exception escapes into the adjacent water courses (Kent or Gowan) which lie no more than 3 metres away, both of which are SSSI sites. While it is recognised that the rivers are in spate at such times the consequences are not monitored directly. The Task Group is currently in discussion with partners (listed in 7.7) to ensure attention is given to this and the results made known.

9.2 Spillage into the River Kent from the WWTW (still an SSSI at this point) was requested through the EIR process. The results provided make for alarming reading.

9.3 The WWTW has a permitted requirement to pass forward 12.9 l/s to full treatment before flow is diverted to storm tanks for settlement prior to spill to the river. There is a second point of spill reached when the storm tanks are full and flow in excess of 34.8 l/s overtops a weir at the works inlet and spills direct to river.

9.4 The table below shows that, from both sources of spillage, discharge into the adjoining SSSI occurred more than 1300 times across the three full years 2018 to2020. On average this amounts to almost once every day.

Year	Storm Sewage Spill	Settled Storm Tank Spill Total No.
2018	127	381
2019	54	281
2020	81	388
Jan 2021 - 30th April 21	26	124

9.5 The EIR response confirms that capacity of full treatment for sewage at the WWTW is 12.9 l/s after which discharge into storm tanks takes place. Taking Crookfield as an example, at peak flow, evidence from C&C consultants for the Crookfield 3 development calculate sewage discharge at 1.34 l/s. Extrapolating for the whole of Crookfield and excluding any additional discharge from the attenuation tanks, this new development would account for some 28% of the capacity of the Treatment Works. This takes no account of the remainder of the village (some 93%) and strongly suggests a serious capacity problem exists at the WWTW.

9.6 It is further maintained that discharges prior to 2018 must be known to UU. Local information suggests that there were capacity problems as far back as the 1970s and a Local EA report in 1997 highlighted concern over discharges, stating under the heading, PREMATURE STORM DISCHARGES AT SEWAGE TREATMENT WORKS:

'Sewage Treatment Works (STW's) normally have a system for storing and treating excess flows of sewage which reach them during storm events when rainfall increases the flow in the sewers. At Cartmel and Staveley the STW's are constantly overloaded leading to a permanent discharge of partially treated storm sewage. The principal cause is infiltration of groundwater into the sewers. This permanent storm sewage discharge is causing aesthetic problems because of sewage litter in the river and is also causing localised pollution. In the case of Staveley STW, there is also some concern over the potential impact of the discharges on native crayfish populations in the River.'

9.7 It is urgent that the Parish Council ascertains whether this has been rectified and if so, in what way. It is also essential that clarity is given about the capacity as it directly relates to likely flow from the village during heavy rain. As things stand, it does not seem inappropriate to conclude that the constriction in Staveley reduces the rate of flow to such an extent that it protects the WWTW from over capacity and the inevitability of greater discharge into an SSSI river.

9.8 There is also anecdotal evidence that private waste operators use the WWTW in order to discharge content into the storm tanks and subsequently the river even in dry conditions. Again, details of this including frequency and oversight should be sought.

10.0 Task Group Priorities

10.1 Direct answers continue to be sought from UU to the questions considered in this report. One meeting has been held since the Group was set up. A further meeting is planned shortly. Issues raised include:

- Seeking a firm commitment to resolve the problems
- Accuracy of UU's records
- Opportunities for proposing alternative strategies
- Opportunities to co-ordinate work with planned flood management
- Manhole monitoring across the flood plain
- Surface water infiltration mapping
- Clarification about development

10.2 Working with partners will continue, either separately or jointly, depending on advice and perceived benefits. It is recognised that coordination is both essential and valuable. There is a fear that until this point Staveley has not been given enough attention by agencies and authorities responsible in joint discussions and there is insufficient understanding of the urgency with which these need to be considered. A key strategy will be to ensure that Staveley is a high priority in the established joint discussions between agencies, that transparency is evident and feedback given

10.3 The Parish Council should be aware that in order to achieve progress, these questions may need to be escalated further. Different approaches and publicity may be necessary both to draw attention and find solutions to the problems.

10.4 Throughout this community support will be vital. Already, SENS is actively seeking reassurance from the agencies highlighted and pressing the community case. Other individuals are being similarly supportive and this is appreciated. Our own recording and evidence gathering will need to be secure, as will our communication locally.

Appendix 1: EIR Response from United Utilities

1. Details of all sewage exceedance from all manholes within the catchment area of the Waste Water Treatment Works (WWTW) serving Staveley between January 2000 and the date of this request. Please identify the date/time of the report, together with the clearance time and the manhole numbers for each incident.

Date of reported incident	Location of affected MH's	MH Reference	Reported
02/01/1991	Kendal Road	SD 479 73 803	Reported to E.Agency
26/07/2004	Kendal Road	SD 479 73 803	Reported to E.Agency
28/07/2004	Kendal Road	SD 479 73 803	Reported to E.Agency
31/03/2005	Kendal Road	SD 479 73 803	Reported to E.Agency
11/12/2006	Kendal Road	SD 479 73 803	Reported to E.Agency
20/07/2007	Kendal Road	SD 479 73 803	Reported to E.Agency
04/09/2008	Kendal Road	SD 479 73 803	Reported to E.Agency
03/11/2008	Kendal Road	SD 479 73 803	Reported to E.Agency
20/11/2009	Kendal Road	SD 479 73 803	Reported to E.Agency
17/01/2011	Kendal Road	SD 479 73 803	Reported to E.Agency
08/12/2011	Kendal Road	SD 479 73 803	Reported to E.Agency
10/01/2015	Kendal Road	SD 479 73 803	Reported to E.Agency
12/01/2015	Kendal Road	SD 479 73 803	Reported to E.Agency
26/02/2015	Kendal Road	SD 479 73 803	Reported to E.Agency
28/10/2015	Kendal Road	SD 479 73 803	Reported to E.Agency
09/11/2015	Kendal Road	SD 479 73 803	Reported to E.Agency
15/11/2015	Kendal Road	SD 479 73 803	Reported to E.Agency
18/11/2015	Kendal Road	SD 479 73 803	Reported to E.Agency
06/12/2015	Kendal Road	SD 479 73 803	Reported to E.Agency
26/01/2016	Kendal Road	SD 479 73 803	Reported to E.Agency

20/08/2016	Kendal Road	SD 479 73 803	Reported to E.Agency
22/08/2016	Kendal Road	SD 479 73 803	Reported to E.Agency
12/10/2017	Kendal Road	SD 479 73 803	Reported to E.Agency
22/11/2017	Kendal Road	SD 479 73 803	Reported to E.Agency
13/10/2018	Kendal Road	SD 479 73 803	Reported to E.Agency
12/03/2019	Kendal Road	SD 479 73 803	Reported to E.Agency
16/03/2019	Kendal Road	SD 479 73 803	Reported to E.Agency
10/12/2019	Kendal Road	SD 479 73 803	Reported to E.Agency
09/02/2020	Kendal Road	SD 479 73 803	Reported to E.Agency
15/02/2020	Gowan Terrace	SD 479 81 009	Reported to E.Agency
20/02/2020	Gowan Terrace	SD 479 81 009	Reported to the E.Agency
01/11/2020	Gowan Terrace / Kendal Road	SD 479 81 009 / SD 479 73 803	Reported to E.Agency
23/02/2021	Gowan Terrace / Kendal	SD 479 81 009 / SD 479 73 803	Reported to E.Agency
28/03/2021	Kendal Road	SD 479 73 803	Flooding of highway

Postcode	Year	Number of Incidents
LA8 9LP	2013	1
LA8 9LN	2009	6
LA8 9LN	2012	1
LA8 9LN	2014	1
LA8 9LN	2015	3
LA8 9LN	2020	1
LA8 9LU	2005	1
LA8 9LU	2013	1
LA8 9LW	2016	1
LA8 9QN	2015	2

2. The throughput capacity of the WWTW and the dates and duration of any discharge into the River Kent, which have occurred before sewage treatment was completed, between January 2000 and the date of this request.

The WWTW at Staveley has a permitted requirement to pass forward 12.9l/s to full treatment before flow is diverted to storm tanks for settlement prior to spill to the river.

There is a second point of spill reached when the storm tanks are full and flow in excess of 34.8l/s overtops a weir at the works inlet and spills direct to river (inlet CSO).

Both spill points have been monitored with an Event Duration Monitor (EDM) since Dec 2017 as required by the Environment Agency. However, the Dec 2017 month of data is inaccurate due to the commissioning of the monitor and testing of the telemetry and hence only data since January 2018 onwards has been provided below.

There are no records held for spill frequency and duration before this time. The number of spills recorded from these EDM's is summarised in EA reportable format.

Year	Storm Sewage Spill	Settled Storm Tank Spill Total No.
2018	127	381
2019	54	281
2020	81	388
Jan 2021 - 30th April 21	26	124

The flow monitor recording the flow to full treatment (12.9l/s) is at the back end of the Wastewater treatment process and is not always fully representative of flow conditions at the inlet where the flow splits to storm tanks and the inlet CSO occur. For this reason there are future drivers on the business within our environmental enhancement programme to move the flow monitor to the front (inlet) of the WwTW by 1st October 2021. It is currently not possible to demonstrate that the flow at the inlet is in excess of 34.8l/s prior to spill at the inlet CSO.

3. The principal exceedance of sewage from the system in Staveley are from manholes along Kendal Road and Gowan Terrace for a distance of approximately 300m, plus possibly one in Station Road and others in private gardens. There is evidence to indicate that these discharges have increased significantly as development in the village has increased. Please advise whether this is due to:
    a. Inadequate capacity of the WWTW

The WWTW does not contribute to the hydraulic issues on the wastewater network.

    b. Inadequate capacity of the pipe work between the crossing of the rivers from the village and the WWTW

Yes, that's correct.

    c. The constraint due to reduced pipe work capacity where it crosses the rivers (Gowan and Kent)

The River Kent crossing has been identified to be the restriction.

    d. Any other issues not identified above

No

4. Please provide details and the timeframe for any proposals that you have identified to rectify inadequacies in the sewerage system

There are currently no plans to invest in the Staveley area to resolve the surcharging of the sewer system.

United Utilities has repaired a third party asset which was inundating the public sewer system

Brow Lane – Lateral connection had infiltration. Liner installed 2019

Infiltration in two manholes, 0503 & 9801. Pointing conducted Oct 2019

CCTV of sewer through gardens parallel with River Gowan. Several points of interest need further investigation

The sewage pipe work between the River Kent and the WWTW includes several manholes within the flood plain. This makes them difficult to inspect under flood conditions as they are then below the water level. Since the manhole covers are not watertight and most are not visible due to vegetation, please indicate any evidence you have of:

a. Sewage exceedance from the manholes into the flood plain
b. Ingress of flood water which will have an impact on the sewerage system

We hold no data / information / records on this area with sewage exceedance or ingress of flood water.

6. A number of significant housing and business developments continue to be proposed within the WWTW catchment area. In relation to sewerage system exceedance please confirm that you have informed the LDNPA, LLFA and the Environment Agency, together with all proposed developers, that the current system is regularly in overload and that any additional burden will have a detrimental effect on your ability to meet your contractual responsibilities.

Through local liaison meetings with the LLFA & Environment Agency, the inadequacies with the sewerage system in Staveley have been raised.

United Utilities is not a statutory consultee in the planning process, and we provide information to developers on an application basis relating to the public sewerage network and treatment works. Under the Water Industry Act 1991 we cannot refuse a foul and surface water connection to the public sewage system.

7. We understand that small commercial WWT systems are available which, when suitably sited, can meet the requirements for sewage treatment for any development likely to be considered within this community. Please confirm that this is your preferred solution where there are issues with the performance of existing systems.

Please see information above, we don't hold any further information.

8. In relation to the disposal of surface and storm water in the village, there is regular flooding on Kendal Road, Gowan Terrace and Station Road caused by inadequacies in the storm water drainage system. Please confirm that in conjunction with LLFA and LDNPA you will not accept new storm water into the sewage system or highway drainage systems where you are responsible for them.

United Utilities is not responsible for the highway drainage system. As per above, under the Water Industry act 1991 we cannot refuse a surface water connection into our combined system in Staveley if there are no other sustainable ways to drain the surface water from the development. To ensure that surface water is drained sustainably, the surface water hierarchy is employed by the LLFA, and supported and encourage by Water & Sewerage Companies.

9. We understand that commercial systems are available which, when given adequate site space and sizing, will store and disperse groundwater, roof and roadway drainage from most non-intensive developments without relying on external pipe work systems. Please confirm that this is your preferred solution where you are unable to accommodate this load on your system or where discharge into local water courses will create more flooding downstream.

Please see information above, we don't hold any further information.

Staveley with Ings Sewage Task Group (updated 6.7.21)