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28 July 2022

Please ask for: Kevin Owen (Team

Leader)

Planning Policy & Conservation

Directorate of Place

Direct Line: (01903) 737853

Dear DWMP Team

RE: Drainage and Wastewater Management Plan (DWMP) consultation between 13 June and 5 September 2022: Arun District Council response

Thank you for providing Arun District Council the opportunity to comment on the documents forming the proposed Drainage and Wastewater Management Plan (DWMP) consultation.

This letter makes high level comments with respect to the above consultation, broadly based around the order of topics and consultation questions that are on your web site (https://southernwater.co.uk/dwmp), rather than necessarily, providing a detailed response to every question.

Planning for the future

The main points considered to be important currently, and going forward, from the Council's perspective, within the catchments falling into Arun District are set out below.

As an overarching point, it is considered that, the key priorities in the Arun Waste Water catchments, are addressing groundwater and surface water infiltration, associated with the high groundwater level and Arun's location on the coastal plain; in addition, maintaining and improving the chemical, biological and ecological statuses of the protected water bodies and nature designation sites in Arun District.

Addressing the issues identified above, will also be critical to reducing the occurrence and frequency of discharges from storm overflows from the network, so that existing and future designated bathing waters retain or improve to excellent standard.

Finally, and not least, is that progress on any of the above is not compromised through the accommodation of future growth within and cumulatively, adjacent to Arun. Indeed – Southern Water must align its capital forward planning for investment in the WWTW network in a transparent way with respect to the phased accommodation of housing growth set out in

existing and emerging development plans; including allowances for cross boundary and windfall and background growth. Although the overall growth levels are set out in terms of each Waste Water catchment, the note containing this does not set out the exact housing figures this has been based on. For the purposes of transparency, this information must be included. This should be on the basis that the DWMP sets out a specific section on an 'enabling role' supporting development plan deliverability (and infrastructure viability) including though subsequent Statements of Common Ground. Currently, there are still barriers to this alignment, evidenced by significant time and resource expended by Southern Water and adjacent Local Authorities on resolving forecasting methodologies and confirmed timescales for investment.

The roles and responsibilities for water, protection of the environment and improving the management of drainage and wastewater infrastructure, cover a wide number of organisations, from the national, regional or local level down to individual landowners. It will therefore, be essential for Southern Water to collaborate with all stakeholders. Some suggestions for coordination of responsibilities are included in the following sections of this letter.

Creating Resilient Wastewater Systems

In terms of future investment priorities, it is felt that these should be directed in the following order of priority:

- Focusing on the outcomes of the Storm Overflow Force Taskforce, to ensure no reoccurrence of the discharges to bathing waters - as occurred during 2021 along the coast of Arun District
- 2. Detailed investigation of appropriate separation solutions and exact design (i.e. size and scale) of new storage tanks to be delivered within the towns of Bognor Regis and Littlehampton;
- 3. Prioritisation of investigating the practicalities of locating storage tanks in the Lidsey catchment to attenuate flows and reduce spill events
- 4. Reviews of permits for all treatment works within Arun District, especially the Summer Lane, Pagham works to ensure no detrimental impacts on the water environment of Pagham Harbour
- 5. Joint education programme and/or implementation of grant schemes directed at businesses in Arun around improvement of FOG (the industry acronym for Fat or Grease) management and installation of grease traps
- 6. Consideration of the scope to increase the design capacity of any further extensions or provision of replacement pipes, as needed to increase the network's overall ability to accommodate growth

Options and Development

The overall principle set out in this section is around separation of rainwater from the foul sewerage systems, where possible, to reduce sewer flooding and storm overflows and is roundly endorsed and supported. The issue of the frequency of storm overflow discharges particularly, has been bought up in repeated correspondence from this Council to Southern Water since December 2021. In answer to the previous question of priorities, it can be seen that this remains a top priority for this Council. Furthermore, a number of the other priorities listed above are also linked to this issue. The Council would especially wish to direct Southern Water to priorities 2 and 3 listed above, which are connected to providing the confidence that the solutions to be delivered to address these issues, will be robust into the future. This needs to take into account the characteristics of the district, such as the high groundwater level resulting from its location on the coastal plain, and the known issues connected to groundwater penetration into the waste water network that occurs.

The majority of Littlehampton and Bognor Regis are served by combined sewers, many of which have the majority of surface water flows coming from highway drainage. Experience of the Council, when it was involved with separating a small section of Littlehampton's network, was of it being complex and only dealing with a very small part of the system. Although it is appreciated that looking at a wider catchment level can help, this Council do not consider that it is appropriate for this approach to always be prioritised over traditional hard engineering solutions. The Council considers that the exact local characteristics and circumstances need to be factored in at the design level, particularly when dealing with predominantly existing built-up areas such as the Ford catchment.

It would however, be suggested that a wider catchment approach may be appropriate, along with actions such as Permit Reviews, for new large scale proposals for example, within the Lidsey catchment and opportunities for integration of the Rife into the BEW development (because there will be less of the combined outflows and more space for delivery). The most appropriate collaboration that could be done in conjunction, would be providing specific technical input with both developers and case officers over site or catchment level actions to be taken, as a scheme/proposal progresses through the planning system. The Council would be glad for a pilot to be done focused on this approach. The pilot could then be used as a case study for others, either in a similar location on the coastal plain or where groundwater and surface water ingress is especially acute.

With respect to groundwater ingress/penetration, The Council would urge Southern Water to consider the cost/benefits of preventative action e.g. via a financial inducement /recompense scheme for landowners, including local authorities, to introduce infrastructure that reduces rainwater runoff into combined sewers. This would not only encourage of delivery of such measures but also potentially reduce cost of future corrective action so that it could be covered by savings (i.e. invest to save).

It has been identified that blockages can be one of the main reasons contributing to internal sewer flooding and the main actions to address this, being at source, best achieved through changing customer behaviour. It is suggested that Southern Water, in collaboration with the local authority (Arun) do a specific education programme targeted at food businesses generally within Arun district and/or consider grants for delivering improvements in FOG management e.g. through installation of grease traps etc. for existing businesses.

Investment Needs

Though it is agreed that Southern Water should prioritise those options that provide multiple benefits, this should not be at the expense of ensuring that solutions are sufficiently resilient to last into the future long-term.

The Council is glad to see that many of the projects for the 3 catchments (Ford, Lidsey, Pagham) within its boundaries, are scheduled for the short-term period of 2025-2030, but would also wish Southern Water to consider and set out within the DWMP, those areas for collaboration and the further actions suggested in the previous section of this letter. Further, Arun would suggest that the comments made above in relation to collaboration, means that the DWMP should be referred to in terms of partnership working and be given the same weight as other documents such as the Water Resource Management Plan. Specifically, the DWMP document needs to make it clear where the linkages are with intended actions triggered by planned growth in Arun, being addressed in these other plans (i.e. water recycling/treatment works extension at Ford; as set out in the Statement of Common Ground between Arun District Council and Southern Water in 2017).

The DWMP sets out the 3 DEFRA scenarios of; protecting the environment; protecting public health in designated bathing waters; and ensuring storm overflows operate only in unusually heavy rainfall events. Arun are glad to see this specific inclusion in the document and would wish this to be continued in the final DWMP. As an authority however, rather than disagree with any of the options as the questions ask, the Council would strongly agree that all of these aims are required.

Taking the above into account, it is important to address the frequency and incidence of discharges from storm overflows and in particular, the higher number of combined sewer overflows arising in the urban areas, impacting the number of existing and any future bathing waters. In his regard, the Council would prefer that Southern Water propose planning for and addressing all of the scenarios. It is recognised that there is still high uncertainty over the cost figures included within the DWMP on this topic, including with respect to associated impact on household bills. However, the following approach should be taken into account:

- Due to the number of chalk stream in its district, spillages should be minimised, taking account of the cost range in sensitive areas (chalk streams));
- That the 10 per year average may have to be moderated in order to reduce increases to household bills;
- That where storm overflows are recognised as the cause of reduced GES, that Southern Water take responsibility and through the DWMP, tackles this issue while ensuring that the impact to household bills is curtailed at the lower cost on the basis that the chief responsibility rests with Southern Water.

In summary, the Council welcomes that catchment wide options are being considered but would not wish this to be at the expense of traditionally engineered solutions, when taking local characteristics/circumstances into account at the detailed design stage. Arun Council's priority remains connected to the need to reduce the incidence and frequency of spillages from storm overflows. It has tried to provide some suggested areas of collaboration within this letter and to reflect its local knowledge and experience on key issues that could help improve the situation

or delivery of the DWMP objectives.

This letter responds to the current DWMP consultation – however, in October and November 2021 the Council also set out key considerations as part of its early response. This is included as an appendix to this letter.

If you wish to discuss the contents of this letter, or if there is anything you do not understand, please contact me.

Yours Sincerely,

Kevin Owen (Team Leader Planning Policy & Conservation)

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Arun District Council

CC:-

Neil Crowther (Group Head of Planning), Arun District Council;

Appendix 1: Letter 26 October setting out Arun early Comments on DWMP Process



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e-mail: kevin.owen@arun.gov.uk

26 October 2021

Please ask for: Kevin Owen

Your Ref: "[Your Ref]"

Our Ref: DWMP Autumn 2021

Dear DWMP Team

RE: DWMP Consultation

Thank you for the opportunity to respond to the consultation on the Drainage and Wastewater Management Plan (DWMP). It is understood that this is intended to be the longer term strategic plan covering drainage, wastewater and environmental water quality and the comments that are provided in this letter are given in this vein. I also understand that a formal consultation will take place next year (June 2022).

Officers from the Council's planning policy and engineering teams attended workshops on 28 and 30th September and the 19th October, related to the 3 specific drainage catchments or systems within the District. It is hoped that the input made at these is captured along with this informal response letter in the further development of these plans (this letter is a provisional response subject to confirmation after 30 November). The letter addresses the issues in order of the consultation questions subject matter.

It is appreciated that the 14 planning objectives used are based on those set by Water UK, which were then supplemented i.e. Nutrient Neutrality, and it is appreciated that all 3 works within Arun District have been identified through the screening and BRAVA exercises to require improvements. However, the Council does have some concerns over the reasons behind these, as set out in this letter.

Problem characterisations

The most obvious point on this aspect is how little the existing issues are dealt with i.e. flooding and discharges at outfalls, including lack of urgency/clarity on when these are scheduled to be dealt with. The approach merely identifies the standards that have been set

and consequently, the standard that will be applied. This does not explain the reasons or assumptions behind these to give any confidence that the specific issues will be resolved. An obvious example has been the recent discharges at the outfalls, from the Consented Storm Water Overflows in the Littlehampton area and why these were so significant. It is not obvious from the content of the existing workshop documents whether this is temporary and will not continue in the future because there is a lack of capacity/resilience in the system. Repeated internal flooding of basements at properties along South Terrace, Littlehampton occurs but does not seem to have been picked up. With the increase in volume caused by the torrential rain there was a) surcharging manholes (lifting cover(s) of in the road) and b) backing up inside property (flowing out of WCs & shower trays. The issue of impact on bathing water both at Bognor Regis and at Littlehampton is a current issue which was acknowledged in the workshops. The solutions or remedies are difficult because of the range of factors which impact – however, Arun District Council would urge that specific solutions be found in the short and intermediate term.

Groundwater flooding is a significant issue for Arun District not fully explained by its topography, with only 3 small areas of the District not affected by this. Attention should therefore, be given to the relative variance of susceptibility of flooding from this source. For example, this variance is specifically known to be high across a large proportion of the area and significantly impacts the Lidsey area. The information relating to this can be seen within the Arun SFRA Update 2016 Appendix F¹. Due to this characteristic, it is not fully understood why planning objectives 4 and 7 (in the short term) have not been classed as very significant for all the systems within Arun District. The Lidsey system in particular has had long standing historical problems not just any that may be anticipated in the future. This is particularly relevant when inundation is so prominent in Arun resulting from the impact of the run-off from the chalk spring line (e.g. South Downs) onto the impermeable clay around Lidsey, Barnham, Elmer and other villages. More detailed discussion on the exact issues for this area can be found in the Lidsey SWMP and the associated ones around Elmer can be found in the Elmer SWMP.

Although not a currently a direct issue for any of the systems within Arun, officers are acutely aware of the emergent issues around nutrients and water neutrality that neighbours are facing. While it is encouraging that nutrient neutrality has been recognised and added to the planning objectives, Southern Water are reminded that there are designated sites (e.g. Arun Valley SPA), which partially overlap with the Arun District area which are hydrologically and cumulatively linked to the planning authority area. The Council is therefore, deeply concerned at being the only sub-regional area not to have the ability to demand the required water neutrality standards through planning decisions through default, purely based on the boundaries of the relevant catchment. Arun District Council would therefore, urge that a comprehensive coordinated and cumulative approach be applied to this topic in Arun going forward with policy solutions and recommendations.

Option Development and Appraisal

As was raised within the workshops, there is a need to ensure that the modelling and forecasting reflect the latest EA sea level projection, peak river flow and rainfall intensities at the relevant catchment and medium ranges, unless otherwise advised by the Agency.

The Council would wish to see a consistent and coordinated methodology applied across all systems and catchments to the establishment of development headroom within connected

https://www.arun.gov.uk/flood-risk-planning-policy

planning authority areas. This should clarify the impacts on and of Dry Water Flow calculations, using a comprehensive database of existing, planned and unplanned developments to establish headroom for discharge consents. It must be emphasised that this must go across local authority boundaries to fully account for the cumulative impacts of development. This is particularly important when focusing on Pagham Harbour where the authority boundaries cut through the middle of it and includes associated issues such as the location of water quality testing or access. To this extent, Arun officers would like to meet with you to discuss setting up a liaison meeting to refresh and update the previous Statement of Common Ground (2017)² – as Southern Water have similarly been coordinating with Chichester District Council and the Environment Agency.

Linked to this, the Council wish for more guidance to be produced (e.g. to ensure robust construction of foul drainage connections where the groundwater is high) and strongly enforced to prevent future infiltration, which is a significant issue for a large proportion of Arun District as discussed above. Additional to this, tide locking and high water levels will mean that certain solutions (e.g. extra storage via SUDs) may not always be appropriate in their present form or standard requiring other solutions or standards to be identified and proposed.

For overall development of options, it is recommended that to address some of the problem characteristics, consideration be given including the role of recommissioning redundant plant/equipment and infrastructure for pumping, treatment or storm storage and short to intermediate term remedies. It seems that there are assets that could potentially be reused in an active way to help towards some solutions.

It is suggested that a full assessment of the risks posed by climate change be taken into account, especially looking at the role and location of existing assets related to sustainable growth and whether larger scale consolidation/augmentation or relocation maybe needed for any assets. This may be especially pertinent to the Manhood peninsula and/or coastal locations once the impact of climate change coastal flooding and any erosion is accounted for.

In particular, it is evident in Arun that a combination of ground water flooding susceptibility and tidal water tables limit the current scope of SUDs to attenuate flooding and surface /ground water infiltration in their current form. The council urges a more holistic and strategic approach be investigated including objectives that decarbonise the WwTW infrastructure in terms of renewable energy and in particular the scope for pumped water storage on a intercatchment basis looking at the South Downs National Park and coastal plain including river Arun. Manmade water bodies, uphill in the Downs must be feasible option provided that sensitive landscape considerations are accommodated given the urgency of the climate emergency.

Similarly, the Council would wish to see that there is consideration of the scope for larger scale – i.e. catchment or landscape scale – nature based solutions, that may be appropriate for any specific locations in Arun or the connected catchments. If found appropriate through further stages and refinement, then a mechanism for coordinated engagement with all relevant stakeholders (e.g. local authorities and developers or land promoters) should be prioritised and reflected in the investment programme in order to align other documents or plans.

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² https://www.arun.gov.uk/download.cfm?doc=docm93jijm4n15993.pdf&ver=16505

Investment Programme

It is appreciated that there is not going to be one simple solution required but a combination throughout each, however the Council consider all of the objectives of the DWMP should be considered as a priority for investment within Arun District, as is detailed through the above points in addition to the existing designation of 'Improve' for each of the systems (Ford, Lidsey and Pagham) falling in the district.

As signalled under comments on the Option Development and Appraisal section above, the Council would wish more work to be done on responses to proposals for connection to the systems, along with guidance and specifically enforcement of high standards for design details to ensure robust construction of foul drainage in areas with high groundwater to prevent future infiltration. This can be achieved in short term through direction towards existing information that is available from West Sussex County Council (WSCC) and the Districts and Boroughs. This could then be addressed more comprehensively through the creation of stand-alone or coordinated documents with WSCC or respective authorities that can be used in determining applications as material considerations until entrained in Supplementary Planning Documents following plan making and testing at examination.

The issue of the high groundwater level and associated high susceptibility to groundwater flooding will be essential during the detailed work on solutions for those systems in Arun District. There should be clear direction provided over the appropriate roles and actions to be taken by each party.

Finally, a clear set of comprehensive documents need to be issued on wider strategic issues that affect the whole region, such as that of nutrient neutrality, particularly nitrates although phosphates and others also apply. The Council do not wish to be left as the only area not being able to apply high standards when all it's neighbours are being required to apply such. This would also be counter to the Council's overall priorities to address the climate emergency declared in January 2020 and the intention to raise standards of new developments wherever possible.

Overall in summary, Arun District feel that:

- there needs to be greater content on the existing issues and how and when these are to be dealt with;
- consistency in the methodology used (climate change allowances and DWF calculations):
- significantly greater enforcement of high design details for the robust construction of foul drainage in areas of high groundwater;
- possible recommissioning of redundant assets;
- identify where natural solutions would be expected to occur and engage with all needed in their development; and
- believe there should be investment in the production of standalone or coordinated guidance documents.

I would be grateful if you could contact me at kevin.owen@Arun.gov.uk or phone 07908919397 in order to coordinate possible meeting dates (for the purposes set out and underlined above under 'Option Development and Appraisal') week beginning 8 November.

Yours sincerely

Kevin Owen (Team Leader Planning Policy & Conservation)

Appendix 2: Planning Policy Committee Item 8 Drainage and Wastewater Management Plan (DWMP) Consultation - further points email 15 December 2021

From: Kevin Owen

Sent: 15 December 2021 17:52

To: Cc:

Subject: FW: Planning Policy Committee Item 8 Drainage and Wastewater Management Plan (DWMP)

Consultation - further points

Dear Sally,

Apologies for the delay in forwarding this updated response.

Further to the interim letter response on 26 October, below are Arun member's additional points made at the meeting of Planning Policy Committee (PPC) on 30 November 2021. I have grouped these under the appropriate letter topic headings:-

Problems and Characteristics

Southern Water needs to set out via the DWMP how the company can be interventionist and
proactive on combatting the impact of blockages in the sewer network and consequent storm related
back surges within properties (e.g. in the Pagham and Yapton catchment areas). E.g. consider
appropriate penalties/charges to deter inappropriate flushing of wet-wipe and fatty waste products
as well as a public information/guidance and campaigns; including Southern Water's operational
response to such incidences.

Option development and appraisal

- Southern Water to clarify in the DWMP action to address East of Arun catchments surface run of capacity – e.g. impact of development within Arun and Worthing e.g. on Ferring rife incidence of storm water discharges
- Southern Water to consider and clarify their role in the DWMP for assisting with nature based water storage (e.g. SUDs, wetlands etc.) solutions – including in terms of design policy standards, operation and offsetting infrastructure planning to serve developments and collaborating with other stakeholders and agencies in delivering 'nature based' water storage solutions e.g. wetland habitats which deliver both biodiversity net gains and carbon sequestration
- Opportunities for water storage needs to be balanced with the need to remove water from the land quickly out to sea because of the high coverage of surface water flood risk across Arun
- In the scoping the feasibility of recommissioning of redundant/disused assets (e.g. for pumping, treatment or storm water storage) to attenuate current and emergent problems due care be given to ensure that this does not lead to inadvertent issues e.g. resumption of pumped outfalls to sea at Pagham etc. This includes assessing measures to address carbon reduction and renewable energy solutions e.g. pumper water storage etc.

Investment Programme

- Southern Water's supporting evidence for the DWMP identifies Ford WwTW bottom of the list for capacity/performance and therefore, needs priority investment urgently (given its strategic significance for facilitating planned growth in the adopted Arun local Plan).
- Arun is a key tourist destination with a dependent visitor economy reliant on clean bathing beaches –
 consequently, there needs to be urgent action to prevent the incidence of licensed and unlicensed
 combined storm/foul waste water discharge to the sea at outfalls affecting Arun's key bathing
 facilities with climate change likely to increase storm rainfall

The meeting agreed that comments should only relate clarifying the above points actually raised at the meeting - I would therefore, be grateful for any editing clarifications by Friday 3 December please.

I hope that these are helpful and aid clarification of the provisional response letter.
K rgs
Kevin