Drainage and Wastewater Management Plan

Statement of Response

Public Consultation

May 2023





Source	Topic	Response	Where addressed in the Plan / website
Adur DC Ref: 4050	The extent of recent discharge to coastal areas does highlight the need for more effective working with the LLFA and LA's to ensure a more robust approach towards SUDs and standards for new sewers.	We support close working with local councils to manage drainage and wastewater. We hope the DWMP is a catalyst for greater collaboration and partnerships.	See the Level 1 Plan section on "Developing our Proposed Partnership Projects"
Affinity Water Ref: 4029	As a water supply only company both water resources and water quality are important to us. Protecting groundwater quality is therefore important and we welcome reference in the draft plan of sewer condition in relation to potential groundwater pollution. We would welcome further engagement with Southern Water on investment plans for assets in our groundwater source protection zones in our Southeast supply region. Treated effluent returns from small local works are also often important from a catchment water balance perspective and again we would welcome further engagement on this as you develop the final plan.	We want to work closely with Southeast Water to ensure not only our own groundwater sources are protected from contamination but also those used by our neighbouring water supply companies. We were only able to explore the supply zones potentially impacted in our own water supply areas in the first cycle but are committed to extending this in cycle 2. and to collaborate and work together to provide security of potable water supplies while protecting the environment.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Amberley Parish Council Ref: 3005	Water companies have been unable to adequately address problems since privatisation. Other organisations, including environment action groups, have the ideas to contribute, but they seem to be ignored. The public perception is that water companies prioritise profit and dividends above investment in infrastructure, and by doing so exacerbate the problems. We know what's wrong, listen to those with the answers, even if you don't like what you hear!	It is our intention to develop plans that integrate more effective drainage whilst protecting and enhancing the natural environment and 'greening' our communities. We cannot do this alone and will develop appropriate partnerships with relevant organisations and communities once we know what funding is available for AMP8.	We set out our intentions in the section on developing partnership projects under Customer and Stakeholder Engagement in the DWMP.
Arun Countryside Trus	t 'Least cost' is a misleading term as the costs may be passed on to customers. The best solutions	Most, but not all, of our funding comes from customer bills. Some comes from developer contributions and some from shareholder investment. "Least cost" is the	Section 6 of our technical summary on the Options
Ref: 2001	should be used whatever the cost, and less money should be spent on enormous bonuses, huge salaries etc.	lowest cost for delivering a solution that will reduce the risks to our customers or the environment. However, our plan is also based on providing "best value" which are solutions that will provide wider multiple benefits to customers and the environment. The UK water industry uses a private sector model to finance the investment through the capital markets. This means money comes from shareholders as well as customers, so funding is not required from Government through taxation. We need to make a profit to encourage investment and ensure investors get a return for investing in the UK water industry rather than elsewhere. Ofwat, our economic regulator, assesses our business plans for investment and efficiency, and agrees what we can charge customers to deliver the programme of work. There are penalties and rewards set by Ofwat which determines the level of profit we can make. Salaries and bonuses are in line with industry and markets in the UK so we can attract the right staff with the right skills to deliver our huge investment programmes and keep our 381 wastewater systems operating 24 hours a day 365 days per year.	Development and Appraisal explains Least Cost and Best Value, and details how these have been determined: https://www.southernwater.co.uk/media/6941/technical-summary-on-oda.pdf
Arun DC Ref: 4042	Key priorities in the Arun wastewater 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 status of the protected water bodies and nature designation sites in Arun District.	In the Arun District, we have identified 3 investment needs for good ecological status and nutrient studies, an investment need to reduce the impact of groundwater infiltration / exfiltration (LIDS.OT01.10) and numerous investment needs to reduce flooding through sustainable and nature based solutions with a mix of storage tanks where necessary. We have also identified that investment is required in our systems models to improve our understanding of the interactions between our sewers, surface water and groundwater.	The investment needs for Lidsey: https://www.southernwater.co.uk/dwmp/arun-and-western- streams-catchment/options-development-and-appraisal-for- arun-and-western-streams
Arun DC Ref: 4042		We used Experian data to forecast rates of population growth, as well as data from local councils in the adopted Local Plans. It is not always possible to know from Local Plans which development options will go forward so we cannot be too precise which wastewater system the new development will connect into. Details of the methodology used in our DWMP is available in the Growth Technical Summary, which provides the growth rates and forecast population increases. We support the suggestion of the DWMP providing an enabling role in development by providing greater clarity over current risks and future investments, and would like to explore this further for the next version of the DWMP.	https://www.southernwater.co.uk/media/5257/technical- summary-growth-and-creep-final.pdf
Arun DC Ref: 4042	detailed investigation of appropriate separation solutions and exact design (i.e. size and scale) of	We will begin detailed investigations of options to reduce storm overflow discharges once we know our funding envelope for AMP8 (2025 - 2030). Our preferred option is to deliver sustainable drainage systems by working with partner organisations to develop the most effective solutions for the specific locations. In the Ford system, we have identified 25 investment needs relating to flooding and drainage of which 19 specifically relate to Bognor Regis and Littlehampton. We have identified 3 investment needs to reduce flooding in the Lidsey system (LIDS.PW01.4 - LIDS.PW01.6) as well as at the Treatment Works (LIDS.OT01.6) and the Barnham CSO (LIDS.OT01.7) alongside studies to improve our hydraulic modelling.	Ford: https://www.southernwater.co.uk/media/6803/ford-forw-ineeds.pdf Lidsey: https://www.southernwater.co.uk/media/5257/technical-summary-growth-and-creep-final.pdf
Arun DC Ref: 4042	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	The BRAVA and Problem Characterisation has highlighted the blockage hotspots in the wastewater systems in the Arun. We have identified investment needs FORW.SC03.1 and FORW.PW01.4, and LIDS.SC03.1 and LIDS.PW01.3 in the Ford and Lidsey catchments respectively to address blockages through a mixture of customer / business education and support, and proactive jetting. We will look to work with partners to implement the proposed programmes.	Ford: https://www.southernwater.co.uk/media/6803/ford-forw-ineeds.pdf Lidsey: https://www.southernwater.co.uk/media/5257/technical-summary-growth-and-creep-final.pdf
Arun DC Ref: 4042	Consideration should be given to 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.	Across the Arun and Western Streams RBC we have five investment needs to identify where our pipe networks needs to be replaced or refurbished to accommodate growth. (CHIC.PW01.6, FORW.PW01.4, LIDS.PW01.3, SIDL.PW01.5, THOR.PW01.3). In the three wastewater systems taken through the ODA stage in the Arun District, we have identified two needs (FORW.PW01.4, LIDS.PW01.3).	Options development and appraisal for Arun and Western Streams (southernwater.co.uk) Additional text added to the Level 1 DWMP on Network Reinforcement to accommodate growth.

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Arun DC Ref: 4042	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 and this Council does not consider that it is appropriate for the surface water separation approach to always be prioritised over traditional hard engineering solutions.	We have noted this. Whilst our long term ambition is to implement the more sustainable surface water separation approach, we will pursue a mixed approach to include traditional storage tanks where required. The section on reducing flooding and spills in our Level 1 Regional Plan sets out our position. We accept that we will not be able to reduce spills to meet the Government targets through green solutions alone.	Level 1 Plan section on "Our Plan to Reduce Flooding and Spills"
Arun DC Ref: 4042	Groundwater ingress/penetration, The Council would urge Southern Water to consider the cost/benefits of preventative action, for example, via a financial inducement /recompense scheme for landowners, including local authorities, to introduce infrastructure that reduces rainwater runoff into combined sewers		
Arun District Council Ref: 4042	The key priorities in the Arun Wastewater catchments are addressing groundwater infiltration associated with the high groundwater level and maintaining and improving the chemical, biological and ecological statuses of the protected water bodies and nature designation sites. Addressing these issues will 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.	Our aim is to ensure that designated sites and local bathing waters are protected and improved by addressing storm overflows. We have identified 16 storm spill related investments are needed in the Ford system, five in the Lidsey system and three in Pagham that will reduce and prevent water quality and aesthetics impacts. As well as this there are numerous investments required to reduce and prevent flooding across the Arun district and several to reline and refurbish sewers to prevent infiltration and exfiltration.	The investment needs relating to storm overflows and infiltration are set out in the ODA tables on the Arun and Western Streams phttps://www.southernwater.co.uk/dwmp/arun-and-western-streams-catchment/options-development-and-appraisal-for-arun-and-western-streams
Arun District Council Ref: 4042	Blockages can be one of the main reasons contributing to internal sewer flooding and addressing this is 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.	Thank you for the offer of working with us on FOG and grease management campaigns. We have identified a number of areas within the Ford, Lidsey and Pagham systems for a partnership approach to tackling blockage hotspots.	See the investment needs for Ford, Lidsey and Pagham systems under the ODA page of the Arun and Western Streams RBC: https://www.southernwater.co.uk/dwmp/arun-and-western-streams-catchment
Arun District Council Ref: 4042	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 shows that separation of even a small section was complex. Although looking at a wider catchment level can help, we do not consider that it is appropriate for this approach to always be prioritised over traditional hard engineering solutions.	We are committed to separation of the foul and surface water systems wherever this is feasible as well as to developing SuDS in preference to traditional 'grey' storage solutions as the most sustainable and best value solutions over the longer term. However, we also accept that we will need a mix of traditional grey and more innovative green solutions to meet the expectations of government and our customers - especially in the short term. Our Investment Needs tables provide for a mix of grey and green solutions to meet the short term requirements. In the Ford system we have 18 proposed investment needs with a mix of storage or separation to alleviate sewer flooding, and two investments in underground storage to prevent for CSOs discharging. In Pagham, we have proposed either storage or SuDs to address the storm overflow at Summer Lane, and in the Lidsey system, we have proposed underground storage for the Barnham CSO and three investment needs in either storage or SuDS to alleviate flooding whichever provides the best solution.	These solution are set out under each system in the ODA page of the Arun and Western Streams RBC: https://www.southernwater.co.uk/dwmp/arun-and-western-streams-catchment
Ashford Borough Council Ref: 4022	It would be useful if the investment areas could be highlighted on a map to show the spatial distribution of the investment opportunities identified in the Investment Plans. This will help to identify if there are projects located upstream or downstream of the borough, which could have secondary benefits, which would help to inform the Council's opinion of investment projects identified.	We support this suggestion. The mapping in our first DWMP needs improving for the next version of the DWMP. There are 'solutions' maps shown in the Options and Development and Appraisal (ODA) pages of the website for each River Basin Catchment which spatially present our investment proposals.	Solutions maps on the ODA pages for each River Basin Catchment, for example for the Stour which Ashford sits within: https://www.southernwater.co.uk/dwmp/stour-catchment/options-development-and-appraisal-for-stour
Barcombe Parish Council Ref: 3001	Maintenance of river flow rates and the cleanliness of our inland waterways barely get a mention. While we agree that they are not the 'most' important they are significant and deserve attention. Some of our wildlife relies on clean regular river flows and the current levels of neglect of these matters are putting our wildlife at risk. Once lost some species will not recover. Some of the Southern water maintenance budget MUST be directed towards securing the future health of our rivers and streams.	Our Planning Objective 9 (PO9) is focused on achieving "Good Ecological Status" for all waterbodies in our region (see BRAVA methodology for PO9). In cycle 1 of the DWMP we have identified over ninety separate investment needs associated with PO9, totalling over £780k. We are keen to explore all opportunities to collaborate as we develop our planning objective on surface water management (PO10) in cycle 2.	· ·
Barcombe Parish Council Ref: 3001	Rainwater cannot be 'planned' for. Sewage from businesses and households can be estimated with some accuracy and the size of the treatment works built accordingly. Rainwater is unpredictable and puts good planning at risk and discredits it. Rainwater is harmless to the environment. It must be channelled away from populated areas and roads.	We agree. We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10).	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Barcombe Parish Council Ref: 3001	Budgets are limited and should be used wisely with the long term view in mind. We cannot continue to ignore the 'real' cost of our water usage.	The investment needs identified provide the best long-term value to our customers and communities by reducing risk through more sustainable approaches, which provide wider benefits. These are our 'preferred' investment options to be funded from customer bills through our standard regulatory processes. The potential impact on Customer bills is shown in our technical summary on "bill impacts".	Bill Impacts Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries

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Barcombe Parish Council Ref: 3011	Priority should be given to reducing the pumping of raw sewage into the sea and rivers. Profits and shareholder dividends need to be reduced to provide more funding for all the requirements of the business to be met.	We do not pump raw sewage into rivers or the sea. Where spills take place, it is the result of our systems and storage tanks being overwhelmed by too much rainwater or groundwater taking up all the available room and discharging automatically rather than backing up and flooding people's homes and businesses. We are prioritising separation of rainwater and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of rainwater through cycle 2 of the DWMP. Our shareholders have not been paid a dividend since 2017. Profits are invested in the company to improve the infrastructure.	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Basingstoke and Deane Borough Council Ref: 4037	The growth projections for WTWs in Basingstoke and Deane Borough are likely to be below that expected for the period up until 2050. It would appear that this is based on Experian population forecasts supported by local Plan allocations and planning permissions. Given that BDBC's adopted plan goes up to 2029 and planning consents will have expired by then, the projected growth beyond 2029 is presumably just based on population projections. The Water Cycle Study for the period up to 2039 indicates there may need to be permit reviews/infrastructure upgrades for all relevant WTWs – Barton Stacey, Oakley, Overton, North Waltham and Whitchurch with growth expected to be above that projected in the DWMP for the whole period.	Thank you for the information you've provided. Our Future Growth team logs all proposed development but we can only begin looking at capacity and needs once the development has been approved in a Local Plan and we have certainty regarding its scale and location. The longer term growth predictions are based on Experian population projections as explained in our technical summary on "Growth and urban creep".	Growth and Urban Creep Technical Summary: https://www.southernwater.co.uk/media/5257/technical-summary-growth-and-creep-final.pdf
Basingstoke and Deane Borough Council Ref: 4037	the borough. In light of the recent Ministerial announcement, it is presumed that the DWMP will	Although we have assessed the BRAVA risks for the whole of our region, due to resource limitations we have only been able to develop options to meet investment needs for 61 of our wastewater systems in Cycle 1 of the DWMP. These include our highest risk systems; see our technical summary on Catchment Selection for full details of how we have done this. We will be extending coverage of our DWMP to all 381 systems for cycle 2.	Catchment Selection technical summary: https://www.southernwater.co.uk/dwmp/technical- summaries
Birdham Parish Council Ref: 3007	Local wastewater has to be pumped to Sidlesham Sewage works. After rain many residents,	Thank you for your feedback. We have 22 investment needs for the Sidlesham wastewater system, which includes three for Birdham (see investment needs ref SIDL.CONS01.2, SIDL.CONS01.3 and SIDL.OT01.8). Two of these are to address the issue at Pinks Lane. We have also included two needs associated with flood alleviation (SIDL.SC01.2) and resilience at Sidlesham WTW SIDL.PW02.1.	Investment Needs tables for Sidlesham: https://www.southernwater.co.uk/dwmp/arun-and-western-streams-catchment/options-development-and-appraisal-for-arun-and-western-streams
Bishops Waltham North Pond Conservation Group Ref: 2008	flooding of sewers. Engineering has an important role in this. There are other catchment wide and nature based solutions which can make a difference such as green spaces and soakaways in places liable to flash flooding. Also the introduction of beavers at the top end of streams and rivers has been shown to reduce the flood water.	Our plan is to work towards separation wherever this is possible. It is not always going to be possible in built up, often historic, urban areas but we have been working with local councils to identify places where separation can be achieved. We have also been working with councils and environmental organisations, such as the catchment partnerships, to identify spaces where schemes such as soakaways and storage ponds can be located. Our regional plan discusses separation and slowing the flow into our sewers in some detail and our investment needs for each wastewater system details where we are looking to introduce such schemes by working in partnerships. However, it is important to note that, on the whole, our wastewater systems do not cover rural areas and that it is not really possible for us to influence change where we have no systems unless the quality of the groundwater is being compromised by poorly maintained septic tanks or private systems. We would love to see beavers introduced but that would be a decision for the landowners rather than ourselves.	wastewater system in the ODA pages for each River Basin Catchment.
Bosham Parish Council Ref: 3010	to ensure the maximum investment by the company for the benefit of the population. But SW must be subject to overview to ensure that our money is being properly and efficiently spent and this will need a government watchdog with some proper teeth.		Bill Impacts Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries
Brighton & Hove City Council Ref: 4031		We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10).	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries
Brighton & Hove City Council Ref: 4031		Yes - we agree and are working with the Council on these initiatives. We are keen to explore further opportunities to collaborate on better rainwater management that will reduce discharges from storm overflows.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Brighton & Hove City Council Ref: 4031	Southern Water should work with the highway authorities to tackle road run-off - to support and encourage them to improve surface water management and reduce pollution from the road network	We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, including working with highways authorities to ensure road run off is managed and treated effectively deliver our planning objective on surface water management (PO10).	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Canterbury CC Ref: 4053		The investment needs identified in the DRAFT DWMP predates the completion of the Stodmarsh nutrient study and we have since updated this. We are now working with the Kent Councils joint Nutrient Neutrality Working Group to implement the findings of the study and address the issue of nutrients in Stodmarsh through a strategic, catchment scale approach. We are proposing to address our contribution to the nutrient overload through schemes for 'effluent polishing' via wetlands, high rate sand filters and / or UV treatment. More detail on the proposals will be developed as the work progresses. We have identified and included 3 additional investment needs for the Stodmarsh (CANT.WINEP.PO2.1; DAMB.OT01.3 and DAMB.WINEP.PO2.1) to reflect this.	Options development and appraisal for Stour (southernwater.co.uk)

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CCW – Consumer Council for Water Ref: 4034	Ultimately, there has to be a compromise between the company's ambition and the impact of investment costs on customers' bills. This should be informed by engagement with customers to establish their priorities and their willingness to pay – on bills – the costs of proposed work, and the pace with which they want to see improvement. It must also run in tandem with measures to protect financially vulnerable customers who may face affordability issues with increasing bills. The single water affordability scheme, which Defra is considering, is key to unlocking investment by protecting those least able to pay.	The investment needs identified provide the best long-term value to our customers and communities by reducing risk through more sustainable approaches, which provide wider benefits. These are our 'preferred' investment options to be funded from customer bills through our standard regulatory processes. The potential impact on Customer bills is shown in our technical summary on "bill impacts". Ultimately, the price customers pay for our services is determined by Ofwat as part of the PR process. We run customer insight programme to understand our customers views and their willingness to pay. Ofwat also conducts its own customer research during the Price Review process.	Bill Impacts Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries
CCW – Consumer Council for Water Ref: 4034	The draft DWMP is, by its nature, a technical and complex document that is not very accessible to a wider audience. It is important that customers and non-technical stakeholders can understand and contribute to the company's plans. We are therefore encouraged that the company provided an easy to understand summary of the draft plan and of the priority areas for this wider audience. The company has a comprehensive suite of webpages about the DWMP. This sets out what a DWMP is and the process of its development. The site is broken down into its 11 river catchment areas catchments, which will help focus attention of local interest groups. We would like to see the company develop these further in the final plan to include likely bill impacts and the use of videos and clips to make them easy to access and understand.	We have updated our customer focused non technical summary to reflect our final DWMP. The potential impact on Customer bills is shown in our technical summary on "bill impacts".	See our short, plain English summary document: https://www.southernwater.co.uk/dwmp/our-regional-dwm Also see the Bill Impacts Technical Summary: https://www.southernwater.co.uk/dwmp/technical- summaries
Chichester District Council Councillor Ref: 3009	There is clear evidence that there are serious issues with the network across the Western Manhood Peninsula served by the Sidlesham WTW. Calculations and surcharging evidence clearly show the network does not have the capacity during wet weather conditions and the situation has been further worsened by the large number of new connections over the past 8 years. Clear examples of mitigation not being undertaken can be seen at the Northfields development in West Wittering where an attenuation tank was not installed even though it was a planning condition. At the 110+50 new homes development at Clappers Lane Bracklesham the planning condition required lengths of the network to be upgraded with larger diameter pipework, again not undertaken. Whenever rain is forecast tankers are strategically parked in this area to prevent overload at the pumping stations. In fact, photos already sent to SW, during rain spell schoolchildren have to wade through the raw sewage surcharging from the manholes. I raise this as there appears to be no plan in any of the attached documents to address these issues.	This is a known problem that we are discussing with West Sussex County Council and Chichester District Council. One of the root causes of the problem is the high levels of infiltration from groundwater into the sewers. This means there is less capacity for wastewater from homes. Rainwater also causes problems and intense rainfall can overwhelm the system. We are currently (March 2023) relining some sewers on the Manhood Peninsular to reduce the amount of groundwater infiltration. The DWMP identifies future risks and investment needs from 2025 onwards. Regarding the Northfield development, a condition was placed at planning stage for the developer to install an acceptable means of drainage. A method was agreed which allowed the condition to be met. Instead, the developer installed a gravity connection under a S106 agreement and so the mode of drainage did not met the requirements of the condition. It is the responsibility of the planning authority to check this. Our responsibility is to accept the flow at the agreed connection point. However, we doubt that the flow from an additional 15 properties would alter the flood risk in the area. Regarding Bracklesham, we are progressing a study of the Sidlesham wastewater system to understand the cumulative impact of rainwater and groundwater in the sewers, and to explore how we can reduce water from these sources from being mixed with sewage and overwhelming the existing systems. We also need to ensure that all new developments meet their planning conditions and do not connect rainwater into the foul sewers. We have identified a number of investment needs for the system, including the catchment wide study (SIDL.OT01.7) and several addressing flooding and pollution.	Investment needs for Sidlesham and Pagham have been updated - these can be found on our website: https://www.southernwater.co.uk/dwmp/arun-and-western streams-catchment/options-development-and-appraisal-fo arun-and-western-streams
Chichester District Council Councillor Ref: 3009	There is clear evidence that there are serious issues with the network across the Western Manhood Peninsula served by the Sidlesham WTW. Calculations and surcharging evidence clearly show the network does not have the capacity during wet weather conditions and the situation has been further worsened by the large number of new connections over the past 8 years. Clear examples of mitigation not being undertaken can be seen at the Northfields development in West Wittering where an attenuation tank was not installed even though it was a planning condition. Whenever rain is forecast tankers are strategically parked in this area to prevent overload at the pumping stations.	Within our 22 investment needs for Sidlesham, we have included five needs associated with growth in the system (ref SIDL.CONS01.1 to SIDL.CONS01.5). We have also included SIDL.OT01.7, our first "total system scheme" study, which will allow us to tackle the combined challenges of climate change, sea level rise, flooding, water resources, water quality, biodiversity and habitat loss.	Investment Needs tables for Sidlesham: https://www.southernwater.co.uk/dwmp/arun-and-western streams-catchment/options-development-and-appraisal-fo
Chichester District Council Councillor Ref: 3009	The environment has been seriously compromised through lack of investment by SW as can be seen with Chichester District. It should be noted that the situation has further deteriorated by allow large scale developments where the network is already overstretched. This has mainly happened because the Statutory Authorities will not admit to a shortfall in their systems due to financial implications. To date there is clear evidence that for many years there has been no investment to maintain the capacity of the network to meet the ever-growing demand. There is clear evidence that show the situation in the Sidlesham catchment area needs urgent action and I cannot understand why it appears to be in Risk Band 1.	The water industry is heavily regulated by three regulators - Ofwat (the economic regulator), the Environment Agency (the environmental regulator) and the Drinking Water Inspectorate (DWI). The EA determines the enhancements that we can make to our systems to protect the environment, and Ofwat controls the amount we can charge customers and hence the level of investment in infrastructure. We do reinforce our sewer network to accommodate additional flows from new development, but new developments still have the right to connect and this can include rainwater into foul systems. We would like to stop this, and start to remove rainwater and groundwater from foul and combined sewers to ensure there is enough capacity for wastewater. The DWMP identifies 22 investment needs for Sidlesham alone, some of which are to address growth and others to address existing issues. The investment needs identified provide the best long-term value to our customers and communities by reducing risk through more sustainable approaches, which provide wider benefits. These are our 'preferred' investment options to be funded from customer bills through our standard regulatory processes. The potential impact on Customer bills is shown in our technical summary on "bill impacts".	
Chichester District Council Ref 4010	There is a concern about whether some of the solutions proposed are deliverable and the long term timescales for schemes that would provide solutions in catchments already needing improvement. The Council's responses to previous consultations set out concerns that the urgency of capacity issues at some of the wastewater treatment works had not been identified, appreciating this is partly due to the use of historic dry weather flow data prescribed in the DWMP process. Whilst these concerns have been taken on board to some degree, which is welcomed, Chichester District Council remains concerned that treatment capacity will be reached or exceeded at many of the wastewater treatment works in the Chichester Plan Area in the short term, before the permits can be reviewed or other changes made that will have an impact on available treatment headroom. We are also concerned that there are no proposals for the northern part of the Chichester Plan Area as Loxwood, Kirdford and Wisborough Green works there will also need additional capacity. We would like to reiterate the urgency of finding solutions so that development can continue across the Chichester Local Plan Area, and that Permit reviews must take account of sensitive receptors and ensure no adverse environmental impacts.	Growth is a critical material issue that we have taken very seriously in planning our investment needs. Wastewater transfer from new developments in Chichester to Tangmere is being completed this AMP (2020 - 2025). Our plans for the wider Chichester district includes increasing capacity at the Pagham in AMP7, and Sidlesham and Thornham WTWs in AMP8 (2025 - 2030) to take account of new development and growth and increasing capacity at Bosham, Lidsey and Tangmere WTWs during AMP9 (2030 - 2035). We have also identified that additional treatment capacity will be needed at Bosham, Tangmere and Thornham during AMP9 to meet our DWF permits. If the permits change in the interim, we will adjust our timescales to ensure we are compliant. As well as this, we have identified that measures to address total nitrogen and phosphorous will be required at Bosham, Chichester, Lavant, Lidsey, Pagham, Sidlesham, Tangmere and Thornham during AMP8 to meet Natural England's revised requirements on Common Monitoring Standards. The timescale for producing the first DWMP meant we could not include Loxwood, Kirdford and Wisborough Green in this cycle but we are committed to investigate the risks from these remaining works during the next cycle.	Investment needs for all the systems in the Arun and Western Streams RBC have been updated - these can be found on our website: https://www.southernwater.co.uk/dwmp/arun-and-western streams-catchment/options-development-and-appraisal-fo arun-and-western-streams

Source	Topic	Response	Where addressed in the Plan / website
Chichester District Council Ref 4010	There should be a separate SEA objective on assessing the impact of options on road transport movement (thinking of tankering as a solution). This was not incorporated into the SEA framework but tankering (along with pumping) is specifically mentioned as a mechanism of impact under the Climatic Factors assessment criteria, there would not be an objection to the SEA in that regard. Can anything more be done to mitigate this? Mitigation will be key in construction phase. The SEA says "Prior to the start of construction impacts on the local community will need to be assessed, noise potential as well as disruption to traffic and public rights of way. Potential receptors include schools, medical facilities, open access areas, green spaces, residential areas." This issue is understated.	We have been developing methods for assessing the wider environmental impacts of our investment decisions on social and environmental factors, include use of energy and carbon emissions. This is helping to us understand the impacts on customers and the environment of different options, including additional tanker movements Additional road transport emissions would be considered under Air Quality questions and impacts on disruption to communities would be considered under Population, Communities and human health questions. We only use tankers as an interim solution although it can be several years before a permanent solution can be funded and delivered.	
Chichester District Council Ref 4010	it would be better if the plan was able to use more recent data (including on Dry Weather Flow) to help inform the investment required. The use of more historic data means the urgency of the need for improvements to treatment capacity at many of the WwTW is missed.		Our Technical Summary on factoring Growth explains how we have taken this into account for this cycle: https://www.southernwater.co.uk/dwmp/technical-summaries
Chichester District Council Ref: 4021	I like the progress that has already started with the 5 (Pathfinder) projects over the next 2 years, looking at ways to evaluate the most effective ways of reducing Storm Overflows. Personally, I hope that SW tackle the root causes of the problems: blockages caused by customer education exwetwipes; separate the sewer and surface waters that causes hydraulic overload from roofs and roads; increase the use of SUDs and permeable surfaces, but use the engineering solutions of storage tanks and additional treatments as the last resort. Increasing the EA Permit, however, does not solve the issue of under-capacity of the WTWs.	Thank you. Our Pathfinders programme is providing evidence that storm overflows can be effectively addressed in an affordable way through working in partnerships with our customers and local interested parties and need not always rely on expensive 'grey' engineering solutions. Solutions to many of the issues identified in the DWMP will rely on this type of partnership approach and we hope that the Plan results in recognition that we need to change the way we all value and treat our water environment to protect it for future generations to enjoy and so that wildlife can flourish. However, we also accept that we will need a mix of traditional grey and more innovative green solutions to meet the expectations of government and our customers - especially in the short term. Growth and capacity are key concerns for us and our partners. We have identified extensive investment needs across the region for increasing capacity at our works to meet the needs of development while protecting the needs of the environment.	We have provided case studies in our Regional plan to illustrate a range of effective and affordable solutions to storm overflows. The sections in the report on surface water management, storm overflows and reducing flooding and spills explains our approach in more detail. Our investment needs for each wastewater system can be found on our website within the River Basin Catchment
Chichester District	Please make the outline and stages simpler to follow and help the reader find what he is is looking	As a result of the consultation, we understood that the way we had presented the investment needs in three different tables, each providing slightly different	pages under Options Development and Appraisal. As above, our investment needs for each wastewater
Council Ref: 4021	for. I used different colours for each of the WWTW in our District, onto the 'Prioritised Investment	information, was confusing to readers. For our final plan, we have simplified the three tables into a single list for each wastewater system and used the AMP in which the solution it will be delivered to show its prioritisation according to the significance of the risks. We hope this is now much clearer.	system can be found on our website within the River Basin Catchment pages under Options Development and Appraisal.
Consultation Ref: 409	59 Are you using the standard published flood radius guidelines. I think that this is now discredited. Both DCWW and Thames justified the use of a much smaller radius around a flooding manhole. The tables could be a bit clearer. The description of the option seems to vary between different locations for effectively the same solution.	Yes we are using the standard published guidelines for flood radius. We are aware of the work by Thames and DCWW on this with their two-dimensional models, but we have stuck to the national guidelines in our DWMP. We are concerned about the results from the standard approach and we have explained this in the Level 1 Plan and moved investment needs associated with this modelling into an alternative pathway. Our "Approaches to Uncertainty" Technical Summary describes and sets out the modelling flood radius we used to forecast flooding from manholes. We will be reviewing our approach to modelling including the flood radius buffers in cycle 2.	See the Investment Plan section of our Level 1 DWMP Approaches to Uncertainty Technical Summary: technical-summary-on-approaches-to-uncertainty.pdf (southernwater.co.uk)
Consultation Ref: 409	59 I am confused about the units of the costs and numbers of incidents. Is it cost per year, for the nex AMP or for the duration of Short, Medium or Long term. Similarly for the number of incidents, is that per year or over a defined period. I assume that this evens out in the cost per incident which is the true cost per incident over whatever timescale.	We have updated and clarified our investment needs tables since publishing the draft DWMP for consultation. We hope this is clearer now.	See the investment needs tables on our DWMP website
Consultation Ref: 40	59 The table for P07 shows number of properties rather than incidents. But this is an annualised risk, so you could show number of incidents to be consistent. Why are there schemes in here with zero properties at risk – or is it a rounding error from a fractional number?		See the investment needs tables on our DWMP website
Consultation Ref: 409		Our BRAVA on storm overflows was undertaken in accordance with the national DWMP Framework. Since completing the BRAVA stage of the DWMP, Defra have published their Storm Overflow Discharge Reduction Plan. We have updated the draft DWMP so that the investment needs identified in our final DWMP meet the new requirements.	Level 1 Plan section on "Storm Overflows" and the ODA pages on the 11 River Basin Catchment sections of the DWMP website
Consultation Ref: 403	59 The Plan says that exfiltration causes groundwater pollution, but the methodology is about groundwater infiltration causing capacity issues. It doesn't match up.	The reason for including infiltration in this risk assessment is that sewers that infiltrate are also likely to exfiltrate, and infiltration indicates close proximity of the groundwater saturated zone to the sewer network. The rate of exfiltration will be less than infiltration due to the pressures involved. Close proximity of the water table to the sewer network mean that there is likely to be more interaction between sewage and groundwater, hence the risks of pollution are potentially higher than for groundwater zones where the water table is a long way below the surface.	N/A
Consultation Ref: 409	59 You need a performance objective for FFT compliance. This could require significant investment but if this is converted into a storm tank spill frequency then it can be solved with extra storm tank capacity (within reason). However, if FFT is written into the consent then you have to be prepared to upgrade the works to deliver this.	We will be reviewing the planning objectives used in our first DWMP to consider what to include in Cycle 2. Flows to Full Treatment (FFT) is a key regulatory performance measure and stated in many permits, although it doesn't necessarily cause a direct risk to customers or the environment. We operate all our systems to meet the permits from the EA, as compliance with these is paramount.	N/A
Consultation Ref: 40	59 There are a lot of proposed investments under "improving resilience" of SPS and WTW. Is that code for clearing a maintenance backlog?	We have a significant number of proposed maintenance investments ranging from sewer jetting to installing automated back-up generators should there be a power cut. We do not to classify these as encoded but as necessary maintenance and operational investment needs.	See revised text in our Level 1 Plan on Asset Health and Resilience

Source	Topic	Response	Where addressed in the Plan / website
Consultation Ref: 405	9 For DWF compliance, what if the EA doesn't allow the increase in flow or requires tighter quality standards to mitigate. Is this costed?	It has not been possible to cost all eventualities but will work with the EA to understand what the requirements will be.	N/A
Customer Ref: 1001	The calculation of Dry Weather Flow in the dryest 73 days of the year is totally unfit for purpose and makes no allowance for capacity in the increasing levels of wet weather we can expect in the future. As well as assessing the hydraulic capacity of the treatment works, the regulatory framework also needs to assess the capacity of the catchment network which currently has no oversight. Planning authorities have no access to technical data assessing capacity and are not allowed to refuse planning permission on the grounds of lack of capacity. Water companies are obliged to connect regardless of capacity. This planning framework inevitably leads to the chaotic situation we have at present.	We agree that the regulatory framework needs reviewing to allow better long term integrated catchment planning. Our approach to future flows and climate change are fully explained in our two technical summaries entitled "Climate change" and "Approach to Uncertainty".	"Climate Change" & "Approach to uncertainty" technical summaries: https://www.southernwater.co.uk/dwmp/technical-summaries
Customer Ref: 1001 Customer Ref: 1002, 005, 1007, 1008, 009, 1010, 1011, 012, 1013, 1014, 015, 1017, 1019, 020, 1022, 1023, 024, 1025, 1028,	Reducing water consumption calculations from 500 litres per household will give an illusory increase in capacity. It is totally unenforcable. The increase in effluent density will inevitably result in the ever-increasing blockages which are evident from Southern Water's report (60% of discharges). The company has used borrowing to fuel shareholder dividends. That is not acceptable. Band 0 should be achieved without significant cost increases to consumers. SW and other water companies have had years in which to research and invest in long-term solutions, but have preferred to pay themselves bonuses. We all know that you wait until there is rain as an excuse to get rid of sewage under the false pretence that it's due to storm conditions. You must stop pumping raw sewage into our rivers and seas. Considering the amount of profit that Southern Water has taken in the last few decades, I don't think it goes far enough. I think you work out the	While reducing water consumption will help in reducing the flows in our sewers, you are right that this may have unintended consequences. However, storm flows are a significant component of the total flow in our wastewater systems. We are therefore prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. A large number of customers expressed similar views regarding the DWMP which is that our business operates only to pay high shareholder dividends and executive salaries, should be nationalised, and uses waterways and the coast as a convenient and low cost way to 'dump raw' sewage into the environment. We understand this is the view of the customers that chose to respond to the consultation. We have collated these responses in our Statement of Response, and used the sentences that outline the sentiments expressed. The views expressed demonstrate the depth of concern our customers have for the health of our natural environment and we would like to reassure them that we care and work hard to comply with the permits from our environmental regulator and reduce pollution incidents. These customer responses are provided in full in the appendix to the report on our 2022 DWMP public consultation.	https://www.southernwater.co.uk/dwmp/technical-
1029, 1030, 1031, 1032, 1033, 1034, 1035, 1039, 1041, 1042, 1043, 1048, 1057, 1058, 1059, 2009 Customer Ref: 1003	minimal cost and minimal risk and do the least you can possibly get away with! Ideally - I'd like Southern Water to have a complete pay freeze until they clean up their act and to collaborate with the government under threat of denationalisation if targets not met. Perhaps you should consider the health of the planet and people rather than saving money in order to pay yourselves and shareholders. You are a disgrace of a company. The Risk Based Catchment Screening (RBCS) is unrealistic because it refers to permitted number of spills where this may not be defined and/or is increasing because of climate change, urban creep or poor maintenance. (e.g. pumps fail in NHS at Marine Drive Brighton in 2021)	We are proposing numerous investment needs to address the nutrient and pollution issues in the Chichester, Langstone and Pagham Harbours. We are collaborating with a wide range of partners to develop a long-term strategy to protect water quality and the important habitats the Harbours provide, and we will be including this in our business plan so we can start work to reduce nutrients from our operations in AMP8.	See updated Investment Needs for Chichester, Thornham Bosham, Pagham and Sidlesham - all on our website under the Options Development and Appraisal section (within the Arun and Western Streams river basin
Customer Ref: 1003	The risks to Marine Conservation Zones and non- designated bathing waters are not considered.	Marine Conservation Zones and non-designated Bathing Waters were not objectives in our first DWMP. We can consider these for inclusion if there is enough appetite from partners for us to do so in cycle 2. Using sustainable options to address surface water issues may take a long time to be effective which is why we have put that delivery timescale to these needs. However, we will begin implementing sustainable drainage options, in partnership with others as soon as we know we have funding to begin implementation.	catchment). We have updated our section on Storm Overflows in our Level 1 DWMP to include how we are reducing surface water flooding.
ustomer Ref: 1003		The government published its revised storm overflow guidance and targets after we published the draft DWMP for consultation. Since that time, we have updated our investment needs accordingly and we have submitted these requirements for funding to the Environment Agency's WINEP (Water Industry Environment Programme).	See our Storm Overflow Technical Summary for more details: b0081-technical-summary-storm-overflows-final-updated.pdf (southernwater.co.uk), and the investment needs tables for the Adur and Ouse River Basin: https://www.southernwater.co.uk/dwmp/adur-and-ouse-catchment/options-development-and-appraisal-for-adur-
ustomer Ref: 1003	PO5 Storm overflow compliance in Chichester harbour is "very significant" - is this because it is so obviously visible?	All our BRAVA assessments have been based on the evidence from data collected, reported and agreed with our environmental regulator, the Environment Agency. We are using the DWMP, and our risk assessments, to ensure there is greater visibility for our customers of the risks to their local environment. All storm overflows are permitted by the Environment Agency and their performance is monitored closely to record every spill. Any spill not in accordance with the permit is reported as a pollution incident, for which we can be fined.	and-ouse https://www.southernwater.co.uk/media/4549/brava-
Customer Ref: 1004	Southern Water should be working with the authorities, including the government, to see where standards and regulations on other sectors which have an impact on volume and pollution load of wastewater that Southern Water needs to deal with can be applied. For example, regulations and standards can be imposed in the areas of development, road building and urban planning which require developments to incorporate the use of rainwater and grey water for non drinking purposes, and drainage from roads and other hard surfaces where run-off may collect pollutants be required to be channelled through suitable SuDS rather than entering the drainage system and potentially discharged into rivers and the sea.	We are working with organisations across our region that have relevant responsibilities and can also effect change. We believe the DWMP is a catalyst, alongside the plans of others, for this to happen. We are also influencing nationally through out trade body, Water UK, to bring about national changes in planning policy and other regulations and standards to bring about more sustainable approaches to water management.	We have strengthened the text in our Level 1 DWMP on the importance of collaboration and the need for changes in regulations and standards.

Source	Topic	Response	Where addressed in the Plan / website
Customer Ref: 1006, 1007, 2009	The reuse of water within properties, instead of sending waste water into an archaic system it would be much better if it could be reused in situ, e.g. greywater. Prioritising investment in clean water, leak prevention & separating grey & black flows. Working with builders and environment agencies should be a must. Firstly we must protect the existing supplies and wildlife that depend on water and then consider how best to provide future needs. A balance is needed, with rising energy costs. Higher water bills will be a tough ask.	Thank you and we agree in principle. Unfortunately, our powers and responsibilities do not enable us to enforce these requirements on developers or home owners. We are working with the government and its agencies as well as developers to try to influence the regulations to take account of all the issues you raise. The price of water bills are determined by Ofwat, our economic regulator, rather than something we decide. However, we have a range of affordability programmes to ensure those in vulnerable financial circumstances are protected.	Information about our affordability programmes is available on the main Southern Water website at: https://www.southernwater.co.uk/account/what-if-i-can-t-pay-my-bill
Customer Ref: 1018	The immense scale of the outcomes required; the timescale over which actions and investment must be undertaken; the ever-changing environment, both physical and political; the uncertainty of future needs and changing priorities; the ever-rising population and their increasing demands on the finite resource we have to share, and our inability to make do with less; the lack of understanding of the public as to their role in wastewater creation and managementand all that and more before we tackle the specific issues how we deal with drainage and wastewater. Given the range of water users and the impact on our lives of wastewater, no one can be immune and pretend it is not their responsbility AND duty to ensure proper and safe use of water and waste water, and the chain of inter-conectivity of one persons actions on others.	It is truly encouraging to read your response and see recognition that, although it is our responsibility to provide a clean and safe water supply to our customers and safely remove and recycle wastewater before returning it back to the environment, looking after our water environment is a universal responsibility. Thank you!	N/A
Customer Ref: 1018	Spreading your investment across a wide range of risk may result in unsustainable mitigation; least cost may be "affordable" in the short term and result in specific issues being dealt with but at what longer term detriment from the other risks? Some sort of classification would be helpful to see how those choices are made and the consequence of not chosing alternatives. We cannot avoid risk in life. We have to be proportionate and what one person deems acceptable may not be to others. In my experience, reducing a risk to a neglible level is unachievable even if it is desirable. so you need also to have warning signals when something is reaching an unacceptable level. And of course if we invest in one thing we are not necessarily investing in something else. You have to be clear about the choices to be made, including the cost, which for some people may be unacceptably high. We all want to have cake and to eat it!	Thank you for your response. We recognise much truth in this. There are very hard choices to made, particularly when it comes to prioritising scarce resources such as funding. Our DWMP and the outputs of the BRAVA have highlighted the most significant risks from and to our wastewater systems and this will shape how we prioritise investments from AMP8 onwards. The regular rerun of the BRAVA and the work we have undertaken on approaches to uncertainty and adaptive planning will equip us to understand when we need to trigger a change of plan - either positive or negative. We hope the information we have provided about the stages of the DWMP and how we have arrived at our decisions is transparent and clear - although perhaps rather technical in places. We have been encouraged by the overall support for the proposals in our draft DWMP outlined in our report on the public consultation.	and adaptive planning:
Customer Ref: 1018, 1026	The definitions and parameters of words such as enhanced and quality have not been explained within the context of the report and are therefore arbitrary and meaningless. It does not seem to have been written with a broad intended audience in mind. It seems to have been written by highly (skilled) technical people for equally (skilled) technical people. Joe Public will barely pick it up and not bother to read it. Try to summarise and simplify and simplify. You can always put the technical stuff in appendices so the reader can dip into it to see what evidence is that underlies the statements being made. Examples of plans and the expected effects and consequences of such plans should be explained in greater detail in plain succinct language instead of terms which are hard to quantify. More details are required. Plans need to be more specific.	a map of our region on the landing page for the DWMP that will help with identifying the river basin of interest. We have also published a series of technical summaries	0.0
Customer Ref: 1021	New WWT plants should not be located on the coast. It should not be necessary. Climate change/sea level rise will inundate some plants. While I support the proposals I think the vision is limited by the framework and we need some bigger thinking all round.	We have not yet identified the need for new treatment works but It is highly unlikely that any new works would be located anywhere on the coast. Our resilience assessment has shown that most of our coastal works are not in risk locations but there are a very few where we may need to begin planning for change in the next 10 years or so. It is good to hear that you support the proposals in our DWMP and we hope that future cycles will enable us, with partner organisations to become more visionary through integrated catchment management.	N/A
Customer Ref: 1021, 1036, 1044, 1045, 1046, 1048, 1049, 1051, 1052, 1054, 1056	More and more houses are being built with little or no opposition from SW. Wastewater and drainage issues will only increase as more and more houses are built, SW needs to be strongly proactive in objecting to out of control new builds. SW should be proactive in opposing more concrete being laid and more houses being built. The ground acts like a sponge to soak up rainwater, when houses are being built and hardstanding for cars is taken into account small wonder there is flooding following heavy rainfall as the sewers are overwhelmed by runoff. You are in fact increasing risks by not strongly objecting to new housing. There should be no new development until the projects to improve water treatment capacity are at least started.	A large number of customers expressed similar views regarding the DWMP regarding the extensive development planned across our region and the capacity of our systems to manage this. We did not think it added value to the process to replicate this number of similar responses in our Statement of Response, so we selected some sentences that outline the sentiments expressed. It is really important to understand that under the current planning regulations, water companies are not statutory consultees on planning applications, we cannot block development, and developers have a 'right to connect' to our sewer networks. There is a defined process we follow regarding new development and urban creep. Our future growth team tracks new development proposals by working the Local Planning Authorities	See the section in our regional plan that discusses growth and development and our technical summary on growth and urban creep: https://www.southernwater.co.uk/media/8413/b0054-technical-summary-growth-and-creep.pdf
Customer Ref: 1026	Southern Water should be looking above and beyond pure compliance and not just completing the bare minimum. Long-term shareholders will also benefit from longer-term planning. Return on investment should not be measured in years but at the very least in decades. Customers will be fine with moderate increases as long as they can see tangible improvements and progress are being achieved.	Thank you for your response. Compliance with our permits is core to our regulated responsibilities in terms of preventing storm spills, pollutions, flooding and protecting the environment. However, we believe our plan does look beyond compliance. By working with partner organisations, we are looking to implement long-term, sustainable solutions to tackle the drivers of many of the issues at source. An example of this is developing schemes to slow the flow of surface rainwater into our systems through constructing rain gardens, ponds and rills that can hold storm water back until the storm has passed but which will also green our environment and provide wildlife habitats.	Compliance is referred to throughout our regional plan but there are many case studies of the work we are already undertaking that go beyond compliance as well as the sections on surface water management. Our methodology for surface water management set out how we have approached this issue in particular: https://www.southernwater.co.uk/media/4542/bravamethodology_surface-water-management.pdf
Customer Ref: 1027	The top priority must be drinking water and the need to avoid pollution of groundwater. Nature based solutions could possibly be less costly than traditional methods and better value for money is preferable to the cheapest solution. If people have to pay more for sewerage, they might be motivated to pay attention to the message in the publicity campaign and not put the wrong items down the drain.	Water is a vital resource and we agree that its supply is, in general, undervalued and taken for granted. The prices we charge for our services are set for each five-year period by Ofwat, our economic regulator. We are working closely with the Environment Agency, one of our environmental regulators and our neighbouring water supply companies, to identify the groundwater source zones that urgently need protecting from contamination. All water supply goes through stringent treatment processes to ensure it is safe and healthy for human consumption. However, if collectively we allow our groundwater sources to become contaminated by, for example, poorly maintained septic tanks or agricultural runoff, these treatment process become more expensive. It is better to prevent pollution of our groundwater than have to spend more to counteract its impacts before it is put into supply.	groundwater and our methodology for assessing and

Source	Topic	Response	Where addressed in the Plan / website
Customer Ref: 1037	You should have a system that is future proof and fit for purpose. There are lots of benefits to rigid pipe systems but also drawbacks so stop using low quality plastic systems, demand a minimum standard of SN12 or SN16 to give the rigidity and also SDR34 rated fittings to avoid consistently going back to sewers and replacing/repairing them and causing disruption. Cheaper is never the best way forward, looking upward and demanding quality is surely the way to go. You should discuss with other water companies and manufacturers as to the best solution for them/you, look at what is on the horizon with BS9295 and it is pushing you in a better quality products direction. Quality has got to be the answer, and the current mindset of balancing pounds etc. is fine but you can never beat a robust, well installed system, with a good life expectancy. Do it right first time, there is no life cost savings if you have to go back every 5-10 years. Most people will agree to less disruption if the job is done right in the first instance.	value to our customers and communities by reducing risk through more sustainable approaches, which provide wider benefits. The specific detailed design aspects such as you describe are beyond the scope of the DWMP but we will take account of these when we are repairing or refurbishing our sewer systems.	N/A
Customer Ref: 1038	The DWMP is based on a set of self-imposed Planning Objectives which are not necessarily comprehensive. For instance they do not include the Flooding Minister's statement in the Defra consultation document on Storm Overflows dated 31 March 2022, where she says: "The targets we have set on storm overflow reductions aim to capture the main priority outcomes protecting the environment and protecting public health. We want to see our rivers restored, with more people being able to enjoy them". At present SW's Planning Objectives do not take these requirements properly into account.	Yes - this is correct but has since been addressed. There was a mismatch in the timing of the consultation and the timing of the Ministerial / Defra statement. We were under a regulatory deadline in terms of the dates for running the consultation and this was half-way through before the statement was issued. Hence the information we consulted on did not include the latest requirements for storm overflows. Since then, we have undertaken significant reviews of the performance of our storm overflows and have now updated our investment needs to ensure we will meet the government's targets. We have produced and published a technical summary explaining the process undertaken to identify the relevant storm overflows that need to be immediately addressed in AMP8 (2025 -2030) and have developed a programme for all the storm overflows in our region. We have submitted our investment needs for funding for AMP8 to the WINEP (Water Industry Environment Programme).	system in the ODA section under each RBC. Our technical summary explaining the process undertaken to identify the storm overflows for funding is available at:
Customer Ref: 1038	Up to the present time there has been no SW Press Release giving information about the DWMP consultation. There seem to be only 75 (undefined) addressees, and most of SW 2 million or so customers know nothing about it. The SW communication system is therefore flawed and the current PR policy needs to be re-thought. You obviously do not enjoy the adverse publicity associated with the current high level of CSO spills, but you need to learn to live with it, and take advantage of the good news that rectification action has already started and that some "wins" have been - or are being - achieved in (for instance) AMP7.	within the bigger picture. There honestly was no attempt to bury information about the consultation as we wanted to hear the views of as many of our customers and communities as possible on our strategy for the future.	N/A
Customer Ref: 1044	Local Councils and the HBC have acknowledged that they do not have the ability to meet Government Housing targets. Southern Water should be supporting these Councils by not accepting new connections while there is insufficient capacity.	Under the current regulations, developers have the 'Right to Connect' new development to existing drainage systems. We are not able to refuse applications, although we work with planning authorities and developers to minimise the impact of new development on existing wastewater systems. We also work with the Local Councils to ensure our systems are improved to meet capacity requirements in a timely manner whilst complying with our permits - although the planning application needs to be approved before developers will contribute towards the cost.	
Customer Ref: 1047	You should offer a consultation platform which actually provides user guidelines and the facility to enable them to return to the consultation question stage in process. I was almost to the end, had to look something up, only to find I had lost the connection entirely and forced to start all over again. I cannot find anything helpful in this regard, so I assume therefore this to be entirely intentional.	··· · · · · · · · · · · · · · · · · ·	N/A
Customer Ref: 1049, 1050	Emsworth / Chichester / Langstone Harbour complex are on the boundary between two areas East Hants/Havant BC and Arun/Chichester DC. The challenge is for you to work together with the two planning authorities to ensure that solutions work across these boundaries. The waste water performance here is demonstrably poor, but is not the focus of specific actions.	t We are working with local councils and the Chichester Harbour Board to develop an integrated plan for the three harbours (Chichester, Langstone and Pagham) to reverse the deterioration and enhance the natural capital of the three harbours and their catchments. We have identified investment needs for the all the wastewater systems that are hydrologically linked to the harbours in the DWMP. We are already investing in this area to reduce nutrients entering the harbours.	See the investment needs tables for each relevant wastewater system in the ODA section under the Arun and Western Streams RBC: https://www.southernwater.co.uk/dwmp/arun-and-westernstreams-catchment/options-development-and-appraisal-for-arun-and-western-streams
Customer Ref: 1052	The investment plans are worthwhile but are they enough? A first impression of the plan is that much more investment money is required if even the rather relaxed schedules are to be met.	We have to strike a balance between the need for investment to address the risks we've identified from the performance of our wastewater systems and the costs to our customers. We would like to be able to rectify all the issues and risks identified but need to be pragmatic and realistic about what this will cost. We will be submitting our investment requirements alongside the evidence provided by our risk assessments to Ofwat, our economic regulator, later in 2024 as part of its 2024 Price Review process. Ofwat will determine how much we can charge our customers during 2025 - 2030. This will, in turn, determine the funding we have available to address the issues. In the main, this means will address the most significant risks as a priority.	See 'Next Steps in our Regional Plan: https://www.southernwater.co.uk/dwmp/our-regional-dwmp and our Technical Summary on Bill Impacts: https://www.southernwater.co.uk/media/8419/b0082- technical-summary-bill-impacts.pdf
Customer Ref: 1053	There doesn't appear to be any attempt on your part to acknowledge both the potential pollution from old communal septic tank outflows into river systems in the South, or to be honest about your negligence in upgrading this infrastructure. When our parish council in Hamsey, East Sussex enquired (EIR reference 1230) about the status of the communal septic tank on the Ouse in Hamsey you responded by saying you had acquired a permit in 1986 that exempted you from the EA's General Binding Rules or from locating any flow monitors at the site. There has been concern from the local community for some time that the septic tank is not functioning properly - strong smells coming up from the river and anecdotal evidence that the EA has tested the river and fined you for contamination.		N/A
Customer Ref: 1055	Efficiency and effluent reuse are woefully under utilised as possible solutions and often ignored in options studies. It is not clear why this is the case. The company WRMP is equally unambitious in these areas even though reuse is effectively a cheap resource.		See our Water Resources Management Plan (WRMP) for more details: https://www.southernwater.co.uk/our-story/water-resources-management-plan
Customer: Ref: 1003	PO6 Thornham WTW has no record of compliance failure during 2018-20. "No record" is not satisfactory given previous history of poor record keeping.	We used our recorded data from 2018 - 2020 for the EPR (Environmental Permitting Regulations) Compliance assessment and this was reported annually to the EA. During the 3 years of assessment there were no failures or near misses of the EPR. We think it is right for us to be challenged over our choice of wording. We will make this clearer in future and use more appropriate wording.	We have made sure the wording used in the Level 1 DWMP is correct and will update the wording in the 'causes of risk' documentation for cycle 2.
Earnley Parish Counc Ref: 3015	The investment plans need to be more wide-ranging and comprehensive. A section of sewerage in our parish (including a pumping station) has been subject to hydraulic overload for some years and has caused great distress to local residents, yet it is not included in the investment plans.	Thank you for your feedback. We have 22 investment needs for the Sidlesham wastewater system, which includes a number in the Earnley Parish (eg d SIDL.CONS01.5) to address specific issues.	Investment Needs tables for Sidlesham: https://www.southernwater.co.uk/dwmp/arun-and-western-streams-catchment/options-development-and-appraisal-for-arun-and-western-streams

Source	Topic	Response	Where addressed in the Plan / website
Earnley Parish Council Ref: 3015	The DWMP needs to be far more radical in its approach. After examining all the issues, it seems inexplicable that the DWMP should conclude with the proposed overall core investment strategy of "Maintain", described as: "Current performance is within acceptable limits and no major concerns for the future". Clearly the overall adopted strategy should be to "Improve", recognising that current performance is unacceptable. Southern Water needs to recognise that this radical improvement in its performance comes at a cost. To achieve major improvements it may be that bills have to increase significantly (or other funding secured), and that SW starts raising serious objections to some major planning applications for new housing. To be effective, the latter action may require changes to the 1991 Water Industry Act, but Southern Water in concert with other water companies and interested parties could lobby for this.		Bill Impacts Technical Summary: https://www.southernwater.co.uk/dwmp/technical- summaries. See also our Sustainable Development policy: https://www.southernwater.co.uk/our-services/planning- your-development
East Chiltington Parish Council Ref: 3012	Rainwater should be reserved in reservoirs and then the sewage treatment works would not be overwhelmed each time it rains. Water companies should be consulted as part of the planning process.	It would make a huge difference if we were a statutory consultee in the planning process for planning applications, although we would like to see changes to Building Regulations on conservation and reuse of water. Rainwater management is a key issue and with climate change it is increasingly important in the water stressed south-east. We believe that slowing the flow of rainwater from buildings, roads and green spaces would reduce the discharges from storm overflows and make more space for wastewater to stay in our systems until it has been fully recycled. We are prioritising separation of rainwater and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of rainwater through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10).	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries
East Chiltington Parish Council Ref: 3012	Your draft plan doesn't seem to address the abhorrent nature of your actions each time you fail to fulfil your duty by polluting the waterways. Years of neglect in the infrastructure has to be faced sooner or later. You need to do more and sooner. We are going to endure this situation for years if your plan is followed through. It's going to be costly to improve. We are all going to pay and that includes the water companies themselves.	We work hard to provide reliable and resilient wastewater services to over 4.7m customers every day. We have 381 wastewater system, which are complex system of pipes, pumps and treatment works. Occasionally equipment can fail or blockages can occur in sewers (e.g. from fats, grease, wet wipes) that leads to flooding or pollution. We receive penalties or fines on these occasions so we work hard to ensure these incidents do not happen - but we cannot prevent them altogether. Hence we act fast when problems occur to limit any environmental damage or impact on customers. There is a lot of independent information on the internet about the investment in the water industry since privatisation in 1989. The levels of investment are set by the Government's economic regulator, Ofwat. They scrutinise water company business plans to determines how much water companies can charge customers. As most of our funding is from customer bills, this determine the level of investment in the infrastructure. The Government has set out new targets for water companies, for example of nutrient reduction and discharges from storm overflows. This will lead to an increase in customer bills to fund this work.	https://www.southernwater.co.uk/dwmp/technical- summaries
East Hampshire District Council Ref: 4012	Hard engineering solutions are not necessarily environmental solutions and can be site specific. Therefore, solutions should be catchment-wide and, if possible, nature based. It is not about monetary costs it should be about environmental costs too.	We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows.	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
East Sussex County Council Ref: 4040	It is essential that the data underpinning the assumptions in the draft DWMP are accurate and up to date. The County Council, working with its colleagues in the Districts and Boroughs and utilising latest ONS data, develops population projections which serve as a sound foundation for service planning and local plan development. It would appear that Southern Water, in developing its projections up to 2050, has not sought the advice of the Local Authorities even though they are best placed to provide relevant and accurate demographic data for their areas. This has implications for the accuracy of the assessment of need and, consequently what measures will be required to meet the challenges set out in this draft plan and to prepare for what will be increasingly higher standards set by government for the water companies over the coming decades.		Factoring in Growth Technical Summary: https://www.southernwater.co.uk/media/5257/technical-summary-growth-and-creep-final.pdf
East Sussex County Council Ref: 4040	As a Lead Local Flood Authority, we have seen an increase in the use of package treatment works to enable development on individual sites in this catchment. Meanwhile key waste water treatment plants seemingly struggle to meet the demands of new development. Our concern is that these local treatment works are susceptible to failure and therefore sites should be connected to mains sewerage services as a matter of priority.		See investment needs for nutrient neutrality in the Level 3 DWMPs in areas of nutrient advice issued by Natural England (Stour, Test & Itchen, East Hampshire).
Eastbourne Borough Council and Lewes District Council Ref: 4033	In both the Newhaven East and Eastbourne systems there are stretches of sewers which have limited fall. These stretches are prone to 'drying out' and stagnation, which was experienced in 2003 and again this year. The result of 'drying out', or very low flows, is that sewage can become stagnant and anaerobic creating hydrogen sulphide, which is noxious and toxic and which may impact upon the effectiveness of the yeast/ bacterial/ microscopic cultures that operate in wastewater treatment works, resulting in a failure in their ability to treat sewage. The 'drying out' can produce a crust or cake that can physically block sewers. In addition, the drying and heating of the ground can cause sewers to fail. It is noted that this risk has not been identified in the consultation documents provided.	We have identified in our investment needs table for both Newhaven East and Eastbourne the need to undertake improvements in our hydraulic models, including surveys and reverification of models, to improve their accuracy, our understanding of how the systems operate and the issues that are affecting them (see investment needs reference NEWE.OT01.5 and EALP.OT01.5).	Investment needs table for Cuckmere and Pevensey levels (for Eastbourne) and Adur and Ouse (for Newhaven East): https://www.southernwater.co.uk/dwmp/cuckmere-and-pevensey-levels-catchment/options-development-and-appraisal-for-cuckmere-and-pevensey-levels https://www.southernwater.co.uk/dwmp/adur-and-ouse-catchment/options-development-and-appraisal-for-adur-and-ouse

Source	Торіс	Response	Where addressed in the Plan / website
Eastbourne Borough Council and Lewes District Council Ref: 4033	Repair work should be carried out on sea defences at Portobello Pumping Station in Peacehaven. Long term, 2050 to 2090, the undefended section of the coast between East Saltdean and Portobello may result in the sewage network being at risk of being severed by coastal erosion. Such a situation would place the Brighton Network at risk. The consultation Plan document does not appear to discuss how SWS will need to work with East Sussex County Council Highway Authority, Lewes District Council and the Environment Agency to seek a coordinated approach to coastal erosion risk management along this stretch of coast. Such work would need to be planned into the Asset Management Plan process. Similarly, the sewerage assets between Seaford and Newhaven, including the Newhaven Works, could be at risk as the coast changes and sea levels rise. This is particularly the case for the Newhaven Works, where the Tidal Mill section of the Shoreline Management Plan identifies this as an area where the policy will seek a managed realignment in the next decades.	others to deliver this. We have been in discussion with the Environment Agency regarding collaborative work with other organisations to maintain the coastal defences which protect from Portobello to Peacehaven. The EA are leading on this particular programme of work and we will contribute to the project. The EA's latest study concludes that no investment is needed pre-2030. Regarding the other areas mentioned (Saltdean, Seaford and Newhaven) we will work with other risk management authorities to understand the change in risk due to climate change, including the impact of sea level rise, to our assets and where required our contribution to the investment required will be included in our future plans. We are including in our AMP8 plans contributions to a shoreline management scheme to protect Eastbourne	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Eastbourne Borough Council and Lewes District Council Ref: 4033	It is of note that there is reference to storm water storage systems, but there does not appear to be discussion of where these exist (should this reference Lewes and Brighton and Hastings?) Information concerning where such storage facilities would be required in future appears to be missing - Eastbourne, Newhaven or Seaford, for example.	e "Storm water storage" refers to the storage that exists in most of our wastewater systems that is necessary for the foul sewers to handle high peaks of storm water. We are prioritising separation of surface water from wastewater and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10).	
Eastbourne Borough Council and Lewes District Council Ref: 4033	In terms of flooding, it is noted that data for only three years is included. The data is provided for number of properties flooded by sewage. Is a longer data set data available? Such data that includes, for example, years 2000/01, 2007, 2012, 2013/14, 2014/15 and 2015/16, when there was extensive flooding or prolonged storm patterns dominating the weather would be useful.	Our approach to modelling flooding and use of historical flood data is explained in detail in our technical summary entitled "Approach to Uncertainty"	Approach to uncertainty Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries
Eastbourne Borough Council and Lewes District Council Ref: 4033	There appears to be limited exploration of how and what the changing coast will impact upon, in terms of wastewater treatment facilities and long outfalls, and how these issues would be accommodated within the investment programme. The way investment is planned appears logical. However, it seems this is based on incomplete data (of numbers of properties at risk, for example) is there any control of the register for this data? Over which time-span are wastewater issues registered? - This should be for longer than the previous two years.	The national DWMP guidance for the first cycle does not reflect the importance of coastal issues (flooding and erosion) so we would like to explore this further for inclusion in future cycles of DWMPs. The risks assessments developed for the DWMP are a good foundation for further work, particularly to look at long term risks. We are keen to further develop and update the BRAVA risk assessments as these are a key basis for our plan. Our technical summary on "Approach to uncertainty" provides details on the approach we will be taking to identify any triggers for a change in our investment plans.	See our technical summary on approaches to uncertainty: https://www.southernwater.co.uk/media/8411/b0050-technical-summary-on-approaches-to-uncertainty.pdf
Eastbourne Borough Council and Lewes District Council Ref: 4033	Given the nature of the Adur and Ouse catchment, there are a number of rural sewage works. Consideration could be given to opportunities for the DWMP to seek an additional level of treatment before final discharge to rivers and other water courses. The additional treatment would preferably be nature-based, using lagoons and reed beds. This would improve treatment before entering the water courses, removing nutrients responsible for eutrophication of Sussex rivers and the near shore coastal waters. Reducing algae blooms and increasing biodiversity at the water column would be clearer. In addition, such lagoons would provide additional capacity during storm events, and so reduce the volume of untreated sewage entering a water course. Such lagoons would enable some treatment prior to entering watercourses	assessing options under our planning objectives for "good ecological status" (PO9) and "Nutrient Neutrality" (PO11).	Catchment Selection technical summary: https://www.southernwater.co.uk/dwmp/technical-summaries
Eastbourne Borough Council and Lewes District Council Ref: 4033	It is difficult to verify your data on (population) growth combined with capacity of water treatment works. Which plant covers which area? What is the capacity of the plant? What is the condition of the plant? Are there results of the assessment for each plant and network? What is the resiliency of each plant/network? It is therefore not possible to comment on this aspect of the investment plans as fully as we would have wished to.	A map of the area covered by each wastewater system is on the DWMP website under the respective river basin catchments. The size of the plant is indicated by the population that it serves. Also, the risk assessment on dry weather flow provides an assessment of when the capacity of the works is expected to be exceeded. Our approach to growth is covered in our technical summary on "Growth and Creep". The investment needs for each wastewater system are shown both in a table and graphically on a map under the Option Development and Appraisal for each river basin. We do not publish data on resilience and capacity of our treatment assets.	Growth and Creep technical summary: https://www.southernwater.co.uk/dwmp/technical- summaries Investment needs table for Cuckmere and Pevensey levels and Adur and Ouse: https://www.southernwater.co.uk/dwmp/cuckmere-and- pevensey-levels-catchment/options-development-and- appraisal-for-cuckmere-and-pevensey-levels https://www.southernwater.co.uk/dwmp/adur-and-ouse- catchment/options-development-and-appraisal-for-adur- and-ouse
Environment Agency Groundwater Ref: 4060	At present many of the solutions involve modelling or installation of additional storage. Over time it is hoped that more solutions will be added working with other professional partners to decrease the amount of rainwater, surface water and groundwater ingress that enters the system with more nature-based solutions within catchments.	t We acknowledge this is the case although we hope we have now clarified throughout the Level 1 Plan and specifically in the Section on "Our Plan for Reducing Flooding and Spills" that nature based solutions have always been our preferred option. The Programme Appraisal for the DWMP enabled us to compare the costs associated with the long-term multiple benefits of nature based solutions with the short term single benefit of storage and also to incorporate the costs of enlarging storage tanks in future AMPs. Separation and attenuation is the more expensive option in the short term than the least cost underground storage option but, over the longer term, will provide multiple benefits at less cost than the need to enlarge or rebuild storage tanks. Our resulting preferred short term strategy is for 30% nature based solutions during AMP8 but moving towards a greater percentage of sustainable, nature based solutions over the longer term.	Programme Appraisal Technical Summary: https://www.southernwater.co.uk/dwmp/strategic- environmental-assessment Level 1 Plan "Our Plan for Reducing Flooding and Spills"
Environment Agency Groundwater Ref: 4060	It is worth noting that some of the proposals for Planning Objectives 9, 11, 13 and 14 may also help contribute to protecting the groundwater and enabling greater protection of surface waters, bathing waters and obtaining nutrient neutrality in groundwater dependent terrestrial ecosystems too. The overlaps or links with groundwater are clearly listed in the tables of options, but possibly an explanation could be included in the explanatory text for completeness.	We have referred to the overlapping links between protecting surface waters with groundwater protection. Across the region we have 23 investment needs that are specifically targeting the protection of groundwater of which 18 are for sewer rehabilitation to reduce risk of groundwater pollution and five are for studies and Investigations into the risks of groundwater pollution with three from trade effluent, one from a WPS (wastewater pumping station) and one from non-specified sources.	Level 1 Plan section on nutrient neutrality
Environment Agency Groundwater Ref: 4060	While there has been no specific differentiation in this document, we note the additional work that Southern Water has done to identify storm-overflows or frequent spill sites that discharge to ground or ephemeral streams. We encourage Southern Water to keep those sites in the list so that their environmental impact can be prioritised alongside other storm overflows that discharge to surface waters, bathing waters and shell-fish waters.	Since publishing the draft DWMP for the public consultation, we have completely revised and updated our Storm Overflow investment programme to ensure we meet the Government's recently published SODRP targets and timescales. This takes account of all the overflows across our region.	Level 1 Plan section on "Storm Overflows".
Environment Agency Ref: EA01	The document clearly explains for this first cycle Southern Water has only represented its own investment needs. It will be important that subsequent cycles of the DWMP reflect the ambition and enthusiasm shown in the external engagement workshops, by detailing shared solutions and projects.	We are committed to working with others and intend to demonstrate a greater level of integration with the plans of partner organisations in the next cycles. Where possible, we have identified where schemes have been identified by partner organisations that have shared solutions and we have we identified these in the investmen needs tables in the ODA page of each River Basin Catchment on our website. The "Developing our proposed partnerships projects" section of the Level 1 Plan also sets out the types of cocreation and codelivery partnerships we will develop for AMP8 once funding envelopes for this period are known.	Level 1 Plan section on "Developing our Proposed t Partnership Projects"

Source	Topic	Response	Where addressed in the Plan / website
Environment Agency Ref: EA02	While we note the desire for nature-based solutions/surface water separation, yet there is no commitment to these in the Plan. It appears that despite the emphasis on the source-pathway-receptor model most of the schemes identified appear to be to attenuate excess flows in sewers through upsizing and/or the construction of storage tanks. We expected to see greater consideration of Nature Based Solutions applied across the catchment scale including natural flood management (NFM) and sustainable drainage (SuDS) for attenuation and possibly treatment (where evidenced appropriate), especially in areas where we are also undertaking investigations. We suggest that if interim results from the pathfinder projects are positive Southern Water needs to put more emphasis on Nature Based solutions than is currently in the Plan. Southern Water needs to lead and be bold.	Our responses above, ref OF07 and OF10, explain that it has always been our intention to prioritise green and Nature Based Solutions and that we hope we have addressed and clarified this in the L1 Plan and in the investment tables. We are committed to providing green solutions above grey. The preliminary findings and results from the Pathfinder projects are extremely encouraging and will be pursued as we deliver the requirements of the Government's SODRP to protect our customers, communities and the environment from the risks.	Level 1 Plan section on "Our Plan for Reducing Flooding and Spills" and all 61 investment needs tables in the ODA pages of the 11 River Basin Catchments.
Environment Agency Ref: EA03	The Pathfinder Projects and rainwater separation proposals do sound positive, but the DWMP would benefit from a commitment to communicate the outcomes / case studies back to interested stakeholders so that good practice can be disseminated outside the water company pilot study areas.	The Pathfinder projects are proving highly successful and have already received strong support from local communities. Some of these projects have been highlighted within our DWMP as good practice case studies, see the section on "Our Plan for Reducing Flooding and Spills" in our Regional Level 1 Plan. The work of our Storm Overflows Taskforce is increasing the evidence base for this approach and the evidence is already being disseminated more widely to partner organisations and communities across our region.	Level 1 Plan section on "Reducing Flooding and Spills".
Environment Agency Ref: EA04	While the stakeholder engagement was generally good, we couldn't find much evidence of co- created/funded solutions although we note the future commitment. The EA and partners did make suggestions for co-funded solutions, but these have not necessarily been taken up in the Plan.	We have indicated the types of co-funded partnerships we intend to develop in the "Developing our proposed partnership projects" section towards the end of the Level 1 DWMP. We feel these types of schemes cannot be fully developed until we know what our funding envelop for AMP8 and can be sure of our own financial contributions to these projects. All proposals made by partner organisations during the development of the DWMP have been logged in our Register of Stakeholder Comments, which is published on our website so these will be followed up as soon as we have certainty regarding our AMP8 funding. Further, our investment needs tables indicate the partnership proposals and schemes with the relevant cocreation and codelivery partners for each wastewater system in the ODA pages within each RBC on our website.	Level 1 Plan section on "Developing our proposed partnership projects" Register of Stakeholder Comments: https://www.southernwater.co.uk/media/7288/register-of-stakeholder-comments.pdf
Environment Agency Ref: EA05	We couldn't find any detail at the summary (company) level of the type of solutions being proposed to manage/mitigate the risks (although they do exist in the individual catchment (L2) reports) but we couldn't easily get a sense of the balance of options the company has chosen across its company area. The Plan is not specific in terms of what type of schemes, where, and there is a lack of transparency around costing.	We have produced a table setting out the type of solutions being proposed to manage/mitigate the risks for the whole of our area within the Level 1 Plan under the Investment Needs section.	Level 1 DWMP under the section on Investment Plan
Environment Agency Ref: EA06	The Defra Storm Overflow Discharge Reduction Plan targets provided by Southern Water in the initial assessment of options did not translate into the final investment plan and lacked detail on how these targets would be met on an achievable trajectory over asset management plan periods (see Annex 1, A4 for further details).	We have now updated the Level 1 documents and the investment needs tables to reflect the requirements of the Defra SODRP. We have identified a further 535 investment needs across the region to ensure we address and meet the requirements.	Level 1 Plan section on Storm overflows "Storm Overflows" and all 61 investment needs tables in the ODA pages of the 11 River Basin Catchments.
Environment Agency Ref: EA07	, , ,	We applied the Source Pathway Receptor model in our DWMP to identify opportunities to tackle the risks as source (i.e. before water enters the wastewater system), or pathway (within the wastewater system) or Receptor (in the receiving environment / customer property - in the case of flooding). Tackling issues at source is our priority as stated in our DWMP. Where runoff from permeable areas or from rainwater in urban areas is a problem then we have identified catchment and nature based solutions (inc SuDS) as our preferred approach. We specifically introduced a bespoke planning objective on Surface Water Management to identify risks from surface water flooding and fluvial flooding, and worked with the EA and Local Councils to progress this. However, integrated flood modelling was needed to progress this further yet it was not available at the current time in all the areas under investigation by the DWMP. We have also endeavoured to take wider considerations into account as the first cycle of the DWMP has been developed, and especially where issues have been raised by partners and which have been logged in our Register of Stakeholder Comments on an ongoing process. However, we accept this needs much more development in future cycles and it is our intention to ensure this happens by continuing to work with our regulators, Risk Management Authorities and groups that care for the environment.	stakeholder-comments.pdf
Environment Agency Ref: EA08	The company's Resilience Action Plan is referenced in the DWMP, but we couldn't see any clear linkages in terms of the plan's development. Water companies need to ensure the work they are doing on assessing the vulnerability of their assets to fluvial/tidal or surface water flood needs to be an integral part of the DWMP and not just cross referenced.	We completed the Resilience Assessment as part of the development of our DWMP, in accordance with the national DWMP Framework. This considered resilience to fluvial and coastal flooding, power outages, Communications failures and continuity plans for assets. Due to commercial and operational sensitivities of this data, our Resilience Assessment has not been published as part of our DWMP. However, we have taken action to improve resilience as part of our Resilience Action Plan, especially on improving our resilience to power outages.	See updated section on Resilience in our Level 1 DWMP.

Source	Topic	Response	Where addressed in the Plan / website
Environment Agency Ref: EA09	One aspect not covered in sufficient detail within the plan is the increased future risk due to climate change and sea level rise, in-particular tide locking of outfalls discharging to estuaries or the sea.	We have set out how we factored in the risk and impact of climate change in our Technical Summary on Factoring in Climate Change. In the six Planning Objectives where it has been possible to conduct 2050 design horizon vulnerability assessments (POs 4, 5, 6, 7, 8 and 11) we have taken the impacts of climate change into account and this is reflected in our investment needs tables for each wastewater system. However, we did not include the issue of sea level rise in this cycle of the DWMP and will develop a Planning Objective and associated methodology for assessing the risks posed by sea level rise and potential tidelocking in the next and subsequent cycles.	Factoring in Climate Change Technical Summary: https://www.southernwater.co.uk/media/5256/technical-summary-climate-change-final.pdf
Environment Agency Ref: EA10	While we welcome the focus on climate change, comprehensively detailed in one of the Technical Appendices, we could not see a commitment to net zero other than a reference to the general water industry commitment.	Achieving Net Zero carbon emissions is a core Business Commitment and measuring and managing our greenhouse gas emissions has been a key element in our	Level 1 Regional Plan sections on "Planning for the Future" and " Nutrient Neutrality"
Environment Agency Ref: EA11	A SEA is not a legal requirement for this first cycle of DWMPs, so we commend Southern Water for producing one. However, as recognised by the company it is 'work in progress' with some aspects that have not been addressed, for example the establishment of a robust environmental baseline, and the report cannot be read as a stand-alone document as it contains a lot of cross-referencing. Most importantly the in-combination and cumulative effects have not been identified and it does not clearly set out how the assessment has informed the development of the draft DWMP.	Thank you for highlighting areas that must be addressed when the DWMP is revised in cycle 2. The SEA set out the criteria that we used in our assessment of options (see SEA Scoping Report) and hence it informed the development of the DWMP and our selection of options. As the specific details of each option, and the location of where to implement the option (e.g. storage or SuDS), was unknown in our DWMP planning it was not possible to identify the synergistic and in-combination effects of the proposed investments. We need to consider this further and develop a workable approach for cycle 2 of the DWMP.	Technical Summary:
Environment Agency Ref: EA12	The sections on investment plans would really benefit from some maps to showcase the amount of work and extent of the issues identified.	We have now produced detailed maps showing the where the investment needs identified in each wastewater system are located. These are published on the ODA page within each River Basin Catchment. We hope that, for the next cycle of the DWMP, we will be able to map entire data sets of risks and options onto an ARC GIS system to enable transparent sharing of the data rather than by presenting the extensive information as pdfs.	Solutions maps for all 61 wastewater systems in the ODA pages of the 11 River Basin Catchments.
Environment Agency Ref: EA13	Although SWS has followed the source pathway receptor model and has evaluated financial costs to reduce the risks to Band 0 for all 381 wastewater systems by 2050 of £20bn there is no clarity on the type of solutions at summary (company) level. The detail does exist in the L2 plans where it goes to a level of detail of specific schemes. We couldn't see much evidence of nature based solutions.	Plan to take account of the Government's new Storm Overflows Discharge Reduction Plan (SODRP) and Nutrient Neutrality expectations. We have produced a table	Level 1 DWMP, see section on Investment Needs. Programme Appraisal pages in each of the 11 River Basin Catchments sections.
Environment Agency Ref: EA15	It is not clear to us what is Southern Water's preferred plan. It is interesting to see the costs broken down by Planning Objective (Figure 20, page 70) but we would also have liked to have seen the costs broken down by option type. We assume that company's final DWMP will include its preferred plan.	We have set out our preferred plan in our final DWMP. We have also included a breakdown of the costs by option type.	See section on Investment Plan.
Environment Agency Ref: EA16	·	ensure we address and meet the requirements. This information also includes the proposed AMP delivery timescale.	Level 1 Plan section on Storm overflows "Storm Overflows" and all 61 investment needs tables in the ODA pages of the 11 River Basin Catchments.
Environment Agency Ref: EA17	It was disappointing to see a lack of consideration for nature-based solutions to address storm overflows within the investment plan, which are only referred to meeting the 20-spill standard, not those detailed in Defra's Storm Overflow Discharge Reduction Plan.	We have set out in our DWMP how we would like to tackle the issues of storm overflow discharges and sewer flooding at source through sustainable drainage systems and nature based solutions. The 20 spill standard is in line with the national DWMP Framework and the BRAVA analysis completed in 2020. Since then the Government has consulted on a new approach to storm overflows. We consulted our customers of the 3 policy scenarios that Government set out in their consultation in March 2022. Defra published their Storm Overflows Discharge Reduction Plan (SODRP) in August 2022 during our consultation on the draft DWMP. We have now incorporated the Government's SODRP in our Level 1 DWMP, and set out our regional programme of delivering against these commitments. We are committed to providing green solutions above grey. However, it is vital to ensure we meeting regulatory targets and this will dictate how we deliver the work. Catchment and Nature Based Solutions will take longer to deliver and there is more risk of failing to achieve the target dates. We have developed and costed our storm overflows programme on 30% separation of the impermeable area and the remainder through storage. We intend to progressively deliver a greater percentage of surface water separation through catchment and nature based solutions in subsequent AMP periods, and will work in partnerships with relevant, interested organisations to achieve this.	Level 1 Plan section on "Our Plan for Reducing Flooding and Spills".
Environment Agency Ref: EA18	A greater level of transparency around Southern Water's appraisal method (both for option development and overall programme) would provide a greater insight into the cost and benefit calculations for different options that inform best value plans. It seems for storm overflows this has been driven by capital costs without capturing the multiple benefits and synergies across planning objectives green infrastructure could provide. It would be appropriate to include a section on risks from storm overflows to the groundwater environment too.	multiple benefits for each investment need and the multiple benefits in our ODA Technical Summary.	ODA Technical Summary: https://www.southernwater.co.uk/media/6941/technical- summary-on-oda.pdf Programme Appraisal Technical Summary: https://www.southernwater.co.uk/media/6940/technical- summary-on-programme-appraisal.pdf

Source	Topic	Response	Where addressed in the Plan / website
Environment Agency Ref: EA19	Companies were expected to include details of how they would implement a robust monitoring programme (both continuous water quality and event duration monitoring) to inform adaptive management, this detail has not been provided by Southern Water.	We are aware of the requirements for continuous water quality monitoring in the Environment Act 2021. We are working with Defra to produce cost information for different scenarios to support the policy development on continuous water quality monitoring. Defra are speaking to Minister and have said that will be having a consultation in Spring 2023 on the approach to implementation. The EA have said that they will provide guidance for water companies to enable companies to submit a proposal for inclusion within the Water Industry National Environment Programme (WINEP). We are keen to establish continuous water quality monitoring upstream and downstream of our discharges so we can understand the true impact on water quality. We have been installing Event and Duration Monitors on our storm overflows and this programme will be completed by the end of 2023 with monitors on all storm overflows. We record and report this information to the EA on an annual basis. We have included much of this information on our Beachbuoy App so customers can understand the potential impact on bathing water quality in near real-time. In addition, our existing Pollution Incident Reduction Plan (PIRP) has an £83 million investment programme to reduce risks and significantly increase monitoring of our networks across the region. This includes £60 million on strategic projects to deliver improvements in network digitisation, logistics and asset maintenance. We are currently investing £35 million throughout AMP7 (2020 – 2025) to optimise our systems by creating smarter sewer networks through a digitisation programme and installing around 20,000 sewer level monitors.	Level 1 Plan subsection on the Pollution Incident Reduction Plan in the "Risk of Pollution" section
Environment Agency Ref: EA20	DWMPs are Strategic 25-year planning documents however our expectation was that more detail would have been available, to enable comments to be made on the programme appraisal stage. A lack of detail within the plan makes it difficult to understand how options that deliver multiple benefits are being considered or how the outcomes will be realised.	Our Technical Summary on the Options Development and Appraisal sets out we factored in, and took multiple, long term benefits into account. Our Technical Summary of Programme Appraisal looked at the risk reduction for each option across all the planning objectives so we could prioritise the investment needs. For example, we compared the costs associated with the long-term multiple benefits of nature based surface water attenuation solutions with the short term single benefits of underground storage tanks, and also incorporate the costs of upsizing storage tanks in future AMPs. We have detailed workings for each wastewater system of our assessment and the completed multi criteria analysis which we used to derive the options. We are making a summary of this available on our website.	Programme Appraisal Technical Summary: https://www.southernwater.co.uk/dwmp/strategic- environmental-assessment Summary of the Generic to Feasible Options on the ODA pages of our website.
Environment Agency Ref: EA21	For the loW catchment, within the 'specific investment need' section you identify where works should be prioritised in Ryde, Cowes and Newport. Costs are provided to show the level of investment required. However, it is not clear how this will be achieved i.e., through SuDS features At what point will this level of detail be shared with stakeholders/partners?	We have followed the national DWMP Framework and identified the risks and need for investment by working with partner organisations in each River Basin Catchment. For 61 wastewater systems we developed more detailed actions to address the risks, although the details will need to be developed through further data	Level 1 Plan sections on "Next Steps" and "Developing our Proposed Partnerships Projects".
Environment Agency Ref: EA22	The investment needs documents are helpful, but again do not contain necessary detail. Within the Adur and Ouse plan there is recognition the hydraulic overloading can be tackled at source. However, this is not reflected in the measures identified within the investment plan.	As with our response to EA21 above, we feel we must wait until we know the funding for AMP8. once known, we will work with all relevant partners to identify the best solution for a particular area and system within the River Basin to co-create and co-deliver the right strategy to address the issues identified. This could be through SuDS or other nature based solutions, or underground storage or a mixture of both.	Level 1 Plan sections on "Next Steps" and "Developing our Proposed Partnerships Projects".
Environment Agency Ref: EA23	Whilst there is acknowledgement of surface water separation and this is an important strategic solution, it would be helpful to see more reference to catchment wide measures such as land use change, payment for ecosystems service or upstream natural flood management options within the investment plans.	As per our response to Ref EA02 above, we have endeavoured to take wider considerations into account as the first cycle of the DWMP has been developed, and especially where issues have been raised by partners. However, we accept these types of solutions needs much more development in future cycles of the DWMP. We will work with our partners including regulators, Risk Management Authorities and groups that care for the environment to develop integrated catchment-wide solutions that take land use change and upstream management into account. We believe that a more holistic approach to managing water is essential in the South East to protect scare supplies of water, and this will require land use change and recognition of the ecosystem services.	Level 1 Plan sections on "Next Steps" and "Developing our Proposed Partnerships Projects".
Environment Agency Ref: EA24	We expected to see greater consideration of Nature Based Solutions and natural flood management (NFM), especially in areas where we are also undertaking investigations. For example, in the New Forest catchment as part of the options development generic options of NFM land management and SuDS are included however, at Brockenhurst NFM as a measure was not carried forward into the investment needs. It has been highlighted at previous events, that the Environment Agency will be undertaking an NFM study at Brockenhurst, so it would be helpful to see this option listed.	the Brockenhurst system, and to support the EA's work on nature based solutions	Investment needs table: https://www.southernwater.co.uk/media/7083/brockenhurst-broc-ineeds.pdf
Environment Agency Ref: EA25	For Slowhill Copse, the programme appraisal identifies suitable locations for NFM, and wetland creation is referenced. However, these are not referenced or referred to in the investment needs. It is positive that NFM, land management and SuDS are all included as generic options to mitigate flood risk, although these options do not appear to have been taken forward into the investment needs	Our response is similar to those for EA21 and EA22 regarding surety of funding. However, we have included an investment need to work with others to identify appropriate locations for Natural Flood Management and SuDS (Ref: SLOW.CONS01.1)	Investment needs table: https://www.southernwater.co.uk/media/7086/slowhill-copse-marchwood-slow-ineeds.pdf
Environment Agency Ref: EA26	We are interested to understand the detail of the 36 catchments that require further investigation, specifically the risk and the investment needs, as part of your DWMP development and how this will be included in your PR24 Business Plan.	Our draft Investment needs identified a number of locations where studies are required to further investigate the underlying causes of nutrient and ecological issues and these have been submitted to the WINEP. Owing to the urgency of addressing high priority locations impacted by Nutrient Neutrality restrictions such as the Stodmarsh in Kent, we have already progressed a number of these nutrient neutrality studies into actual schemes. These have been updated in our final DWMP (CANT.WINEP.PO2.1; DAMB.OT01.3 and DAMB.WINEP.PO2.1).	Stour investment needs tables: https://www.southernwater.co.uk/dwmp/stour- catchment/options-development-and-appraisal-for-stour
Environment Agency Ref: EA27	Southern Water reference its 'Resilience Action Plan'; however, no further detail is contained in the draft DWMP and we would have expected to see more granularity.	We completed a Resilience Assessment as part of developing our DWMP. This followed the national DWMP Framework, and considered power resilience, communications, river and coastal flooding and business continuity plans. The findings are commercially sensitive so we have not published these in full. However, the actions to improve vulnerabilities were incorporated in our Resilience Action Plan and our Pollution Incident reduction programme in AMP7. We have published our Resilience Action Plan on our website: https://www.southernwater.co.uk/media/2746/resilience-action-plan-final-publication.pdf	Level 1 Plan Section on "Asset Health and Resilience"
Environment Agency Ref: EA28	We understand local discussions are being held between the Environment Agency and Southern Water, regarding the need to protect key assets from risk of landslips/coastal erosion and flooding We feel this should be recognised within the draft DWMP.	We are working with local EA staff where they are developing projects to reduce the risks of coastal flooding to understand the scale of the work and the potential benefits to our infrastructure. We understand that the EA would like a financial contribution towards the scheme from our customers. At present the scale of contribution is not confirmed. We have identified the needs for a partnership investigation and consultation into landslip issues (SAND.CONS01.10).	Investment needs table on our website
Environment Agency Ref: EA29	One aspect not covered in sufficient detail within the plan is the increased future risk due to climate change and sea level rise, in-particular tide locking of outfalls discharging to estuaries or the sea. Taking an adaptive approach to making the right investment choices now for customers and the environment is crucial. Tide locking will be a significant risk with climate change. This risk doesn't appear to have been addressed in any detail and is of relevance in coastal areas where the tide locking of systems will become an increasing issue. The 'Hurst to Lymington' and 'Redbridge to Lymington' FCRM Strategies should provide useful information on this specific issue. Future DWMP development should draw from these strategies, and we would like to see this considered for the second cycle.	Sea level rise / tidelocking and coastal erosion were not prescribed planning objectives for the first cycle of the DWMP. Although the issues are vitally important and were raised with us by several partners during the first set of River Basin Catchment workshops in the Autumn of 2020. After further consideration of the resources and data available to us, we did not include it as a specific planning objective for the first cycle but it is an issue that we need to incorporate within the DWMP for the future cycles.	Included in the issues to be considered for Cycle 2 of the DWMP
Environment Agency Ref: EA30	Attenuation and reducing surface water flows into the wastewater systems should be investigated where applicable – road runoff attenuation, SUDs, NFM & WwNP. EA road runoff project. EA Hurst to Lymington FCRM Strategy which is currently under development. This could have particular relevance to nature-based solutions to reduce runoff into wastewater systems	This study sounds like a great opportunity to tackle issues of rainwater runoff at source in line with the recommendations of our DWMP. We want to work in partnership with the EA and other relevant organisations to encourage the reduce of surface water ingress into our combined or foul sewer systems.	See updated text in our Level 1 DWMP on "Our Plan for reducing flooding and spills"
Environment Agency Ref: EA31	It would be beneficial for the current DWMP phase to work closely with the EA at Calmore. The fluvial flood risk at this location has been recently remodelled which may be of benefit to the DWMP process.	We look forward to working with the EA during the second cycle of the DWMP to understand and incorporate the findings of the Calmore study.	See the Level 1 Plan section on "Developing our Proposed Partnership Projects"

Source	Topic	Response	Where addressed in the Plan / website
Environment Agency Ref: EA32	The EA will be undertaking a two-year NFM study in the Brockenhurst catchment and there may be benefits to the DWMP process in identifying areas where surface water runoff into the wastewater system could be reduced.	We will work with the EA on the NFM study in Brockenhurst as it develops to identify where surface water runoff into the sewers could be reduced.	See the Investment needs for Brockenhurst
Environment Agency Ref: EA33	An EA scheme is currently under development and we recommend that this cycle of the DWMP process be involved with this large FCRM scheme in Southampton to determine whether mutual benefits could be identified and delivered. Here, detailed options are being looked at for urban SuDS and reducing the amount of surface water entering the CSO. It is likely that lessons learnt will follow on from the projects.	We are currently working with Southampton CC and the EA on the FCRM scheme, and are providing flood modelling data for the relevant sewer catchments.	See the Level 1 Plan section on "Developing our Proposed Partnership Projects"
Environment Agency Ref: EA34	When separating surface water from the combined sewer it will be important for Southern Water to show that this will not increase the risk of flooding to third parties. The EA are currently working with SW to agree a methodology on how this can be done at Gurnard.	We will continue working with the EA to develop the methodology and apply the outcomes to other relevant schemes across our region. We welcome the Government's plan to give water companies the right to discharge rainwater to water courses. The Government has recognised that "water companies need to discharge new and existing single rainwater drainage systems to the nearest water course - currently they have no rights to do this".	See our advice to developers and Sustainable Development policies at: Planning your development (southernwater.co.uk)
Environment Agency Ref: EA35	The DWMP takes account of Local Authority Growth projections (in line with regional WRSE plan and then WRMP and WRPG) but it would be good to know if SWS has included any sensitivity testing around this projection.	We did not conduct sensitivity testing of the growth forecasts used within the BRAVA (Baseline Risk and Vulnerability Assessment) outputs. However, we have considered lower and higher growth forecasts in the adaptive planning of future investment needs for alternative pathways under these different conditions.	See Level 1 DWMP section on Investment Needs.
Environment Agency Ref: EA36	We welcome the reference to PCC targets and 'Target 100' and impact on future domestic sewage flows. SWS could state when it plans to meet Target100 (by 2040). The DWMP could link	We have aligned the DWMP with the WRMP and WRSE wherever possible. However, the timings for producing and submitting these plans is not the same, so the best available data is used at the time of that stage of developing the plan. The time lags mean that issues concerning, for example, demand forecasts in the WRMP and WRSE, are not always fully aligned as the forecast data changes over time. Since our risk assessments and network modelling, the growth forecasts have been updated with new information. We will use the latest available growth forecasts in subsequent cycles of the DWMP.	N/A
Environment Agency Ref: EA37	The Plan states a proposal to further align with water resources and wastewater strategic planning to explore additional opportunities for greater recycling and re-use of water in the South-East. We would expect the 2 plans to be in full alignment for re use schemes.	We agree. We are completing pilot schemes at Budds Farm and Peel Common to test the viability and acceptability of recycling wastewater for potable supply. Our WRMP has proposals for four recycling schemes at Sandown, Isle of Wight, (to be delivered in 2027-28), Ford, Sussex, (2027-28), Aylesford, Kent (2030-31) and Budds Farm, Hampshire (2030-31).	WRMP consultation: https://www.southernwater.co.uk/our- story/water-resources-management-plan/our-draft-water- resources-management-plan
Environment Agency Ref: EA38	Rainwater separation – encouraging customers to capture and store more rainwater for water quality reasons makes sense, but we would be interested in seeing more detail about how this would work in reality (and the linkages to the WRMP and demand management options. For example, Is there any possibility of expanding the Pathfinder Projects to include other ideas? For example, in America householders use downpipe extenders and diffusers to enable rainwater to flow from guttering downpipes in a channel across their patios and to spread out on their lawns. This encourages the return of rainwater to garden areas as opposed to discharging directly to foul sewer or soakaways. A method of rainwater separation at a household level. It could have the added benefits of watering parched lawns in summer, providing more infiltration of clean water to groundwater and decreasing the amount of water entering the sewerage systems during storm events.	Our Storm Overflows Task Force Pathfinders work is leading the way in developing these sorts of schemes and approaches. It has notable successes in engaging local communities in the pilot schemes underway and has already delivered community level schemes to install "leaky" waterbutts. We have found that one size does not fit all, and the design of each scheme depends on many factors and what the affected community wants to achieve. However, our Pathfinders work is already proving that there are many inexpensive solutions to preventing surface water ingress into the sewer systems, some of which are innovative and some are just simple, old-fashioned common sense approaches. Not everything needs to be tackled through large scale engineering works.	Level 1 sub section on "Our Storm Overflows Taskforce" in "Our Plan for Reducing Flooding and Spills" section.
Environment Agency Ref: EA39	We would be interested in seeing more detail on catchment schemes and where they could have multiple benefits. This is especially relevant as water companies have been having discussions with the EA and Ofwat over which plan is appropriate for catchment schemes to reside.	We want to move to an integrated catchment management approach and collaborate with relevant partners and local communities to ensure multiple objectives are codesigned and co-delivered. We are currently bringing together the right sets of skills and experience within the business to ensure we can work in an integrated catchment basis once we know the funding available to us in AMP8.	See the Level 1 Plan section on "Developing our Proposed Partnership Projects"
Environment Agency Ref: EA40	SWS applied the standard uplift of 20% for 2050 rainfall. Is there a more regionally specific figure to apply to Southern Water's drainage area?	We are keen to use more area specific information in our modelling and have committed to reviewing this and updating the base data used and assumptions made in cycle 2.	N/A
Environment Agency Ref: EA41	We could not find any reference to assessing the impact of climate change of the performance of WwTWs and suggest that this needs to be included in the DWMP.	Climate change can affect the quality of influent arriving at a wastewater treatment works as well as the performance of the treatment process. We did not assess the impact of climate change on the performance of our works in this first cycle as further work is required to understand this in more detail and establish the likely impacts. We will develop and assess this in cycle 2.	
Environment Agency Ref: EA42	Although there is a reference to greenhouse gas emissions and the water industry's pledge to reach net zero by 2030, we couldn't find any specific commitment from Southern Water in the DWMP and what that means specifically for its drainage and wastewater planning.		N/A
Environment Agency Ref: EA43	In several sections of the [DWMP] report there is reference to action being needed to update information in the [SEA] Scoping Report on these aspects In addition to these, the Draft SEA Report also sets out, in Section 7.2, other areas which it is acknowledged need further development. As the Draft Report is 'work in progress' it is not clearly set out how the assessment has informed the development of the Draft DWMP. With the above in mind, it is difficult to determine the significant effects of the draft plan, how these effects will be mitigated and monitored, and how the SEA has influenced the development of the preferred plan. Please can we be updated during the development of these aspects, prior to the finalisation of the final DWMP and SEA Environmental Report.	Our SEA has shown that the DWMP are largely compatible with SEA objectives as shown in the SEA compatibility matrix. Many of the DWMP planning objectives are directly seeking improvements in the natural environment or reductions in events affecting people's homes. There may be some areas where the way the DWMP planning objective is met, for example, where a specific intervention that is proposed, or the sensitivities of a specific location, that may lead to some tensions with SEA objectives. We will identify where mitigation measures will be needed and will keep the EA and all stakeholders updated on any developments relating to the implementation of the DWMP with regard to the SEA and the monitoring of the impacts both positive and negative of interventions to meet targets.	matrix: https://www.southernwater.co.uk/dwmp/strategic-
Environment Agency Ref: EA44	When considering "groundwater sources at risk from wastewater" it is important to consider all water companies abstractions from Southern Water's drainage area equally rather than just those operated by Southern Water. The other water companies (South-East Water, Affinity Water, Portsmouth Water, Thames Water and SES Water) and some private abstractors all have groundwater sources at risk from wastewater too. During the development of the risk assessment process, we suggested that Safeguard Zones, or Source Protection Zones where evidence has been provided, should be used as a proxy. We recognise that risk from wastewater to abstractions was considered equally when we held discussions in the workshops but that has not come across clearly in the document at present.	risk in cycle 2.	See the Level 1 Plan section on "Developing our Proposed Partnership Projects"
Environment Agency Ref: EA45	We welcome the flagging up of emerging concerns and considering future needs for first time sewerage.	We think this is really important and hope to work with the EA to ensure regulations can be updated to reflect the importance of the issue.	See our advice to developers and Sustainable Development policies at: Planning your development (southernwater.co.uk)
Environment Agency Ref: EA46	The section on enhancing the environment includes work to enhance the ecology of streams and rivers (PO9), solutions for nutrient neutrality (PO11), improving bathing water quality (PO13) and improving the quality of shell-fish waters (PO14). It would be worth looking through the proposed work programme to see how many of the sites identified for these planning objectives could also help protect the groundwater itself, or other water receptors via groundwater too, to add further weighting.	Our Programme Appraisal Technical Summary sets out how we identified the links and synergies between the Planning Objectives as well as where the required investments would address and provide benefits to two or more Planning Objectives. This is now presented in the investment needs tables, for example in Broomfield Bank where there is an investment need that addresses both PO9 and PO12.	The Programme Appraisal Technical Summary: https://www.southernwater.co.uk/media/6940/technical- summary-on-programme-appraisal.pdf For example, Broomfield Bank: https://www.southernwater.co.uk/media/6964/broomfield- bank-brom-ineeds.pdf

Source	Topic	Response	Where addressed in the Plan / website
Environment Agency Ref: EA47	All these priorities for investment are important, but legal compliance must take precedence. Legal compliance needs to be covered in the DWMP but should also be taken as read, with the DWMP further focussing on going beyond legal compliance for the benefit of people and the environment. The focus needs to be on managing/mitigating the risks in priority order which will most likely require a mix of the investment plans with the development of options addressing the risks and providing social and environmental benefits across the range of priorities. The challenge for all water companies is to plan to address the infrastructure underinvestment of the past, whilst at the same time account for future impacts arising from growth and the impacts of climate change. To do so will require the optimum combination of the five investment plans.	We agree and have updated the Level 1 Plan to reflect this, and combined the 5 investment plans into one integrated investment plan.	Level 1 Plan section on Wastewater Recycling and Nutrient Removal, and the section on "Investment Plan"
Environment Agency Ref: EA48	The plan does need to address the risks with the goal of reducing the risks to Band 0, but the question is too simplistic. The objective of this DWMP and future DWMPs should be reduce all the risks to Band 0. However, the timescale for achieving that must be balanced against bill impacts and how important these issues are to customers, linked to their willingness to pay. We expect Southern Water to explore these issues with customers in the development of its Business Plan, where drainage and wastewater objectives need to be considered alongside other areas of water company expenditure.	We have tested the goal of reducing the risks to Band 0 with customers and stakeholders during the consultation. The majority of respondees agreed this should be a top priority and accept that customer bills may need to increase to enable this to happen. However, this must still be balanced against willingness and ability to pay. It will be fully tested during the PR24 customer insight programme and public consultation.	Report on the Public Consultation: https://www.southernwater.co.uk/dwmp/have-your-say Level 1 Plan section on "Next Steps"
Environment Agency Ref: EA49	While the company is open to nature-based solutions/surface water separation it appears that in much of the plan 'grey' solutions have been selected. Also we were left feeling the Level 2 and Level 3 plans were still fairly strategic which didn't allow us to see what solutions were being proposed in specific locations. How does the Plan get properly costed with elements progressing to the company's Business Plan without this step?	We believe this was because of the way the information was presented in the draft DWMP investment tables. We have since addressed this and hope we have clarified that green and nature based solutions are our preferred option unless we have been informed that this approach is entirely unsuitable for a particular locations such as in the coastal landslip areas of the Isle of Wight. We estimated costs in the ODA stage of the DWMP using engineering judgement based on experience. However, the Programme Appraisal stage of the DWMP quantified the per unit delivery cost based previous schemes, for example, per length of replacement sewer pipe. In the case of SuDS schemes, we have based the cost on the construction of traditional underground storage per hectare of surface water that needs to be removed from the system and than allocated this cost to delivering a nature based solution where this is a preferred, best value option. This means we are relatively confident regarding the likely overall costs that will be submitted as part of the PR24 Business Plan.	The Programme Appraisal Technical Summary: https://www.southernwater.co.uk/media/6940/technical-summary-on-programme-appraisal.pdf
Fairlight Parish Council Ref: 3002	Fairlight needs a sewerage system that does not distribute raw sewage round parts of the village several times a year, causing damage to local infrastructure, ecosystems, and the residents' enjoyment of the local environment	We have identified seven investment needs for the Fairlight system. These include investments to prevent flooding and overflows discharging, ensuring the integrity of the infrastructure, working in partnership to address coastal stability issues, minimise nutrients and education campaigns to prevent blockages.	Fairlight investment needs tables: https://www.southernwater.co.uk/media/6962/fairlight-fair-ineeds.pdf
Fareham Borough Council Ref: 4032	The Council notes the timescales for achieving the Planning Objective PO8 for Peel Common WTW as medium meaning for the period 2030-2040. The Partnership for South Hampshire Integrated Water Management Study (2018) indicated that due to forecasted growth in the catchment served by this works, increased capacity may be needed as early as 2025. Reassurance is sought that the timescales for the investment in capacity at the Peel Common works is appropriate.	Peel Common is currently a risk Band 1 for Dry Weather Flow which means it has still has sufficient headroom. It rises to a risk Band 2 by 2050 if no action is taken in the interim. We must remain compliant with our permits and so will be working with the EA to ensure we address the permit and remain compliant.	BRAVA table for Peel Common: https://www.southernwater.co.uk/media/4252/east-hampshire-wastewater-systems.pdf
Friends of the Westbrook and Stonebridge Pond, Faversham Ref: 2006	In the Investment Tables it is not always clear where locations are. For example, where is Church Lane? Is this Church Lane, Newington? A simple addition of town or village name by every road name/location reference would make the Investment Plans much clearer to read and easier to navigate.	This is helpful feedback. We have clarified locations in the final DWMP tables and we will improve this further in the next cycle of the DWMP.	All 61 investment needs tables. These can be found in our DWMP on the website within the River Basin Catchment pages under Options Development and Appraisal
Gosport BC Ref: 4054	"Groundwater drinking water supplies are being gradually degraded by poorly maintained sewers and septic tanks, and from discharges direct to ground in areas that are not connected to our mains sewerage networks." While these assets may not be Southern Water's responsibility, are you please able to confirm to us what action is being taken (and by whom) to tackle this serious and ongoing problem?	We currently have no authority regarding the maintenance of septic tanks or private sewers and cannot require households to connect to our sewers if they are not already connected. In the Budds Farm system, we have identified an investment need for CCTV surveys and sewer replacement to protect groundwater (BUDD.PW01.6), and several investment needs in the Peel Common system to upsize and refurbish pipes to improve capacity in the system.	Options development and appraisal for East Hampshire (southernwater.co.uk)
Gosport BC Ref: 4054	You want to work with the EA 'to understand and plan for long-term future permits changes so the next cycle of the DWMP can set out adaptive pathways for future investment in our WTWs, including the relocation of assets or investment in new technology to meet tighter environmental permits.' Is it not possible to incorporate this within this DWMP?	We have developed risk assessments in the first cycle of the DWMP, but we were not able to develop all of them to be able to forecast future risks and investment needs. One area is to identify the future environmental capacity of waterbodies and hence the standard of treatment that may be required to meet permits in 2050. This is challenging and we will work with the EA to understand what the future permit requirements may need to be to protect the environment. We will consider this and discuss further with the Environment Agency for the next cycle of the DWMP.	No changes to our first cycle DWMP
Gosport BC Ref: 4054	We request enhancement to the bathing water quality near Lee-on-the-Solent and Stokes Bay beaches, which are popular recreational and tourism areas and very important to the local economy. We understand this would require increased investment to both Peel Common WTW and Budds Farm WTW, both of which are listed on page 67 as priorities so request that additional monitoring is also conducted in these locations.	The EA samples and monitors water quality at designated bathing waters in England during the bathing water season. We have included our regional storm overflow discharge reduction programme in our final DWMP. This is reducing the number of discharges from storm overflows to protect the environment. There is significant investment identified as being need in Budds Farm to reduce the risks across several planning objectives.	See the storm overflows discharge reduction programme in our DWMP Level 1 document

Source	Торіс	Response	Where addressed in the Plan / website
	It would be helpful to include reference the Strategic Flood Risk Assessment which take into account the latest climate change allowances and modelling for flood risk within the PfSH area in the 'Working with others' section on pages 13 – 16.	Thank you for raising this. We have referenced the work of the group in the "Developing our Proposed Partnership Projects" section of the Level 1 Plan	See the Level 1 Plan section on "Developing our Proposed Partnership Projects"
	It is helpful for Local Authorities to be able to understand what type of SuDS can be adopted by Southern Water.	We have committed to adopting SuDS that meet the CIRIA (C753F) industry standards. Please let us know of any SuDS that meet these standards that we may not be aware of.	We have included a figure in the Level 1 DWMP with photos of the types of SuDS we can adopt.
Gosport BC Ref: 4054	With regards to estimations of population growth, would Southern Water be able to confirm which data sets they are utilising, and whether it would be updated in light of the new Census?	We used Experian 7.1/ Sage16 population forecast data with a baseline population of 2020. This data is obtained from the Experian 7.1 database which provides current and projected (future) population levels across our operating region. We use the information from Local Planning authorities to adjust and improve the forecasts obtained from Experian. The growth forecasts will be updated in cycle 2 of the DWMP to reflect changes in the census data.	See the technical summary on Factoring in Growth (on our DWMP website)
Gravesham BC Ref: 4056	GBC has concerns that the figures you have used may significantly underestimate population increase within the catchments of the works serving Gravesham and Medway in particular given the quantum of new housing we are being pressed to deliver under the Government's 'Standard Method'. GBC has concerns regarding investment in new capacity to meet demand in a timely fashion and would welcome an assurance that the DWMP will be sufficiently flexible within AMP8 to deliver required infrastructure investment to meet demands arising from and impacts of new development over and above dealing with existing issues and shorter term climate change impacts.	Our future growth team works with LPAs and will ensure that our infrastructure will be able to meet new demand as and when it is needed. Our approach to accounting for growth is set out in the "Factoring in Growth" Technical Summary. We forecast and plan to accommodate new local development into our sewer network and treatment works by: • Developing our long term DWMP to identify future investment needs based on risks to people and the environment • Incorporate the Growth needs for our wastewater systems into our 5-year business plan which then approved by OFWAT • During each 5 year investment period, produce annual Execution Plans • For each capital project the design population used for engineering design is reviewed and updated if necessary to reflect major changes in Local Plans. There is flexibility in our plans, but there are limitations. The overall funding for the 5-year business cycle cannot change. So, if large developments or changes of permit or technology were not anticipated in the 5-year business plan, usually, we will not be able to make the investment until the next business cycle. In addition, change of permit involves the Environmental Agency, which could take one to several years.	Factoring in Growth Technical Summary: https://www.southernwater.co.uk/media/5257/technical-summary-growth-and-creep-final.pdf
Gravesham BC Ref: 4056	We wonder whether the plan should be more proactive about grease management for domestic customers by, for example, highlighting that households can install small domestic kitchen biomass grease / fat traps under their kitchen sink.	This is a good idea and one we will look into as part of our customer education programme.	N/A
4056		We have included investments being delivered in AMP7 where the risk was identified in our risk assessment stage of the DWMP. Otherwise it would appear that we are not identifying the options and need for investment to tackle all the risks identified during the risk assessment stage. The national DWMP Framework required us to use 2017-2019 data in the risk assessments, and we have already secured funding to address some of the risks within AMP7. The work at Gravesend WTW will be in both AMP7 and into AMP8. We have 23 surface water overflows into the Thames. We are going to include the impact of sea level rise in cycle 2 of the DWMP and we will have regard to tide	https://www.southernwater.co.uk/media/6820/gravesend-
4056	frequency of tide lock due to sea level rise, depending on the invert level of outfalls.	locking in all systems that discharge to the coast.	
	The most important future challenge for all authorities within the water management sector is changing mindsets to ensure that water is more widely regarded as a precious resource in its whole lifecycle and not solely as a risk (in the case of flooding) or a right (in the case of drought). Often Socio-economic change can be the greatest barrier to projects, even highly technical ones. Collaborative and holistic solutions to the challenges presented is considered to be the most effective long term, strategic way of producing a sustainable water management system for the future which will encompass both water quality and quantity. All organisations with remits in the sector need to be involved and residents and other stakeholders with an interest need to be consulted to ensure all areas of expertise and different areas of priority are considered and taken into account.	We agree that all organisations with a remit in the sector need to be involved and that residents and other stakeholders with an interest should be involved in any proposals that affect their interests. At the moment, the DWMP only identifies the Investment needs and is not an action plan. Once we know the funding that will be available to us in AMP8 following Ofwat's PR24 determination, we will engage with all those with local interests to develop implementation plans. The more engagement that can take place, the more understanding will be engendered regarding the nature of water management and how precious the resource is to ensure the environment remains healthy and so that we and wildlife can thrive.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Council Ref: 4030	The County Council agrees that rainwater absolutely needs to be kept out of foul/combined sewer systems to reduce the risk of flooding and to reduce the amount of expensive, resource/carbon hungry processes for cleaning this water to allow it to return to the water cycle. It is not as simple as saying, run off from roads needs to be reduced. The highway system in the UK conveys significant amounts of water, though this cannot all be viewed as highway runingf. The vast majority of surface run off from the highway does not fall onto roads, but on surrounding land – it finds its way to roads as these tend to be lower lying than surrounding areas, and are often the path of least resistance. Therefore, much more needs to be done to encourage water to re-enter the ground at source to reduce the runoff reaching roads and overwhelming drainage systems. When runoff contains silt etc from surrounding land – this compounds the issue by blocking drains.	investment needs associated with Planning Objective 5). We are keen to explore all opportunities to collaborate and separate surface water and incorporate more nature based catchment schemes as we develop our planning objective on surface water management (PO10) in cycle 2.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.

Source	Topic	Response	Where addressed in the Plan / website
Hampshire County Council Ref: 4030	The County Council strongly believes that significant investment is needed to sustain our water supply, improve our environment and continue to provide our residents with a holistic water management system that reduces the risk of flood and drought as much as possible. Options that provide multiple benefits including improvements in mental and physical health, reduction of flood risk, improvement in water quality, increase in biodiversity, reduction of water wastage, improvement in customers' knowledge and appreciation of water as a resource, improvement in living conditions etc, should all be prioritised. The County Council would encourage work to be undertaken into the funding mechanisms for large scale, strategic, catchment-based water management schemes, which would recognise the wide areas of sectors (including businesses) which would benefit from them.	We support this approach and would be happy to work with Hampshire CC on a more integrated catchment management approach. We are keen to explore all opportunities to collaborate and explore Catchment based water management in cycle 2 of the DWMP.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Hamsey Parish Council Ref: 3006	Use whatever approach (nature based/trad engineering) is most effective overall, whilst taking into account built and natural environment. Cost alone should not be the greatest consideration. Are you able to put a price on the natural environment/human and wildlife health in order to weigh up investment vs value. "Storm overflows" and their consequent pollution are (other than in really exceptional weather) NOT of "low concern" and are unacceptable to SW customers. Do whatever it is that you need to do to invest in and prevent sewage being pumped into our waterways and countryside. You should be prioritising bathing waters AND environment everywhere, investing in all these areas. Nowhere is dispensable.	The investment needs identified provide the best long-term value to our customers and communities by reducing risk through more sustainable approaches, which provide wider benefits. These are our 'preferred' investment options to be funded from customer bills through our standard regulatory processes. We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10).	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries
Hastings Borough Council Ref: 4026	Partnerships should also extend to working more closely with developers. There are a range of bodies with varying levels of responsibility for management of drainage and wastewater to some extent and close partnership working is essential in order to avoid duplication and seek best value for money. The proposals within the Levelling Up and Regeneration Bill will place a statutory duty upon utilities providers to work more closely with local planning authorities, including during the local plan making process and for individual planning applications. There may be some missed opportunities within the DWMP for collaboration with Hastings Borough Council including the pilot urban greening programmes being delivered under the Town's Fund capital programme, which will seek to better manage surface water in known areas with a high risk of flooding from all sources, contributions to the Infrastructure Delivery Plan for the emerging Local Plan up to 2039, including site specific design guidance for sites with critical drainage problems, and involvement through joint working protocols in regeneration activities.		The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail. See also our sustainable development policy advice on our website: https://www.southernwater.co.uk/ourservices/planning-your-development
Hastings Borough Council Ref: 4026	clean bathing water) and with an active fishing fleet whose commerce includes access to shellfish		Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Hastings Borough Council	Investment in this area is vital but we do not agree that this should be passed on to Southern Water's customers. Hastings is a deprived seaside town, the most deprived town in the southeast	Providing wastewater services is important for the health, safety and wellbeing for all people and communities, including deprived communities. These services are funded through customer bills. As the public demand higher standards of wastewater treatment and protection for the environment, it will mean that more investment is	Bill Impacts Technical Summary :
Ref: 4026	and the second most deprived seaside resort in the country, and we cannot support any	needed to improve systems. Our DWMP sets out these investment needs. Ofwat, the economic regulator, determines how much we can charge customers to ensure that customer bills remain at affordable levels. We provide support to vulnerable customers through significant reductions in bills for the most vulnerable.	
Hastings Borough Council Ref: 4026	Survey and replacement/ repair of the entirety of the sewer between Galley Hill- Bulverhythe has been omitted and improving the condition and capacity is critical. The TN34 3 postcode has been identified as one of the worst for "fatbergs" and disposal of non-sewer items into wastewater but is not listed as an educational intervention area.	Survey of the sewer between Galley Hill and Bulverhythe has been included in our investment needs table for the Cuckmere and Pevensey Levels river basin catchment (see investment need reference HABX.CONS01.1)	See the Investment Needs table for Bexhill and Hastings: https://www.southernwater.co.uk/media/6810/bexhill-and-hastings-habx-ineeds.pdf
Hastings Borough Council Ref: 4026	The Plan lacks ambition – for the most part it seeks to maintain things as they are. We need to see greater ambition to changing the status quo, which as recent events have proven is broken. When will thie learning from the Storm Overflows Task Force be applied to Hastings issues?	The investment needs identified provide the best long-term value to our customers and communities by reducing risk through more sustainable approaches, which provide wider benefits. These are our 'preferred' investment options to be funded from customer bills through our standard regulatory processes. We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows.	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Havant Borough Council Ref: 4057	We have concerns that the draft DWMP does not adequately reflect the level of investment needed in the Budds Farm Wastewater Treatment Works (WTW). The council would have expected to see proposals to upgrade Budds Farm to feature forefront and centre of the draft DWMP but it does not. There is also concern that the extension and optimisation of Budds Farm WWtW is only an 'option', and that this project may not be subsequently implemented.	Budds Farm is our largest wastewater system and probably needs greater emphasis in our DWMP. We have updated the draft DWMP and identified significant investment needs options for the Budds Farm wastewater system, with 59 separate needs. The investment need associated with reducing the number of storm discharges from Budds Farm WTW (reference BUDD.WINEP01.1) is the single largest option identified in the entire DWMP. These "needs" options inform our future business plans as part of the Ofwat periodic review process to secure the finance to implement them.	Investment needs table for East Hampshire: https://www.southernwater.co.uk/dwmp/east-hampshire- catchment/options-development-and-appraisal-for-east- hampshire
Havant Borough Council Ref: 4057	Whilst the need to increase storage or separation of surface water as an investment need is welcomed, this only seeks to reduce spill frequency below 20 spills per annum. This is not acceptable – the focus should be on ending the use of Combined Sewage Outfalls (CSO) altogether.	In our final DWMP we have used a spill frequency of 10 spills per annum or less. Without fully separating storm water from the foul sewage, we are unable to end the use of Combined Storm Overflows (CSO) entirely in our sewerage systems. We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows.	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Havant Borough Council Ref: 4057	Overall, it is felt that the draft DWMP and supporting documents are unduly technical to understand. An unergonomic process, the way in which the proposals are presented across a series of documents means that the material is convoluted and time consuming to navigate. The documents seem to outline the process to arrive at the draft DWMP, rather than identifying the problems and a clear set of planned improvements with timeframes and costs. As a result, there is a lack of clarity and transparency with regard to what is actually proposed by Southern Water.	Thank you for your constructive criticism. We have taken this onboard and firstly produced a short public facing summary of our Regional Plan and significantly rewritten our DWMP to provide the clarity and transparency required. We have summarised our programme of Investment Needs on the landing page for each River Basin Catchment and produced a single Investment Needs table for each of our wastewater systems. These are available in the ODA section under each of the River Basin subsections on our website.	See the regional plan pages of our DWMP: https://www.southernwater.co.uk/dwmp/our-regional-dwmp and the RBC landing pages and ODA Investment Needs tables for all the information required.

Source	Topic	Response	Where addressed in the Plan / website
Historic England Ref: 4026	The demand for consultants and qualified contractors to put all this together and prioritise across eleven river basins and their catchments will be a huge effort over many years	Yes we know. We think, having completed the first cycle of the DWMP, that cycle 2 may become simpler to undertake depending on the revisions of the National Guidance that will be issued that will govern its production. However, the DWMP is not just an exercise, it sets a new way of working. Although the BRAVA and documentation will need to be updated every five years, the planning and delivery of the DWMP will become embedded in our business as will working in partnerships to deliver schemes and initiatives that will improve the environment and provide the multiple benefits we all wish to see.	N/A
Historic England Ref: 4026	The TN34 3 postcode has been identified as one of the worst for "fatbergs" and disposal of non-sewer items into wastewater but is not listed as an educational intervention area.	We have included an investment need to address this (HABX.CONS01.2)	Bexhill and Hastings investment need table: https://www.southernwater.co.uk/media/6810/bexhill-and-hastings-habx-ineeds.pdf
Horsham DC Ref: 4003	To remedy the ageing assets and to improve in line with legislation more CAPEX (Capital Investment) is needed. Part of this should be a reduction in dividend policies to shareholders and a tighter management approach to paying off loans to asset capital.	Yes, the DWMP sets out the future investment needs. Our shareholders have not been paid a dividend since 2017. Ofwat is the economic regulator and determines a what we can charge our customers and the outcomes we need to deliver. The structure and approach to financing of the water industry is a Government issue - it is a private sector model widely in use today	Bill Impacts Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries
Horsham DC Ref: 4004	There should be a better summary for policy makers, plus consideration of more radical action for new build housing. In new large housing developments (say > 100 dwellings), the installation networks to separate sewage and rainwater should be a planning condition, with the full network and post treatment in place before the first dwelling is occupied.	We agree. However, the purpose of the DWMP is to understand the risks to and from our wastewater infrastructure across the whole of our region rather than to design policies. The development of the DWMP has definitely highlighted the need for policies and stronger guidance for Planning Authorities to use and this includes more innovation around surface water drainage and SuDS. We have developed and published our Sustainable Development policy which sets out our expectations for new developments:	The Sustainable Development policy document is available here: https://www.southernwater.co.uk/ourservices/planning-your-development
Horsham DC Ref: 4052	Monitoring against targets and objectives is needed.	The progress and performance of water companies is closely monitored and reported by the water regulators - Environment Agency on water quality and Ofwat on financial matters. We will monitor and report on progress against the targets as required by the regulators. We are planning to continue to work on the DWMP as 'business as usual' rather than stop and start with the investment planning cycles. We will be reviewing our current planning objectives and further developing our risks assessments based on lessons learned in cycle 1 of the DWMP.	N/A
Horsham District Council Ref: 4003	The data in places is unclear or you provide it in a way that I cannot compare data. Eg page 37 spills 20,000 for 200,000 hours but for 2021 on page 39 I cannot measure up. A year by year table preferably by the highest 10 say WTW spills would be useful.		New table added in the Level 1 DWMP - see the section on Storm Overflows
Horsham, Pulborough, Amberley and Coldwaltham Ref: 3017	I am surprised that SW limited the list of consultees to 75. This is an important exercise and should warrant a higher profile. I am sure with a wider consultation, that members of the public would have engaged, as difficult as it might be.	We did not limit our public consultation. Our public consultation was open to all through our website but we could do better. It is important that we continue to work with all stakeholders and improve how we engage with customers as we develop the DWMP through cycle 2.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Horsham, Pulborough, Amberley and Coldwaltham Ref: 3017	SW is more concerned with high profile issues such as bathing and shellfish waters and not so much about rivers even although only 14% nationally are judged to be in good ecological condition. What is unclear is how the decisions to allocate WtW to either Band 0, 1 or 2 were made and the criterion used. How were the Arun Valley and Western Rother sites classified? There are a number of SSIs and RAMSAR sites that would presumably make the risks much more sensitive but these are in Band 0. There is no detail about the work being undertaken on rivers.	Achieving "Good Ecological Status" (GES) for waterbodies across the region is one of our planning objectives (PO9). Risks to designated habitats are integral to our BRAVA process and are explained fully in our BRAVA methodologies. Although we have had to prioritise options development for our wastewater systems for cycle 1 (see our technical summary on catchment selection), our investment needs tables for Arun and Western Streams identify 10 specific investment needs for PO9, totalling £54,269k. These will go along way in helping us to achieve GES. These needs include HONE.WINEP.PO2.1, which will help us to reduce the nutrient load from our wastewater treatment works at Horsham.	Our BRAVA methodologies explain how we assess risks to designated habitats: https://www.southernwater.co.uk/dwmp/baseline-risk-and-vulnerability-assessment Catchment Selection technical summary: https://www.southernwater.co.uk/dwmp/technical-summaries
Horsham, Pulborough, Amberley and Coldwaltham Ref: 3017	A risk based approach to deal with spill related pollution seems sensible. What is not clear is the pollution caused by runoff from hard surfaces such as roads and car parks which can be heavily polluted. Any measures such as filtration systems or sump tanks would be welcome.	It is our intention to develop plans that integrate more effective drainage whilst protecting and enhancing the natural environment and 'greening' our communities. We cannot do this alone and will develop appropriate partnerships with relevant organisations once we know what funding is available for AMP8.	We set out our intentions in the section on developing partnership projects under Customer and Stakeholder Engagement in the DWMP.
Horsham, Pulborough, Amberley and Coldwaltham Ref: 3017	Why does SW seek to develop its own system for valuation of ecosystem service to be used across its plan? These systems already exist so why reinvent the wheel?	Although we do use the existing concepts for costing the "six capitals" (financial, manufactured, intellectual, human, social and relationship, and natural capital), these have required development to be integrated into our financial and risk management systems. This has taken time to achieve. We aim to have these fully operational for cycle 2 of the DWMP.	
Horsham, Pulborough, Amberley and Coldwaltham Ref: 3017	One thing that is missing is monitoring and measuring against targets and objectives. SW should undertake regular reports on progress against delivery providing this not only to the regulator and the EA but also to local councils. There should be open access documentation.		Our website provides transparent information regarding processes and intentions for whole of our operating area and for each RBC: https://www.southernwater.co.uk/dwmp
Isle of Wight Council Ref: 4005	It is vital to not put water into the ground in the known coastal landslide complexes of marginal and declining ground stability which underlie Ventnor, Bonchurch, St Lawrence, Niton, Blackgang, Cowes and Gurnard. Whilst usually a good thing, separating out rainwater is the exact opposite of what is required in the vulnerable urbanised coastal landslide complexes on the Isle of Wight. There, all water should enter piped disposal systems, and be kept entirely out of the ground. It is also vital to fix leaks straightaway. Any water in the ground will reduce ground stability and help trigger ground movement which will damage SW infrastructure, both pipe networks and much larger fixed facilities, dependent on the scale of ground movement and landslide reactivation triggered.	We understand the concerns in these coastal areas and have updated our investment needs to reflect the local geological and flooding issues highlighted. We have identified the needs for a partnerships investigation and consultation into landslip issues (SAND.CONS01.10) as well as 54 storage solutions to address storm	Investment needs table for the Isle of Wight: https://www.southernwater.co.uk/dwmp/isle-of-wight-catchment/options-development-and-appraisal-for-the-isle-of-wight).
Kent County Council Ref: 4039	The DWMP frequently references the impact of surface water on the performance of your sewers, however surface water and surface water removal do not feature as a challenge. Managing surface water effectively and sustainably appears to be a significant challenge.	Yes, this is good point! We wanted to keep the list of challenges limited to macro factors and although the impact of surface water in our sewers is really significant, we have thought of this as being one impact of climate change rather than a challenge in its own right. Effectively managing surface water is a challenge for us. Initially we are prioritising separation of surface water from wastewater and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained in the final DWMP and our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10).	https://www.southernwater.co.uk/dwmp/technical-

Source	Topic	Response	Where addressed in the Plan / website
Kent County Council Ref: 4039	One of the challenges is water recycling and repurposing, however this appears to be a water resource challenge, and whilst we understand that it needs to be incorporated into the management of wastewater, it doesn't appear to be a specific challenge in this field and there is very little reference to it in the rest of the DWMP, in respect of the recycling of water at WTW.	with our Water Resources Management Plan (WRMP) to ensure we meet all future challenges.	Our Water Resources Management Plan (WRMP): https://www.southernwater.co.uk/our-story/water-resources-management-plan
Kent County Council Ref: 4039	Whilst the consultation on the DWMP has good, we do not consider it appropriate to say that the inclusion of wider socio-economic and environmental outcomes is a result of collaboration. Collaboration would be indicated by the identification of measures that other parties would lead or participate in and are happy to have these included at this stage having been involved in their identification and prioritisation. Whilst joint delivery is identified in the DWMP for the delivery of some measures, we understand that none of these has been agreed yet and there is much further work to be done to agree any collaborative measures. We hope that future rounds of DWMPs can be undertaken in a genuinely collaborative way and lead to a plan that includes specific commitments from partners.	We agree. It is vital that we continue to work with all the organisations that have helped us develop the DWMP and fully intend to do so - especially once we have a degree of certainty over the funding available to us during 2025 – 2030 and can begin detailed planning and progress the potential partnership opportunities which were identified in our DWMP. We will continue our engagement with local councils, other flood risk management authorities, planning authorities and environmental groups to develop plans for co-funding and co-delivery of actions.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Lewes District branch, CPRE Sussex Ref: 2002	There is little point in ensuring that the discharges from a WWTW are absolutely policy compliant if that same WWTW is releasing untreated sewage for much of the time, as far too many are, because they have inadequate capacity to deal with expected loads in ordinary wet weather. Many WWTW release untreated sewage every time we get ordinary rain, and calling these "storm overflows" is ridiculous. Alarmingly such situations are quoted as "Low Concern" to Southern Water. They are of high concern to everyone else, and completely unacceptable, but do not even appear on your priorities list. There is absolutely nothing proposed here that will achieve the declared objective of reducing "storm overflows" by 80% by 2030.	Storm overflows are integral to the design of many older wastewater systems, and both the WTW and the storm overflows are permitted by the EA to prevent harm to the environment. The name is historical and is used and recognised across the water industry, its regulators, government and increasingly now, with customers. Storm overflows are a concern to us are we are investing to reduce discharges. The Government has set out targets for all water companies to meet in their Storm Overflows Discharge Reduction Programme. The BRAVA stage of the DWMP assessed the risks in each wastewater system from storm overflows. This then influences where we invest to reduce the risks. We're using a risk based approach to tackle those that could cause the most risk to the environment first. We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows.	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries
Lewes District branch, CPRE Sussex Ref: 2002	consider minimum service standards, or reduce storm overflows by 80% by 2030. The DWMP considers "planned growth". Is this based on the adopted Local Plans or on the outrageous housing targets imposed which are very different, and far higher, so leading to unplanned growth? If Southern Water cannot deliver an acceptable level of service for the existing population, which it	Please refer to our response above on addressing storm overflows. The investment needs identified provide the best long-term value to our customers and communities by reducing risk through more sustainable approaches, which provide wider benefits. Our approach to population growth is fully explained in our growth and urban creep technical summary. It is important to note that our Future Growth Team works closely with Local Planning Authorities to plan for future demands on our infrastructure. We assess how much capacity will be required for new developments when contacted by a developer. We consider whether the development can be accommodated through system upgrades, whether an entirely new system is required or whether wastewater would need to pumped / transferred to an alternative system. We cannot extend our wastewater infrastructure until any new development has been granted planning permission by planning authorities.	Growth and Urban Creep Technical Summary: https://www.southernwater.co.uk/media/5257/technical-summary-growth-and-creep-final.pdf
Lewes District branch, CPRE Sussex Ref: 2002	At the moment Southern Water is charging its customers heavily for a service it is not providing to an acceptable standard. Does Southern Water seriously think that under present economic services the government or the public will accept another utility demanding large increases in payment from its customers?	Thank you for providing your views on our services and charges. We have many challenges and significant risks that need to be addressed and we will require funds to be able to reduce these risks. We have set out what we expect these costs are likely to be in our DWMP and hope this, and the reasons for the costs, is clear and transparent. It is, in fact, Ofwat, the government's economic regulator that determines the price for the services we provide for our customers rather than something we ourselves determine.	plan and reduce the risks. This is set out in the section on
Lewes Town Council Ref: 3016	Southern water shows utter disregard for organisations that are desperately trying to maintain biodiversity in our rivers, lakes and seas, and those seeking to preserve human health. In addition to working with statutory authorities, SW must work with groups like Surfers Against Sewage, Greenpeace and the Wildlife Trusts.	It is vital that we continue to work with all the organisations that have helped us develop the DWMP and fully intend to do so - especially once we have a degree of certainty over the funding available to us during 2025 – 2030 and can begin detailed planning and progress the potential partnership opportunities which were identified in our DWMP. We will continue our engagement with local councils, other flood risk management authorities, planning authorities and environmental groups to develop plans for co-funding and co-delivery of actions.	
Lewes Town Council Ref: 3016	We have a lot of over-engineered drainage, but also not enough of it. Without scaling back on building (including roads to developments), our poorly invested-in existing drainage will be increasingly overwhelmed. We need to ensure properties (whether businesses or homes) have some water resilience in the form of decent grey water recycling and water-butt collection for	Grey water recycling will become more of an issue as pressures on our available water increase. We are working closely with our Water Resources Management Team as they develop the Water Resources Management Plan (WRMP) to ensure we meet all future challenges in future cycles of the DWMP and WRMP.	Our Water Resources Management Plan (WRMP): https://www.southernwater.co.uk/our-story/water-resources- management-plan
Lewes Town Council Ref: 3016	rainwater for gardens. The DWMP should be about how SW invests in it's facilities, not about how to charge customers more. When the leaks are fixed and the sewage stops being dumped into the sea and rivers every time there's a bit of rain, THEN shareholders should be taking profits and CEOs might be entitled to a raise. Until then, it's stealing from the commons.	Actually, this is exactly what the DWMP is for. It has identified the investments that are needed to improve our infrastructure and the services we provide to our customers and communities. The investment needs identified provide the best long-term value to our customers and communities by reducing risk through more sustainable approaches, which provide wider benefits. These are our 'preferred' investment options to be funded from customer bills through our standard regulatory processes. The potential impact on customer bills is shown in our technical summary on "bill impacts". The Government privatised the water industry in 1989. Since then it's operated in the commercial sector to raise the finance needed to invest in infrastructure from shareholders (on the basis of an expected return on their investment) and from customer bills. Ofwat, the economic regulator, determines through their Price Controls how much water companies can charge customers and the levels of potential profit. Our shareholders have not received dividends for the last seven years, meaning profits have been invested back in the business to improve services.	Bill Impacts Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Lower Medway Interna Drainage Boards Ref: 4017	There needs to be a balance between green and grey solutions which will be largely dictated by local and site specific conditions but of course need to be viewed in a catchment context. It will depend largely on how much time there is to deliver something, and the consequence of not delivering in that time. More innovative solutions may need more time to come to fruition, but there is a danger that the costs will not be balanced against the benefits. Monitoring of contribution to the various elements (e.g. environmental enhancement) as a % goal rather than an absolute may assist with this.	We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10).	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Lower Medway Interna Drainage Boards Ref: 4017		We have worked with stakeholders to develop detailed investment needs for 61 of our highest risk wastewater systems in Cycle 1 of the DWMP. Some sites vulnerable to sewer flooding may therefore not yet be specifically mentioned in our DWMP. We intend to expand these detailed needs to all 381 of our wastewater systems in cycle 2. Our approach to prioritising our wastewater systems for cycle 1 is explained in our technical summary on catchment selection. Where we have published the investment needs, yet the vulnerable sites are not mentioned, then please let us know and we can add them in and develop options and investment needs to address the issues.	Catchment Selection technical summary: https://www.southernwater.co.uk/dwmp/technical- summaries
Lower Waites Lane (Fairlight) Road Maintenance Association Ref: 2010	There is not enough capacity on the pipes in the Fairlight system to support the development of housing proposal received by the council.	We are aware that the Fairlight wastewater system can be overwhelmed by rainwater and flooding can occur. We assess the capacity for new development, and work with the planning authorities to ensure that new development meets are sustainable development policy.	N/A
Manhood Peninsular Action Group Ref: 2011	The time scales are concerning as many 'current issues' need immediate attention but the DWMP process will consign them at best to the next 5yr business plan process, if they are approved. This is set against a problem/issue that the DWMP has acknowledged and that further stress is being placed on by Southern Water's acceptance of more user pressure for drainage.	The DWMP is a long-term plan for drainage and wastewater management between 2025 - 2050. The timescales are not our decision but were set by Water UK and our regulators. Our priorities and programme of work before 2025 will have been determined in our business plan for 2020 - 2025 as funding for the water industry runs in five year cycles. We also work closely with Local Planning Authorities to understand the development that has been approved in their local plans and this enables us to plan for the additional infrastructure and permits that may be required in a timely manner to allow planned development to go ahead.	Our Strategic Context sets out each of the processes for the DWMP that all water companies must follow.

Source	Торіс	Response	Where addressed in the Plan / website
Maresfield Conservation Group Ref: 2017	a massive 77 acre industrial estate is proposed on headwaters. More development is going to threaten this freshwater ecosystem.	Unfortunately, we are not a statutory consultee on development proposals and, under current regulations, we do not have the right to refuse flows from new development whether for housing or industrial purposes. The EA and NE are the organisations charged with protection of the environment, habitats and ecosystems.	See our advice to developers and Sustainable Development policies at: Planning your development (southernwater.co.uk)
Maresfield Conservation Group Ref: 2017	Swimming at Barcombe leaves people ill - Buxted, Uckfield and Maresfield are upstream. We need better plans to protect the Uck and Shortbridge Stream. Wealden policies have not protected these natural assets. Barcombe is a tourism spot with boats for hire on the Ouse. People camp and swim. This is an urgent health hazard. Shortbridge has other red listed fish species. Empathy and enhanced buffer zones are needed for these headwaters	We are aware that Barcombe Mills is used extensively for recreational pursuits and we have proposed to the Environment Agency that it is considered for investigations under the WINEP in AMP8 as a potential location for designation as an Inland Bathing Water - see the section under Storm Overflows in our Regional DWMP. However, as it is not currently designated as a bathing water, it is not regulated for public health issues. Designation is matter for many organisations with a range of responsibilities, including health and safety, land use and access issues. The local community and users need to evidence strong support for proposals to designate inland bathing water such as this.	Level 1 Plan subsection "Inland Bathing Waters" under the "Storm Overflows" section.
Maresfield Conservation Group Ref: 2017	Uckfield Sewage Treatment has been polluting the Uck leading to the Ouse. Residents across Wealden are experiencing sewage issues through overdevelopment of the infrastructure services. If sewage is already being released, there is no capacity for more development. The transparency of Southern Water's responses to planning applications is not transparent and Wealden does not provide enforcement or conditions on planning applications.	The EA issues us with permits specifying the quality requirements for the effluent released from our wastewater treatment works. We operate our infrastructure to comply with these permits. Any non-compliance is reported to the EA as a pollution incident, and this information is published so our customers are aware of what pollution has occurred. New development has a right to connect to the existing wastewater system, but the developers pay a connection charge, which partly funds work to upgrade sewers to increase capacity. We also assess whether it will be necessary to increase the treatment capacity of the treatment works to enable us to continue to comply with the EA permits. We are not a statutory consultee on planning applications, but we do respond when we can. We are aware that there are concerns about enforcement of planning conditions. This is a matter for the local planning authority and we will raise concerns if they are relating to the connections to the wastewater system.	See our advice to developers and Sustainable Development policies at: Planning your development (southernwater.co.uk)
Maresfield Conservation Group Ref: 2017	There are specific concerns for run off and groundwater pollution at Budletts Common, which means a place of water and springs. Engineered solutions would harm environments like this. Placing Sewage Treatment plants and pumping stations on groundwater and headwaters is deeply exposing concerns. These should be identified and not placed on headwaters leading to Shortbridge Stream as it is sea trout spawning and European eel migration.	Groundwater pollution is a concern which we are tackling to protect our groundwater resources that we use for drinking water and the environment. The placement of our WTWs is historic and something we cannot change, but we have included a risk assessment for groundwater pollution in our DWMP so we can highlight future risks from our wastewater systems and the investment needed to tackle the problem. Any new stand alone or package plants which are constructed by developers are not within our control. This is the responsibility of the Local Planning Authority and the Environmental regulators.	See our advice to developers and Sustainable Development policies at: Planning your development (southernwater.co.uk)
	Currently there are issues with some partnership working opportunities between partners. To ensure that this process is efficient this should be a priority	We have many good examples of partnership working between the EA, Local Councils and water companies. We identify in the DWMP many potential opportunities to work in partnership with others, and we will explore these further once we have secured funding through the Ofwat Price Control process. We know that establishing partnerships can be challenging, but they can bring wider multiple benefits by working together. We will be developing partnership working further in cycle 2 of the DWMP.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
NE01	The dDWMP has only carried out an HRA screening and does not identify all the Habitats sites within the zones of influence. The full HRA has not yet been completed so we cannot fully determine the likelihood of significant effects on Habitats sites.	The impacts on priority habitat and species are within the SEA Framework. The Baseline section identifies the types of habitat of principal importance. Where there is potential for effects on priority habitats, this has been identified under the SEA objective for Biodiversity, flora and fauna. The mitigation measures have been updated to mention priority habitats and species and opportunities for restoration of priority habitats.	SEA Statement of Response Appendix A: https://www.southernwater.co.uk/dwmp/strategic- environmental-assessment
Natural England Ref: NE02	The SEA has been completed including the scoping stage which NE were consulted on, however it is not complete.	We have completed our first DWMP and alongside this, our first attempt at a regional SEA on the DWMP. We have tried to complete both to an acceptable standard but it has been a learning experience and both will be improved in subsequent cycles.	SEA Final Environmental Report: https://www.southernwater.co.uk/dwmp/strategic- environmental-assessment
Natural England Ref: NE03	The dDWMP has not yet been assessed for the potential of net gain in biodiversity.	Yes, we agree. We will be in a better position to assess Biodiversity Net Gain in cycle 2.	N/A
	The natural and social capital of the dDWMP options has been partially assessed.	Again, we agree. Our Options Development and Appraisal covered natural and social capital at a high level using a Multi Criteria Analysis but as a business, we are still developing our 6 Capitals Framework and how to apply it. Additionally, text has been added into the main SEA report setting out how environmental and social considerations, including the SEA, have influenced the development of the DWMP. The Technical Summary on 'Approach to Options Development and Appraisal' goes into further details on the information considered for unconstrained and feasible options.	Options Development and Appraisal Technical Summary: https://www.southernwater.co.uk/media/6941/technical- summary-on-oda.pdf
Natural England Ref: NE05	A clearly defined methodology of how designated sites have been screened in/out should be included.	The DWMP has taken a risk based approach and all designated sites in our region have been included in the BRAVA assessments. None have been screened in or out of this process. Because the nature of our responsibilities, there is potential for all hydraulically connected sites to be impacted through our operations and infrastructure but particularly relevant are the methodologies for POs 5, 9, 11, 13 and 14. Appraisal and selection of options was carried out in line with the method and process outlined in our draft SEA Scoping Report, which we consulted on in September 2021.	BRAVA Methodologies: https://www.southernwater.co.uk/dwmp/baseline-risk-and- vulnerability-assessment See also the SEA Scoping Report
Natural England Ref: NE06	There are significant errors in the methodology for screening designated sites in, for example, the only WwTW listed as interconnecting with Stodmarsh Ramsar site is Pennington (New Forest catchment) – this does not seem correct as is very far away. It is advised that the screening assessment is checked across all catchments to ensure there are no other errors of this nature.	This is correct and we apologise for this mistake in the draft materials. The works that are hydraulically linked to the Stodmarsh are Canterbury and Dambridge Wingham. This has been addressed in the final documentation.	The SEA final report: https://www.southernwater.co.uk/dwmp/strategic- environmental-assessment Stour Options Development and Appraisal: https://www.southernwater.co.uk/dwmp/stour- catchment/options-development-and-appraisal-for-stour
Natural England Ref: NE07	Proposed European sites should also be included, these include pSPA, pSAC and pRamsar sites.	Noted. Our indicative HRA reviewed the proposed investment needs within the priority wastewater systems identified in the DWMP against their potential to affect the UK National Network of designated protect sites - RAMSAR, SACs, SPAs and MCZs. Any candidate SACs, proposed SPAs, proposed MCZs and proposed RAMSAR sites were included in the review though none were present in the region at the time of our analysis.	The SEA final Report: https://www.southernwater.co.uk/dwmp/strategic- environmental-assessment BRAVA Methodologies: https://www.southernwater.co.uk/dwmp/baseline-risk-and- vulnerability-assessment
Natural England Ref: NE08	There is no mention of whether designated sites are failing their conservation objectives and/or current condition status or uncertainty around this – this should be included and considered	We did not publish data regarding the conservation status of designated sites because this was not complete when we ran our assessments. However, we did use the 'Reasons for Not Achieving Good' in our BRAVA risk assessment for Nutrient Neutrality. Its appendix lists the Water Dependent Habitats Sites, their designation, and the specific reasons for not achieving good. we expect to be able to improve our assessments in cycle 2.	BRAVA methodology for Nutrient Neutrality: https://www.southernwater.co.uk/media/4551/brava- methology_nutrient-neutrality.pdf
Natural England Ref: NE09	The appropriate assessment must identify all relevant adverse effects on integrity and uncertainties.	This needs to be appropriate for the scale of planning and information available. Where the actual and specific details of the option are not known from the DWMP planning, or the location for the solution is unknown, then a full assessment cannot be made in the DWMP. We will ensure this is undertaken when developing and delivering local level interventions.	See revised SEA, HRA and WFD assessments
Natural England Ref: NE10	The HRA of the plan has not completed an assessment of the in combination and cumulative impacts of the plan with other plans and projects. NE seek clarity on when this will be undertaken.	The cumulative and in-combination impacts assessment has been undertaken. The list of plans to inform this assessment has been considered to be proportionate to the level of assessment that is possible at this stage, given the information available. Where plans are not specifically listed as being part of the in-combination assessment, these plans have been reviewed as part of the PPP review, to capture key environmental and social issues and opportunities.	SEA Statement of Response Appendix E: https://www.southernwater.co.uk/dwmp/strategic- environmental-assessment
Natural England Ref: NE11	Pressures on designated sites to identify where activities might have LSE's. Those that are listed as amber will require appropriate assessment.	Once locations of investments are known, additional data will be collated to inform the assessments that are applicable to the consenting route, for example, the Environmental Impact Assessment and project level Habitat Regulation Assessment.	SEA Statement of Response Appendix E: https://www.southernwater.co.uk/dwmp/strategic- environmental-assessment
Natural England Ref: NE12	The plan has failed to fully comply with the policy and legislation as set out in Annex 2.	We have followed the national DWMP Framework in preparing our DWMP. At the first series of workshops with stakeholders in September 2020, Natural England stated that our DWMP would not be compliant with the Habitats Regulations if we follow the DWMP Framework. They stated that this is a national issue that requires a change in the national DWMP Framework. We continued to follow the policy and legislation for strategic, regional scale plans on Strategic Environmental Assessment, Habitats Regulations Assessment and Water Framework Directive assessment on a best endeavours basis. This was to learn from the first cycle of DWMPs before they become a statutory plan. We will ensure we are compliance with the SEA and Habitat Regulations when developing and delivering local level interventions.	See revised SEA, HRA and WFD assessments

Source	Торіс	Response	Where addressed in the Plan / website
New Forest Catchmen Partnership Ref: 4043	The impacts of CSOs must be addressed as a matter of urgency and that would therefore be similar priority (or if your consultation does not allow, a major and linked second priority). There are certain urban areas of the catchment where sewer condition is a concern and that would be recognised in our third priority.	Thank you. We acknowledge your priorities and confirm that we are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows.	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
New Forest Catchmen Partnership Ref: 4043	t Nationally and internationally important landscapes and habitats should not be exposed to environmental risk and we would support Southern Water in advancing such a case to regulators. We would also support the urgent need for investment which is not necessarily the least cost. Whilst multiple objectives are desirable, there is value and benefits for investment in certain priorities such as enhancing environmental quality and contributing to nature recovery. Whilst the New Forest may have lower population compared to some other parts of the Southern Water operational area, its special environmental qualities generate over 13.5 million person visit per year with associated interest in the performance of those managing the environment, and it is highly prized by residents as well as being a natural asset of national importance.	The investment needs identified provide the best long-term value to our customers and communities, rather than lease cost, by reducing risk through more sustainable approaches which provide wider benefits. These are our 'preferred' investment options to be funded from customer bills through our standard regulatory processes.	Bill Impacts Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
New Forest Catchmen Partnership Ref: 4043	t A particular weakness of the DWMP is the lack of targeted and qualitative data relating to environmental quality. The WFD and SSSI condition assessments on which the process is based are necessarily limited in their scope and relate to specific objectives, they therefore do not fully represent the threats operations pose to wider biodiversity and nature recovery. Research shows that potentially 50% of invertebrate species are lost from waterbodies in good condition as compared to high, the WFD target is therefore hardly one that will delivery nature recovery. In the New Forest context there is an exigent case for Southern Water to be prioritising urgent investment in WWTW infrastructure to address immediate problems which compromise nature recovery.	Thank you. We welcome suggestions on how to improve and enhance our BRAVA methodologies for cycle 2. As part of developing the DWMP, our BRAVA for the Good Ecological Status objective assessed the risks from all our wastewater systems where the EA's RfNAG in water related habitats confirmed or suspected it was partly due to our wastewater operations.	Our BRAVA methodologies explain how we assess risks to designated habitats: https://www.southernwater.co.uk/dwmp/baseline-risk-and-vulnerability-assessment
New Forest NPA Ref: 4041	We would query whether the Drainage & Wastewater Management Plan should also be subject to a Habitats Regulations Assessment, as a 'plan or project' which would impact on the integrity of internationally designated sites (Special Protection Areas and Special Areas of Conservation).	We completed a Habitats Regulations Assessment (HRA) on our DWMP - which is published on our Strategic Environmental Assessment (SEA) page. One of the issues identified by Natural England at the first round of our DWMP workshops in September 2020 was that if we follow the national DWMP framework we would not have a Plan that is compliant with the HRA. The issues needs to be resolved nationally. However, we explored how to apply the HRA as we developed our DWMP on a best endeavours basis. Our learning from this process and feedback from partners will enable us to apply the HRA processes to the next round of DWMPs when it will be a statutory plan and require a full HRA.	https://www.southernwater.co.uk/dwmp/strategic-environmental-assessment
New Forest NPA Ref: 4041	by 2030 in 'nutrient neutrality' areas to the highest achievable technological levels. For phosphates	The proposed Levelling Up and Regeneration Bill that is currently going through Parliament does include a requirement for water companies to take action to achieve a Technically Achievable Limits in nutrient neutrality areas by 2030. In the south east of England, these areas include Stodmarsh, the River Itchen and the Solent. We have submitted proposals for investment at all our wastewater treatment works (above a certain size as specified by the EA) to the EA to be included in their Water Industry National Environment Programme (WINEP). In the New Forest we have identified investment needs to reduce nitrate at 5 wastewater treatment works.	Options development and appraisal for the New Forest (southernwater.co.uk)
New Forest NPA Ref: 4041	Nationally and internationally important landscapes and habitats should not be exposed to environmental risk and we would support Southern Water in advancing such a case to regulators.	these areas are set at the right level to protect these sites. The DWMP risk assessments will continue to identify current and future risks to further action can be taken at the right time. We would like to work with other organisations to improve our risk assessments and the available data to ensure they accurately reflect the risks to the environment, and the identify the scale of future investment that will be needed to protect the sites. Our DWMP will be submitted to Ofwat and our regulators for approval and it will then inform the PR24 Business Case for funding for the period 2025 - 2030. Some aspects relating to CSOs and Nutrients will be submitted for inclusion within the EA's WINEP (Water Industry National Environment Programme).	https://www.southernwater.co.uk/dwmp/our-regional-dwmp
New Forest Verderers Ref:	Priority SAC habitat, riverine woodland which is thought to be the finest example of this habitat left	t approach is explained fully in our technical summary on storm overflows. In our investment needs tables for the New Forest, we have three schemes identified under PO5 for the Lyndhurst system (LYND.WINEP01.1, LYND.WINEP01.2 and LYND.WINEP01.3.) which will all contribute to addressing the specific issue you have identified.	Storm Overflow Technical Summary: https://www.southernwater.co.uk/dwmp/technical- summaries Investment Needs tables for the New Forest: https://www.southernwater.co.uk/dwmp/new-forest- catchment/options-development-and-appraisal-for-the-new- forest
Newick Parish Council Ref: 3014	It is difficult to educate, influence and change people's behaviours if there are areas within the system which are out of their control and they can therefore criticise the water company. Therefore, both sewer condition, groundwater pollution and sewer flooding have to be a priority, so that when looking at compliance issues there is no come back. If all of the above are prioritised, then environmental enhancement will follow.	We agree. It is vital that we continue to work with all the organisations that have helped us develop the DWMP and fully intend to do so - especially once we have a degree of certainty over the funding available to us during 2025 – 2030 and can begin detailed planning and progress the potential partnership opportunities which were identified in our DWMP. We will continue our engagement with local councils, other flood risk management authorities, planning authorities and environmental groups to develop plans for co-funding and co-delivery of actions.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.

Source	Topic	Response	Where addressed in the Plan / website
Newick Parish Council Ref: 3014	, , , , ,		"Climate Change" & "Approach to uncertainty" technical summaries: https://www.southernwater.co.uk/dwmp/technical-summaries
Newick Parish Council Ref: 3014	Where is the grey water recycling? I am assuming it is not included as it is a supply area as opposed to a wastewater issue. If we improved our use of grey water recycling for toilets flushing, car washing etc etc, surely this would have an impact on the amount of wastewater?	Grey water recycling will become more of an issue as pressures on our available water increase. We are working closely with our Water Resources Management Team (WRMP) to ensure we meet all future challenges in future cycles of the DWMP and the Water Resources Management Plan. We have also published our Sustainable Development policy which has advice that developers and Local Authorities should apply to make new developments more sustainable and are working with Local Authorities to provide advice to communities regarding sustainable use of water.	See our Water Resources Management Plan (WRMP): https://www.southernwater.co.uk/our-story/water-resources- management-plan and our Sustainable Development policy: https://www.southernwater.co.uk/our- services/planning-your-development
Ofwat Ref: OF01	it is unclear whether you have undertaken the same assessments for intervening planning horizons (5- or 10-years).	We have completed a 2020 baseline for all our Planning Objectives and a 2050 planning horizon for 6 Objectives: 4, 5, 6, 7, 8 and 11. Where we have models to forecast future risks, we have the intervening planning horizons too. We could not complete a 2050 horizon for the remaining 8 Objectives as there may not have been data available, or predictions of issues such as sewer collapse are too far ahead to be of value. This is explained in more detail on our Planning Objectives page and summarised in our Level 1 plan in the section on Adaptive Planning.	Planning Objectives page: https://www.southernwater.co.uk/dwmp/planning- objectives. Level 1 Plan section on Adaptive Planning
Ofwat Ref: OF02	Your plan demonstrates an awareness of adaptive planning and the need to prioritise low-regret investments, and your dDWMP assesses what elements of your system require future investment and prioritisation to reduce risks. However, it is unclear what scenarios and pathways are being used to inform this analysis.	We have clarified this in our DWMP. Our ODA Technical Summary describes how we have prioritised addressing the risks, including by using a Multi Criteria Analysis to assess best value. Our Approaches to Uncertainty Technical Summary explains the modelling and scenarios analysis process we have used to identify the range of potential approaches and pathways in an uncertain future.	ODA Technical Summary: https://www.southernwater.co.uk/media/6941/technical- summary-on-oda.pdf Approaches to Uncertainty Technical Summary: https://www.southernwater.co.uk/media/6939/technical- summary-on-approaches-to-uncertainty.pdf
Ofwat Ref: OF03	how this will be used to address some of the risks you have identified. - You should clearly set out how asset management and optimisation (base expenditure activities) can address some risks such as providing additional hydraulic capacity headroom in the system, as part of a hierarchy of options, before recommending enhancement schemes.	Technology and optimisation is referred to throughout the plan in sections on pollution reduction, internal sewer flooding, rainwater separation and investment needs. We have explained in our L1 Plan the types of technology we will deploy to address the risks, such as installing 20,000 smart monitors in our sewer networks to help pre-empt blockages and sewer collapse. Our Plan clearly sets out that we intend to work in partnerships with other organisations to progressively remove surface water through separation and attenuation schemes, and prevent groundwater ingress into our sewers through relining and refurbishing and so will create headroom to accommodate growth and minimise the impact of climate change. We have identified numerous investment needs to address this in each River Basin Catchment set out in our investment needs table. Our BRAVA risk assessments are predicated on compliance with legal and environmental obligations and many of the investment needs identified in our Plan are determined by meeting these obligations.	Level 1 Plan sub section on our Pollution Reduction Incident Programme in the "Risk of Pollution" section. Investment Needs tables on our website have been revised. BRAVA methodologies: https://www.southernwater.co.uk/dwmp/baseline-risk-and-vulnerability-assessment
Ofwat Ref: OF04	costs to deliver against your planning objectives, but you have not clearly provided a comparison of alternative scenarios or options such as a least cost plan, to demonstrate to us that you are proposing the right long-term best value plan.	Our Plan is a best value plan. We have followed the national DWMP Framework in developing our DWMP, which asks for a best value plan to be developed. However, many of our investments are also the least cost option, especially where they are for operational issues such as maintenance, sewer jetting, customer education. We also brought forward the investment needs previously identified in our Drainage Area Plans - which are also least cost options. We have identified both least cost / preferred / alternative options for investment needs under the WINEP drivers such as storm overflows, and phosphate and nitrate reduction. Our ODA Technical Summary describes how we applied the Multi-Criteria Analysis (MCA) during the Constrained Options Screening to determine which options would provide best value, vital for our customers, communities and the environment. Our Feasible Options tables, published in the ODA sections of our website for each wastewater system, sets out the stage of the process that an option has been discounted and why.	Feasible Options tables in each ODA page on the 11 River
Ofwat Ref: OF05	We consider that there is insufficient convincing evidence in your dDWMP on why alternative options were discounted.	We have now included a 'Feasible Options' table for each wastewater system in the ODA section of each RBC on the website. The tables summarise the ODA process for each wastewater system. It starts with the Generic Options identification through to the best value and preferred options. The tables show the point in the screening where an option has been discounted and why.	
Ofwat Ref: OF06	one of the 14 planning objectives and provides the best mix of social, economic and environmental benefits. However, you should provide further detail in your final plan to quantify the multiple	A best value option is one that provides positive benefits across social, economic and environmental criteria that can be delivered for a reasonable additional cost. We have endeavoured to clarify this in the Level 1 DWMP and the technical summaries. The ODA Technical Summary sets out how we qualitatively assessed multiple benefits. The Programme Appraisal Technical Summary clarifies how we have assessed and prioritised risk reduction across the planning objectives by quantifying the synergistic benefits of options.	ODA Technical Summary: https://www.southernwater.co.uk/media/6941/technical- summary-on-oda.pdf Programme Appraisal Technical Summary: https://www.southernwater.co.uk/media/6940/technical- summary-on-programme-appraisal.pdf
Ofwat Ref: OF07	You should explain why green options are not being pursued in your final DWMP.	We will prioritise green and Nature Based Solutions before traditional engineered approaches such as storage tanks where we are able to achieve the outcomes and meet regulatory dates. We believe the way this was presented in the investment tables in our draft DWMP did not clarify this sufficiently and so we have updated all the investment needs tables to reflect this. However, there is an exception to this on the Isle of Wight where the Council has informed us that land stability issues in coastal areas means that underground storage is a necessity. The Council believes that surface water attenuation will further exacerbate the current ground instability issues. See our response to REF: 4005 above.	Isle of Wight Investment Needs Table: https://www.southernwater.co.uk/media/6816/sandown- sand-ineeds.pdf
Ofwat Ref: OF08	You mentioned how partnerships and co funded schemes will be created as you secure funding and focus on delivering your DWMP in AMP8. However, it is unclear at this stage what opportunities you are actively pursuing and prioritising for us to understand your ambition and the likelihood that these schemes will materialise.	We have set out in the investment needs tables for each wastewater system where we expect to be able to work in partnership to deliver the programme of work and who the partners will be. The partnerships identified is the result of the extensive engagement activities carried out in developing the DWMP and all the proposed partnerships were identified and agreed by the potential partners. They are keen to work with us to deliver the benefits. We have also included a section on partnership development in the L1 document. Partners wanted us to have certainty that the funding to develop schemes is available before we all commit to investing time on developing the opportunities identified during the development of our DWMP.	Level 1 Plan section on "Developing our Proposed Partnership Projects"

Source	Topic	Response	Where addressed in the Plan / website
Ofwat Ref: OF09	requirement.	The consultation on the draft DWMP commenced before the publication of Defra's Storm Overflows Discharge Reduction Plan in August 2022. We have since updated our DWMP to reflect the Government's plan and the new targets for spill reduction. We have incorporate our Storm Overflows Discharge Reduction plan into our DWMP to set out how we will meet the requirements and expectations. We have also updated our Investment Needs tables to incorporate the needs to meet the Storm Overflows Discharge Reduction Plan. It has resulted in an additional 104 investment needs across our region in AMP8, and a further 431 investment needs for future AMPs. The costs for these schemes have been identified in the investment needs tables for each River Basin Catchment.	Level 1 Plan section on "Storm Overflows and Investment Needs pages in the 11 River Basin Catchment sections on the website.
Ofwat Ref: OF10	required to address risks in your region. However, many of your prioritised investment needs describe storage / storage tanks or surface water separation as the preferred options, particularly to reach your own target of less than 20 storm overflow spills per year. It is unclear to us how ambitious and committed you are to prioritising nature-based solutions. In your final DWMP you should compare the costs and quantify the benefits of green and grey options, provide clarity on your decision-making approach for choosing one over the other, and explain the rationale as to why green options have been discounted.	Our DWMP identified the significant percentage of rainwater that could be in our wastewater systems during a 1 in 20 year storm. This has been a key driver for our Cleaner Rivers and Seas Task Force to reduce rainwater getting into combined sewers. Our DWMP also used the Source-Pathway-Receptor model to ensure we first looked at tackling the risks at source. Hence, our intention is to prioritise green catchment and Nature Based Solutions, including SuDS. We have set out a solution hierarchy in our dDWMP. Seeking rainwater separation is the priority over attenuation by SuDS. We have addressed and clarified this in the Level 1 Plan in the section on Reducing Flooding and Spills, and in the updated investment tables. We are committed to providing green solutions above grey, and hope that the regulatory targets incentivise this approach. Our ODA Technical Summary sets out how we assessed the benefits of the range of storage solutions alongside estimated costs so that these could be compared. Although storage has short term benefits, separation has multiple synergistic benefits. Our Programme Appraisal Technical Summary sets out we factored in, and took these multiple, long term benefits into account, alongside costs quantified per hectare of water stored. The Programme Appraisal enabled us to compare the costs associated with the long-term multiple benefits with the short term single benefit of storage and also incorporate the costs of enlarging storage tanks in future AMPs. Separation and attenuation is the more expensive option in the short term than least cost underground storage but, over the longer term, will provide multiple benefits at less cost than the need to enlarge or rebuild storage tanks. https://www.southernwater.co.uk/dwmp/strategic-environmental-assessment Since the public consultation on the draft DWMP, we have published Feasible Options tables on the ODA page of each River Basin Catchment which show where the options under consideration have been rejected, why and when. We have also updated o	ODA Technical Summary: https://www.southernwater.co.uk/media/6941/technical- summary-on-oda.pdf Programme Appraisal Technical Summary: https://www.southernwater.co.uk/media/6940/technical- summary-on-programme-appraisal.pdf Investment Needs tables in the ODA pages under each of
Ofwat Ref: OF11	objective and a breakdown of indicative costs by site. However, we did not see sufficient and convincing evidence for the comparison of your best value and least cost options. For your final plan you should explain the range of costs and bill impacts associated with addressing customers' priorities for your overall preferred best value plan.	benefits at less cost than a need to enlarge or rebuild storage tanks. Our Technical Summary on the Programme Appraisal sets out we factored in, and took these multiple, long term benefits into account, alongside costs quantified per hectare of water stored. The Programme Appraisal enabled us to compare the costs associated with the long-term multiple benefits with the short term single benefit of storage and also incorporate the costs of enlarging storage tanks in future AMPs. Our resulting	https://www.southernwater.co.uk/media/6941/technical- summary-on-oda.pdf Programme Appraisal Technical Summary: https://www.southernwater.co.uk/media/6940/technical- summary-on-programme-appraisal.pdf Report on the Public Consultation: https://www.southernwater.co.uk/dwmp/have-your-say
Ofwat Ref: OF12	dDWMP if you have reviewed alternative solutions to compare costs and the impact on affordability.	We describe above the process we followed to review and appraise alternative solutions. We followed the process for the Planning Objectives to ensure we had identified both best value and least cost options. The process for Storm Overflows involved consideration of storage and separation solutions, with our programme and costs based on an overall separation of 30% of the permeable area contributing towards a storm overflow and storage. Both the storage option and the separation option was costed and presented as least cost, best value and alternative options (in some cases the least cost and best value options are the same) We have assessed bill impacts as part of the DWMP in terms of average cost per household. We did not undertake Willingness to Pay or Affordability research as part of the DWMP as this will be undertaken as part of the PR24 Business Case preparation and submission. However, in our public consultation on the draft DWMP, we asked whether the risks to our customers, communities and the environment should be reduced to a Band 0 even if this meant a rise in customers' bills. 64% of the total responses agreed that the risks should be reduced to Band 0 even if this means that customer bills would increase.	
Ofwat Ref: OF13			Level 1 Plan section on "Storm Overflows and Investment Needs pages in the 11 River Basin Catchment sections on the website. Report on the Public Consultation: https://www.southernwater.co.uk/dwmp/have-your-say
Ofwat Ref: OF14	We note the feedback you have received on the difficulties communicating technical detail to your customers and so we would like to understand the measures you have taken to improve this ahead of your consultation and how effective your consultation has been.	The report on the public consultation sets out customers' feedback on the draft DWMP. We received responses from 60 customers, 16 community groups, 18 Councillors and 59 organisational responses. Some customers have said that the detail is too complicated for them to follow but others think it is very clear and comprehensive. On the whole, customers are really pleased that we are developing the DWMP and that there is transparency concerning the challenges we are facing and our intentions for addressing these. We have improved the language used in our Level 1 DWMP and added boxes for definitions to explain terms to customers. We have also updated our 4 page customer facing plain English summary to address this issue.	Report on the Public Consultation: https://www.southernwater.co.uk/dwmp/have-your-say See revised Level 1 Plan for definitions and case studies. See the plain English summary of our Plan.
Ofwat Ref: OF15	You should consider the responses to your dDWMP consultation and explain how these have influenced your final DWMP.	We have produced a Statement of Responses (SoR) for our consultation to explain how these have influenced our final DWMP. We have also incorporated statistics on the consultation feedback we received at relevant points throughout our Level 1 DWMP. We have undertaken extensive engagement throughout the development of the DWMP which has meant we have captured issues and incorporated them as the Plan has been developed. On the whole, our plan has received widespread support from all respondees. The few material concerns raised during the consultation has resulted in us including 5 more investment needs, amending 1 other investment needs and incorporating 137 investment needs after discussions in stakeholder engagement meetings.	See Statement of Responses (SoR) - this document.

Source	Торіс	Response	Where addressed in the Plan / website
Ofwat Ref: OF16	We note that you did not provide a full Board assurance statement for your DWMP It was also unclear whether you have undertaken additional assurance including independent/external reviews of your dDWMP submission or component parts. You should ensure that a full Board Assurance statement is provided as part of your final DWMP submission, and we would welcome confirmation of any additional assurance provided on your final plan.	· ·	N/A
Ouse and Adur Rivers Trust Ref: 4009	There is a reluctance to move away from, investigate or consider the vast array of options for surface water or drainage management. This DWMP process (in our area) has disappointingly resulted in a long list of the same option, which we consider unsuited to deal with your challenges. Despite the wealth of experience and knowledge at your disposal through the consultation process to have maintained the line on grey engineered, storage tanks fails to move Southern Water into line with current knowledge or thinking. Only by working in collaboration with other organisations, considering new or emerging partnerships, will you be able to sustainably and cost effectively resolve the complex but serious issues within the drainage and wastewater system and have a measurable impact on improving the environment.	We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. Moving forward into cycle 2 of the DWMP, we aim to develop our planning objective on surface water management (PO10) in collaboration with partners.	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Ouse and Adur Rivers Trust Ref: 4009	We see no place for Defer within the strategy, defer is a negative approach and is not necessary if the prepare option is followed	Our "Defer" investment strategy only applies where the current performance of the wastewater system is assessed as "acceptable" under BRAVA but we anticipate that future investment may be required and we don't feel that there is a need to undertake investigations yet. Our approach to our investment strategies is intended to facilitate proportional management of the BRAVA risks and is explained fully in our Problem Characterisation technical summary.	t Problem Characterisation technical summary: https://www.southernwater.co.uk/dwmp/technical- summaries
Ouse and Adur Rivers Trust Ref: 4009	There is a clear neglect of the impact of Drainage and WasteWater across the surface water bodies of the catchment and apparently a lack of appreciation of the WFD importance of these operations. 40% of the failings of surface waterbodies in the catchment are directly attributed to wastewater treatment and the sole focus on bathing water status within this plan is also disappointing considering both integrated catchment management and source to sea approaches form the heart of building resilience.	The Water Framework Directive sets out a system of classification of surface water bodies in terms of ecological and chemical status. We have used Good Ecological Status as one of our planning objectives to ensure a focus on investing in drainage and wastewater to achieve good status in surface water bodies. The Environment Agency publishes data on the 'Reasons for Not Achieving Good' (RfNAG) status too. Our risk assessment identifies where there is a risk that our wastewater systems prevent the waterbody from not achieving good. We have assessed each wastewater system that is hydrologically connected to a watercourse or water body where the Environment Agency has confirmed or suspected that the RfNAG is linked to our operations. We have also included risk assessments for nutrient impacts on habitats, pollution of groundwater bodies, and designated shellfish waters.	See our methodologies for assessing Good Ecological Status, NN, Groundwater Pollution and Shellfish Waters: https://www.southernwater.co.uk/dwmp/baseline-risk-and-vulnerability-assessment
Ouse and Adur Rivers Trust Ref: 4009	Why is Goddards Green not included when it matches or is higher impact than sites that have been selected? We can find no justification for this and it is of great concern that this site will be allowed to continue as normal until the next DWMP is produced for PR29.	Our approach to prioritising our wastewater systems is explained fully in our technical summary on catchment selection. In fact, Goddards Green was on our initial list of 71 catchments to be progressed through the ODA and subsequent stages. However, we had to take some hard decisions about the wastewater systems that would be progressed once we understood how long the ODA assessment would take us for each wastewater system. We had to postpone action on 10 of the original 71 and unfortunately, Goddards Green was one of the systems that was postponed. It is our ambition that 100% of our systems will be included during cycle 2 and, if at all possible, to complete more during AMP7.	Catchment Selection technical summary: https://www.southernwater.co.uk/dwmp/technical- summaries
Pulborough Neighbourhood Plan Ref: 2003	Pipework infrastructure in both drainage and sewerage is very poorly understood or monitored, and this must change. Some pipelines are approaching 100 years old. The pipework needs to be mapped, and we need to know where pipeline is under stress (through sagging for example) or where leaks are developing. Collaboration between councils and Southern Water on a more frequent and active basis is essential.	This is an important point. There are around 40,000 kilometres of sewers across our region. Some were transferred from private ownership to water companies within the last 10 years and came with no records of their location or condition. We continue to survey the location and condition of sewers as our funds allow. We have proposed future investment needs across our region to refurbish critical sewers. Other non-critical sewers are dealt with on a reactive basis where we respond quickly to repair damaged sewers when reported by customers.	See Level 1 DWMP section on Asset Health and Resilience for more information.
Pulborough Neighbourhood Plan Ref: 2003	It would be a good start to agree to double the holding capacity at every sewerage treatment facility. Pipework infrastructure in both drainage and sewerage is very poorly understood or monitored, and this must change. Some pipelines are approaching 100 years old. The pipework needs to be mapped, and we need to know where pipeline is under stress (through sagging for example) or where leaks are developing. Collaboration between councils and Southern Water on a more frequent and active basis is essential.	Our modelling shows us that storage tanks, even if these were to be doubled in size, would not be effective in storm events of the magnitude we are beginning to experience. We have set out in the DWMP how we intend to address the risks through a mixture of traditional storage and more sustainable, longer-term solutions such as separation and SuDS (Sustainable Drainage Systems). We believe our DWMP is transparent regarding our ageing assets and systems and the need to invest in these to reduce the risks to our customers and the environment. Regarding our own sewer systems, we do know where these are and we have identified numerous an investment needs to refurbish or replace ageing pipes where these are causing risks. However, there are many kilometres of sewer pipes across our region that are no mapped and which we do not own or manage - known as 'private laterals'. Unfortunately, we are not responsible for these and in many cases, nobody knows who owns them. It is a conundrum that we hope to address in time by working with local councils and landowners and potentially, a recognition of these issues under government regulations.	these are performing: t https://www.southernwater.co.uk/dwmp/arun-and-western- streams-catchment/strategic-context-for-the-arun-and-
Ringmer Parish Council Ref: 3018	During 2021, there were 68 storm releases discharging untreated sewage into our watercourses for more than 10% of the time. The number of such discharges was far higher than the number of occasions on which Ringmer experienced anything that could reasonably be considered a storm. The reality is that "storm overflows" from Neaves Lane occur every time there is even moderate rain. It is of little benefit to make expensive investment in reducing phosphate discharges during the periods when the WWTW is working normally, if for over 10% of the time all the phosphate produced by a community of almost 5,000 people is being discharged without treatment. This is certainly not the service that your Ringmer customers believed they were paying for through their substantial water bills, and it is not a level of service that they consider acceptable.it is essential that there should be substantial investment before 2030 in reducing "storm overflows" from all those WWTW, including specifically the Ringmer (Neaves Lane) WWTW, that discharge untreated sewage other than in truly exceptional weather.	Storm overflows were designed into wastewater systems to protect homes and business from flooding from sewage. They generally spill when there is sufficient dilution (usually at least 8 times) to prevent harm to the environment. The EA issues permits for storm overflows to prevent harm, so where they operate outside of the permits then it is reported as a pollution, for which we may be fined. High groundwater levels can mean that a storm overflow can discharge in periods where there has been no rain. There are 115 storm overflows where the root cause is due to groundwater. The root cause of discharges from Neaves Lane storm overflow is rainwater, but there is often a delay between rainfall and discharges. Depending on the prevailing conditions, it can take time for the ground to become saturated and for the capacity of our systems to become overloaded. We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows.	summaries
Ringmer Parish Council Ref: 3018	You should have consulted far more widely about your future DWMP investment plans. This consultation should have included all Town and Parish Councils in your area. This would have improved the response rate, and brought this important project to the attention of a much wider audience.	We did not constrain or limit our public consultation. Our public consultation was open to all through our website but we acknowledge that we could do better in engaging with more customers. It is important that we continue to work with all stakeholders and improve how we engage with customers as we develop the DWMP through cycle 2.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Ringmer Parish Council Ref: 3018	Ringmer Parish Council has seen in 2022 an assurance from Southern Water to Lewes DC that there is "adequate headroom" at the Ringmer (Neaves Lane) WWTW to accept additional sewage from a proposed new Ringmer development. It has been established that this statement was based only on dry weather sewage flows to the WTW and is not based on the reality of storm events. This is a material planning consideration under both national and local planning policy and Southern Water should in future be open and honest about the consequences	delivered correct, should not increase the number of discharges from storm overflows.	Catchment Selection technical summary: https://www.southernwater.co.uk/dwmp/technical- summaries
Ringmer Parish Council Ref: 3018	There is a second, small, WTW in our parish, The Holdings. This appears from the tables in the DWMP to be operating perfectly, with no "storm overflows" at all. Most of the other very small WTWs have similar perfect performance. This table should distinguish between those WWTW that are in fact operating perfectly, and those whose performance is unknown, because it is not currently being monitored.	Thank you for this feedback. We need to continue to develop our DWMP, especially so we have a more detailed summary for every wastewater system (not just the 61 most complex / at risk systems). We will clarify this information in the next cycle of the DWMP.	N/A
Rother District Council Ref: 4002	The Council has previously engaged with Southern Water on cliff stability issues in the Fairlight area. It appears that this investment opportunity, that was identified in previous engagement sessions, has now been taken out of the DWMP.	We have noted this and included in our investment needs for Fairlight (investment need FAIR.OT01.4) a future potential partnership scheme to improve surface water management in this area .	Investment needs table for the Rother: https://www.southernwater.co.uk/dwmp/rother- catchment/options-development-and-appraisal-for-rother

Source	Торіс	Response	Where addressed in the Plan / website
Rother District Council Ref: 4002	Nutrient neutrality was highlighted as a priority. Two catchments within Rother, the Pevensey Levels and Dungeness European complex of sites, are currently not impacted by this issue, it is the concern that the protected sites could deteriorate and trigger Natural England's intervention. This is of particular concern for the Rother catchment as the WTWs across our authority drain into the Dungeness European complex of protected sites around Rye Bay and the English Channel which is designated as the Dungeness, Romney Marsh and Rye Bay Special Protection Area. Whilst the Bexhill and Hastings WTW drains directly into the English Channel, it is our understanding that any surface water runoff resulting from development near to the Pevensey Levels could harm the condition of the Pevensey Levels and therefore could impact the whole catchment, particularly as Bexhill is the largest town in the District.	Managing nutrients is a key issue in protecting the environment. The DWMP has included achieving "good ecological status" for waterbodies as one of our long term planning objectives (PO9). For our first cycle of the DWMP, we have included a number of studies and Investigations (see investment needs ref HABX.OT01.4 & HAIN.OT01.4) to better understand the impact of wastewater discharges on the local environment and identify the measures required to achieve good ecological status in the receiving waterbodies. As part of our WINEP programme we have also identified specific investment needs to reduce nutrient from specific wastewater systems (see HAIS.WINEP.PO2.1 & HABX.WINEP.PO2.1).	Investment needs table for Cuckmere and Pevensey levels: https://www.southernwater.co.uk/dwmp/cuckmere-and-pevensey-levels-catchment/options-development-and-appraisal-for-cuckmere-and-pevensey-levels
RSPB Ref: 4036	All challenges raised within the Draft DWMP have implications for the environment and must be addressed to ensure the damaging impacts on the environment from Southern Water's operations cease. In addition to putting in place measures to restore habitats impacted by past activities and creating opportunities for environmental enhancement, particularly increasing resilience to climate change. It is inappropriate for the challenges identified to be considered as future issues, these are existing challenges that require urgent action. Several of these issues act synergistically e.g. climate change, nutrients, pollution (aging assets) on the environment, together with changes in water availability as a result of abstraction, and therefore it is essential that a holistic approach is taken to tackling these challenges. The focus should also extend to reversing the damage caused by legacy issues and ensuring that designated sites that have, and continue to be impacted by Southern Water's activities, are functioning for their designated purpose and are in favourable condition.	We acknowledge both the complexity and synergistic nature of many environmental issues. Our BRAVA methodologies attempt to quantify the risks both in the short and long term, so investment can be planned at the right time to avoid any increase risk to customers or the environment. We introduced a series of planning objectives focused on the impact on the environment, including one on achieving "Good Ecological Status" for all waterbodies (PO9). This is to highlight where we need to invest to remove the reason why the waterbody is not in GES/GEP where the reason is confirmed as from our operations. In our first DWMP we have identified 94 specific investments across our region that are associated with PO9, totalling over £786,000k. But our economic regulator determines how much we can charge our customers to ensure bills remain affordable, and hence we therefore cannot deliver all the environmental improvements that we would like to.	
RSPB Ref: 4036	Collaboration should also not be limited to those with responsibilities for water and water protection. To provide sustainable solutions for drainage and wastewater management, that effectively protects the environment and provides best value for customers a diverse range of stakeholders should be engaged with, particularly farmers, large landowners, developers, house builders, industry and local planning authorities. There should be enhanced effort to bring customers on a journey to protect the environment, through their attitude and behaviour towards water. Working at a local level with communities is clearly an important aspect of this.	We agree that we all share responsibility for the quality of the environment. Nature based catchment solutions developed in collaboration with others will be essential to achieving many of our planning objectives. Once funding for AMP8 has been confirmed following the 2024 Price Review, we will engage with all concerned, including customers and communities, that have interests in specific locations and local schemes to ensure their interests are incorporated.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
RSPB Ref: 4036	We do not consider that investment has been prioritised enough towards interventions to protect, restore and enhance designated sites. We are concerned in terms of the geographic spread of interventions, and the lack of prioritisation of designated sites. We also consider that by adopting a catchment based approach other interventions may be prioritised such as those upstream in catchments. However, we would raise the lack of clarity within the information and a future request for an interactive map, to create a visual representation of project and place. This would have made it more user friendly and easier to get a clear understand of where interventions are planned and how they relate to each other	We agree that an interactive map would be desirable for the next cycle of the DWMP. We have provided a number of static maps that show the risks across the region and the associated investment needs that we have identified. Risks to designated habitats are integral to our BRAVA methodologies; achieving "Good Ecological Status" (GES) for waterbodies across the region is one of our planning objectives (PO9). We have had to prioritise options development for our wastewater systems for cycle 1 (see our technical summary on catchment selection) but we have already identified over 90 investment needs that will help us to achieve GES.	to designated habitats:
Sidlesham Neighbourhood Plan Ref: 2003	is often these areas that are the environmental and biodiversity crucial sites. Often rural coastal	Our DWMP sets out the best value options to manage and reduce the risks in our wastewater systems in line with the EA, Ofwat and Defra DWMP Framework. However, many of the solutions are also the least cost option. Our Plan focuses on the urban environment which is served by our wastewater systems. Many single properties in rural areas are not connected to a mains sewerage system. The extent of our infrastructure and systems is shown in the DWMP River Basin Overview documents on the Overview sections under each of the 11 River Basin Catchments.	Overview page for each River Basin Catchment
Sidlesham Neighbourhood Plan Ref: 2004	Essential that there is new legislation that enables water industry to decline new development based on a published and independently qualified assessment.	We agree with the principle but we are not currently a statutory consultee in the planning process and have no powers to refuse development on any basis and we cannot influence when, where, or the scale of the development of new homes. However, it is our responsibility to ensure our systems are available to manage and treat any wastewater that results from this development.	Our Regional Plan explains this in more detail in the sections under the impact of growth on sewer flooding.
Sidlesham Neighbourhood Plan Ref: 2004 and Manhood Peninsular Action Group Ref: 2005	The adoption of best value leaves many particularly rural areas in a non investment scenario but it is often these areas that are the environmental and biodiversity crucial sites. Prioritising on the basis of a cost benefit analysis based on the number of properties protected is a negative, failing approach, especially in rural areas. The EA's approach to cost benefit has illustrated the failure of this system. Often rural coastal areas with a lack of investment because of low numbers of properties protected have suffered sea inundation and biodiversity degrading completely undermining environmental priorities. SW following this same route will simply compound a very bad situation and contradicts your main objective to protect the environment. Fundamentally, greater investment is required across the board, rather than cost-cutting.	We recognise the truth in this. All the risks we have identified in the DWMP are related to where we have wastewater systems - networks of pipes, rising mains, pumping stations and treatment works. Geographically, this means the vast majority of our systems service urban areas, towns and some villages rather than rural	Our fact box on First Time Sewerage Schemes under Groundwater Pollution in the Regional Plan explains this in a little more detail.
Sidlesham Neighbourhood Plan Ref: 2004 and Manhood Peninsular Action Group Ref: 2005	The plan is daunting in terms of the amount of information it contains and issues are often repeated but under different headings. The proposals are duplicated across the five plans, which gives a false impression of activity. A user friendly adaptation of the plan would be good on the lines of what the DWMP means for your community might be useful.	We agree that the consultation draft with five separate investment plans was confusing to many customers and communities. Based on feedback from the consultation, we have incorporated the five plans into the main DWMP and produced a much shorter public facing summary document. In its own right, this is still an overview of the strategic plan rather than providing detailed local information. We have published a guide to where to find things on the website and the main local level information is available under each River Basin Catchment.	
Sidlesham Neighbourhood Plan Ref: 2004 and Manhood Peninsular Action Group Ref: 2011	drainage groups - that is unfortunately ignored in many instances that could contribute to	Thank you for your feedback on local groups and the knowledge they can contribute to the process. We acknowledge that we have not yet engaged with local groups in developing the DWMP. This is primarily because the DWMP is a strategic level plan, although we have focused on identifying the investment needs in each wastewater system with the River Basin Catchments. However, once Ofwat, our economic regulator, has made its final determination on PR24, we will have a degree of certainty over the funding available to us during 2025 – 2030, and can begin detailed planning and progress the potential partnership opportunities which have been identified in our DWMP. We will continue our engagement with local councils, other flood risk management authorities, planning authorities and local environmental and community groups, such as the local flood forums to co-develop and co-deliver schemes.	The section on Next Steps in our Regional Plan explains this in more detail.

Source	Торіс	Response	Where addressed in the Plan / website
South East Water Ref: 4013	Other organisations such as highways both England and local council need to take responsibility for road run off and developers should ensure no additional run off/water capture system or permeable membranes. Regulators and planning should be firm where further development is not feasible. We need to understand what is the limit an area can take. Solutions may be additional works, improvements in works capacity and improvements to hydrology but I feel the highways and council should provide funding for their share of wastewater entering the system via this route. It is not just simple separation, road run off needs treatment, control and regulation. It will be very complex to do respectively, but certainly new builds should be dealt with appropriately and not just added to the system. Catchment based and nature based solutions are preferred where feasible and do not need over engineering. We should still bear in mind there is a limit to land pressure and disposal and we should know when that limit is reached and protect the environment for the future.		Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
South East Water Ref: 4013	Perhaps think more outside the box. Do you need to build additional works in some areas? Do you need support for regulatory changes? Customer willingness to pay: have you identified how much and then sort feedback. Direct developers towards what you really need. Public perception and education and regulatory changes to support things like wet wipes and no flush items.	There are many smaller villages and communities without a network of sewers serving the homes and businesses to remove and treat wastewater and recycle it so it can go back into the environment. New development in these locations will mean that new treatment works may be required in the future. This is an issue that we would like Defra, Ofwat and EA to include in the national DWMP framework for future cycles of the DWMP. We run customer insight programmes to understand customer views and priorities, and their willingness to pay. We will say more about this in our PR24 business plan. We work closely with planning authorities and developers to support growth and developments where they occur. We have set out our requirements for new development in our Sustainable Development Policy, and we run annual Developer Days to discuss water issues. We work with Government and our trade body, Water UK, to influence policy, such as the recently announced ban of plastic based wet wipes.	See our Sustainable Development Policy for the advice we provide to Local Authorities and Developers: https://www.southernwater.co.uk/our-services/planning-your-development
Storrington And Sullington Parish Council Ref: 3013	Why are you only using the best available technology to achieve compliance at some of the 24% sites that have challenging targets? What about the others and what about the other 76%? Why are you waiting for the Environment Agency to tighten environmental permits? you should all be working together now to protect the environment.	The standards of treatment of wastewater are determined by the environmental regulator, the Environment Agency, through the issuing of permits to water companies to prevent harm to the environment. We must comply with these permits, or we can be fined. Improvements to our treatments works to achieve higher standards are discussed and agreed with the Environment Agency through the development of the 5 yearly Water Industry National Environment Programme (WINEP). We both would want to use the best available technology at all our sites, but there is not always the needs to treat to this standard and there is a question of affordability. The economic regulator, Ofwat, determines the level of investment that we can make to ensure it remains affordable for customers (as most of the funding for investments comes from customer bills). This is why we cannot use money from customer bills on work that has not been agreed with the EA and Ofwat. The potential impact of the investment needs set out in our DWMP on customer bills is shown in our technical summary on "bill impacts". We have updated our DWMP with the investment needs that we have been discussing with the EA for AMP8 to reduce nutrients.	Bill Impacts Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Storrington And Sullington Parish Council Ref: 3013	Southern Water should publish details and timescales to your customers for dealing with leaks from your pipes.	Loss of drinking water from our supply pipes does not fall under the Drainage and Wastewater Management Plan. Drinking water is part of our Water Resources Management Plan (WRMP). Our website will always provide details of incidents with real time updates when the are pipe burst impacting water supply.	Our Water Resources Management Plan (WRMP): https://www.southernwater.co.uk/our-story/water-resources- management-plan
Storrington And Sullington Parish Council Ref: 3013	Southern Water needs to work with Local Planning Authorities to robustly assess all planning applications and how they will impact upon water usage rather than just waving the development through and dealing with the stretched resources later. We would urge Southern Water to work with Planning Authorities to implement standards and regulations on development, road building, urban design etc. to safely deal with run-off.	We already work closely with local planning authorities to assess planning applications. However, we have no powers to block development and our ability to effectively control development is limited by the statutory right to connect to the sewerage system. It is an issue that needs to be addressed nationally. We have developed and published our sustainable development policy which provides guidance for Local Authorities and developers to use.	See our sustainable development policy and advice for developers: https://www.southernwater.co.uk/our-services/planning-your-development
Surfers Against Sewage (Brighton Chapter) Ref: 2007	The investment needs for Peacehaven seem mainly aimed at reducing surface water flooding, not the discharge from CSOs. I recognise the 2 are related but there is no obvious cause and effect'	Our BRAVA showed that the major Band 2 risks for Peacehaven are flooding, surface water and CSOs. Addressing the flooding and surface water issues in the catchment as this will have a positive impact on reducing discharges from storm overflows. We have incorporated our response to the Government's Storm Overflows Discharge Reduction Plan in our final DWMP. We have added three additional investment needs in Peacehaven Brighton (and 535 across all systems) to reduce discharges from storm overflows meet the new standard of not more than 10 spills on average per year, rather than 20 spills per year as set out in the national DWMP Framework.	peacehaven-brighton-brig-ineeds.pdf (southernwater.co.uk)
Surfers Against Sewage (Brighton Chapter) Ref: 2007	The issue of road drainage Surface Water Outfalls at King Alfred and Hove Lagoon is not addressed	There are many surface water drainage systems, some of which we own, but many that are connected to highways and other paved areas are owned by other organisations. These may directly discharge to local watercourses / lakes /the sea. We are responsible for the surface water drains at Black Rock Aldrington Hove CEO (Hove Lagoon) and Hove Street Hove CSO (King Alfred). They are not connected to the sewer system and so they convey road and surface water runoff. These have not be investigated in detail during the first cycle of the DWMP. Our planning objective on Good Ecological Status is designed to pick up impacts on water quality so the source of the risk can be investigated. Subsequent cycles of the DWMP will be able to investigate risks in our systems further.	
Surfers Against Sewage (Brighton Chapter) Ref: 2007	There is no recognition that the Stormwater Tunnel could perhaps be used more effectively to smooth out peaks in flow, before pumping to Peacehaven WWTW and the same for Investment Needs at Aldrington	Asset optimisation is our priority for tackling storm overflows, especially where discharges are occurring outside of exceptionally heavy rainfall. We need to ensure our systems are working as designed and optimised to get the most from them. Each cycle of the DWMP will enable us to further develop our investment plans for each wastewater system, and work with partner organisations to pick local issues and identify the investment needs to tackle them.	We have advised our Storm Overflows taskforce for further consideration.
Surfers Against Sewage (Brighton Chapter) Ref: 2007	There is no recognition that electrical failures cause Portobello CSO to be used - you need backup generators and functioning pumps.	The generic root causes of storm overflows were explored in our DWMP in line with the national DWMP Framework. Where the root causes are operational issues such as electrical power failures, we are already taking action on these sites. We do not wait for the next investment period to take action. Our Cleaner Rivers and Seas Task Force is prioritising action on storm overflows where discharges are due to operational reasons. Our resilience action plan is driving improvements across the business where incidents are caused by power failures to prevent future disruption at these sites. Solutions include provision of back-up generators.	See revised section on resilience

Source	Topic	Response	Where addressed in the Plan / website
	Your assessment of needs on CSOs is fundamentally flawed because 1) it is based on reporting of storm discharges in a period (2917-19) when Southern Water has been penalised for lying about the number of discharges - your Baseline Risk and Vulnerability Assessment cannot be trusted 2) the Annualised Incident Average underestimates the number of stormwater discharges e.g. 64 from Portobello in 2021 3) Storm Overflow Performance (SOP) is flawed - it doesn't apply to discharges to tidal or marine waters, only freshwater 4) SOP population growth assumptions don't take account of additional future growth over natural growth of existing population i.e. in-migration. 5) SOP urban growth should include assumptions about increased growth from non- residential development e.g. car parks	2017 – 2019. This data are from our on site monitors and were verified as correct and reported to the EA. We used this data in our Baseline Risk and Vulnerability Assessment. 2) The discharges from Portobello (the Peacehaven Brighton system) during 2021 could not be included in the DWMP risk assessment as they had not taken place at that time of us completing that phase of the DWMP. We agree that using the 2017 – 2019 data for our risk assessment does not provide an up-to-date assessment and we will be asking for the national guidance to be changed in this regard for future cycles of the DWMP so more up to date data is used in the risk assessments. However, Defra published the Storm Overflows Discharge Reduction Plan in August 2022, in which they set new targets for the number of discharges from storm	We have updated the section of Storm Overflows in our Level 1 DWMP in response to these statements and issues.
Surfers Against Sewage (Brighton Chapter) Ref: 2007 (Continued)	6) SOP assumes wastewater treatment plants are maintained properly which is patently untrue from criticisms / fines by the Courts and OFGEM	6) We accepted the charges and fines imposed and apologised for these to our customers, but these issues from 2010 – 2015 are long past. Our wastewater systems are ageing, need investment and maintenance as set out in our investment needs, and it is highly likely that there will be future incidents. However, the fine imposed by Ofwat, our economic regulator was significantly reduced in recognition of the steps and commitments we made, including appointing an entirely new Board and leadership team. 7) We acknowledge there was a lack of data available for CSOs in the early Risk Based Catchment Screening (RBCS) stage of the DWMP. However, as is stated in the assessment criteria for the RBCS, any Tier 2 metric assessed as "Yes" meant the wastewater system proceeded through to the BRAVA. This meant that only 40 systems across our entire region of 381 systems (only 4 of which have populations above 100) were not assessed in greater detail at the BRAVA stage. We have confidence in the processes followed. 8) We have, and will continue to, work with local stakeholders and the EA to propose two new inland bathing water sites as a show that we recognise that bathing waters for use of recreational activities are more than just the currently designated bathing water sites. 9) The WTW is designed to meet permits specified by the EA, including a flow capacity into the works. We monitor and report on the number of times storm water is discharged through the storm overflows. The number of discharges is dependent upon many factors include the number of storms, extent and duration of rainfall, the saturation of the ground and groundwater levels, as well as the runoff from buildings and roads. We develop and used hydraulic models of our wastewater systems to forecast and predict the number of spills, although it is challenging to exactly reproduce the performance of wastewater systems in computer models due to the high number of variables to be considered. We have set out our plan for reducing discharges from storm overflows in	·
Flood and Climate	Can the last part of challenge 1 be updated to include "drought" i.e. "and the environment are not affected by flooding, pollution or drought". There maybe solutions that meet both or a number of challenges.	We have included this as requested and agree that there will be solutions that meet multiple challenges. For example, working with communities to slow the flow of surface water into the drains through property level rain gardens and water butts could result in less call on potable supplies for watering gardens during drought. We expect greater integration of water cycle management in future between the DWMP and WRMP.	See the Challenges section of the Regional Plan: https://www.southernwater.co.uk/dwmp/our-regional-dwmp
Surrey County Council	Management of water falls to a group of RMAs with a varving degree of responsibility and statutory	We are keen to explore all opportunities to collaborate and separate surface water and incorporate more nature based catchment schemes as we develop our planning	The section on developing partnership programmes under
		objective on surface water management (PO10) in cycle 2. We hope that this will also facilitate the alignment of funding for projects.	customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Flood and Climate Resilience Team as LLFA Ref: 4019	Improving the existing system first probably makes sense. This will then hopefully improve quality, pollution and flooding including storm overflows. A holistic catchment view of the whole system is needed including continued investment across all areas. Ideally separating the systems is the preferred solution. If rainfall events do exceed sewer capacity then flooding of just water is preferable to foul flooding. More consideration can then be carried out to manage surface water. Adoption and maintenance of SuDS systems by water companies could achieve this. The prioritisation of approaches depends on the location. Again, a holistic integrated catchment approach is needed. How does the funding of nature based solutions fit with long term maintenance?	We agree and are moving towards a more coordinated integrated catchment management approach to surface water drainage and we have committed to adopting SuDS where they have been constructed to meet the CIRIA standards. We are keen to explore all opportunities to collaborate and separate surface water and incorporate more nature based catchment schemes as we develop our planning objective on surface water management (PO10) in cycle 2 and local expertise will be invaluable as this is progressed.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Surrey County Council Flood and Climate Resilience Team as LLFA Ref: 4019	The 5 investment plans are in a table format. Can this be displayed as a map? A map display would allow other RMAs to overlap their project areas and make it easier to see where the investments are being prioritised. It appears that in the 5 plans there are no allocated investment costings for any locations in Surrey.	Our investment needs for each wastewater system are shown in map form under each river basin catchment's Options Development and Appraisal page. Although the western part of the "Medway" and northern parts of "Arun and Western streams" river basin catchments are in Surrey, none of our 61 wastewater systems prioritised for detailed Options Development and Appraisal of their investment needs in cycle 1 of the DWMP fall in these areas. However, we have considered the risks in river basin as a whole, including wastewater systems within Surry, up to and including our BRAVA assessments.	·
	This plan should not just be about 'protecting and enhancing the environment', it needs to be about restoring past damage, particularly to sites designated for their biodiversity value, which seem to have been undervalued in the plan. In particular, there appears to be little consideration of SSSIs and MCZs. Whilst we support the additional objective of reaching Good Ecological Status, most of the planned investments do not appear to directly relate to this objective. SWT would like to see an objective that considers the risk of assets and operations contributing to existing failures within designated sites and of priority habitats.	subsequent AMPs addressing, for example, storm overflows, will have multiple environmental benefits. Apart from the resilience assessment, coastal regions and the MCZs have not been the focus of the first cycle of the DWMP. However, we have undertaken to address this in cycle 2. We will consider additional benefits for cycle 2.	See the investment needs tables for each wastewater system in the ODA section under each RBC.

Source	Topic	Response	Where addressed in the Plan / website
Sussex Wildlife Trust Ref: 4024	SWT would like a challenge included in relation to Water Companies abilities to influence other sectors such as planning and agriculture. Southern Water have acknowledged repeatedly in its consultation that one of the major issues for sewage overflows is rain water entering the system and that it needs to focus on a catchment based approach and greening the grey to help reduce this problem. However, in the large part this involves working at scale, on land in other people's ownership and in situations where Southern Water has no statutory or legal powers. SWT believe this is a significant challenge that has not been properly reflected in this section of the plan. It is clear that Southern Water realise this, because frustratingly, the vast majority of interventions in the investment plan involve hard engineering and not any of the innovative nature-based solutions highlighted in the various consultation sessions. Southern Water needs to work with businesses, the agricultural sector and vitally, local planning authorities, to address fundamental issues with our drainage and wastewater systems.	We completely agree that this is one of the significant challenges we face. Our Catchment Risk team has been working closely and successfully with sectors in the rural environment to address issues such as agricultural runoff and pesticide use to protect rivers and groundwater. There is still a long way to go before we are all working together on integrated catchment management that considers all the issues within a catchment and we are having more success in some areas than others. We want to pursue 'green' rather than traditional 'grey' solutions and hope we have made this clear within the DWMP, although we accept that the investment needs tables have provided the opposite impression. We hope this has been addressed in the final version of the DWMP. However, we all need to be aware that meeting the government targets on storm overflows, which will undoubtedly tackle spills and pollutions, will also lead to a requirement to implement more grey solutions as these will provide short term certainty rather than the longer term more sustainable solutions we all wish to see.	See updated investment plans under each RBC ODA section.
Swale Borough Council Ref: 4020	Investment needs to be delivered more quickly to secure a network that is fit for purpose. Set out the commitment to resource the investment identified	Our DWMP informs our business plan submission for the Ofwat 2024 Price Review process (2025–30). The DWMP is about identifying the investment needs. Our regional plan sets out the next steps to securing funding to meet these needs and, until funding is secured, we cannot commit to delivering any schemes.	See our regional (level 1) plan , "next steps" section .
Test Valley Borough Council Ref: 4018	There are proposals for the regeneration of Andover town centre and land to the south of Romsey town centre that may present opportunities to introduce additional nature based solutions in the management of rainwater, including through incorporating additional green infrastructure and enhancing the River Anton corridor in this vicinity.	We are keen to explore all opportunities to collaborate and separate surface water and incorporate more nature based catchment schemes as we develop our planning objective on surface water management (PO10) in cycle 2.	The section on developing partnership programmes under customer and stakeholder engagement and the next steps in the Regional DWMP explains this in more detail.
Test Valley Borough Council Ref: 4018	In relation to the Investment Plan for the Environment, it would also be helpful if a nutrient budget study / investigation and the associated works were undertaken in relation to the River Itchen SAC in addition to the designations already identified.	Since development of our DWMP, the EA has issued Guidance under the Water Industry National Environment Programme (WINEP) for water companies to meet the requirements of the Regeneration and Levelling Up Bill for nutrient reduction in nutrient sensitive areas defined by Natural England. The River Itchen is one of these areas so we are investing directly in action to reduce nutrients to the technical achievable levels in AMP8. We have updated the investment plan accordingly.	Investment needs table for the Test and Itchen: https://www.southernwater.co.uk/dwmp/test-and-itchen-catchment/options-development-and-appraisal-for-test-and-itchen
Thanet District Counci Ref: 4025		We take our responsibilities very seriously and recognise the importance of recycling wastewater before it is discharged back to the environment. We are aware of the significance of discharges from storm overflows and all pollution incidents on the Thanet area. We are pleased to be working with Thanet Council on the pathfinder project in Margate. Across the region we are prioritising separation of rainwater from sewage systems to reduce discharges from storm overflows. We want to do this through green, catchment and nature based solutions (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of rainwater through cycle 2 of the DWMP.	Storm Overflow Technical Summary: https://www.southernwater.co.uk/dwmp/technical- summaries
Tunbridge Wells Borough Council Ref: 4028	Southern Water has confirmed that projects of a strategic scale that are required to increase the local sewer network and treatment works capacity, in particular in the Paddock Wood/Capel area, will need to be planned for in its next AMP (AMP 8 - 2025-2030). The delivery of any scheme that is planned for will be provided in line with the occupation of the developments. "A significant number of the option proposals listed in your investment needs for Paddock Wood, particularly in relation to growth and flooding, have an indicative long term timescale (likely to be delivered 2040 to 2050), which conflicts with the agreement in the SoCG, that the work and investment required in meeting future growth at Paddock Wood will be delivered under the AMP 8 i.e. within the short term (2025 to 2030). We would therefore request that the DWMP re-considers the proposed timescales in relation to these options in order to appropriately respond to the growth proposed for this area of Tunbridge Wells Borough. The Borough Council would be keen to liaise with Southern Water in this regard, in accordance with the agreed commitment in the aforementioned Statement of Common Ground.	We have updated the timescales to address the growth issues highlighted.	Paddock Wood investment need table: https://www.southernwater.co.uk/media/6823/paddock-wood-pawd-ineeds.pdf
Wealden District Council Ref: 4001	It is of concern that the level of housing development proposed through the current planning system under the National Planning Policy Framework (NPPF) (July, 2021) does not appear to have been identified sufficiently. Instead, projected population growth expectations (via Experian) and extant planning permissions are used to inform the main modelling work for the report.	We developed risk assessments in our first DWMP for several planning objectives, and used growth forecasts to predict how the risks would change over time. We used the best available regional data at the time for the risk assessment which was based upon Experian data. This provides us with the population forecast on a consistent basis for the purpose of planning for growth across our region. We work closely with local planning authorities to collect data on planned new developments, and update our growth data from approved Local Plans. Some adjustments were made to our growth forecasts based on near term actual growth in the approved Local Plans. The methodology is described in the Growth Technical Summary. Since we completed the risk assessment phase of our DWMP in 2020, we now have improved growth forecast data which we will use to update our DWMP for cycle 2.	Factoring in Growth Technical Summary: https://www.southernwater.co.uk/media/5257/technical-summary-growth-and-creep-final.pdf
Wealden District Council Ref: 4001	Although not currently identified by the draft Regional DWMP, it would be helpful to understand how such collaboration between Southern Water and LPAs should be documented, as LPAs will require this evidence as part of any Local Plan examination process. Paragraph 27 of the NPPF (July, 2021) confirms that 'strategic policy-making authorities' should prepare Statements of Common Ground, although the NPPF is silent on how this could be dealt with for infrastructure providers and other statutory bodies. WDC will work with Southern Water on this issue and will consider the best method to evidence its collaboration for Wealden's emerging Local Plan.	Thank you for considering the key aspect of growth and development. Our Future Growth Team liaises with Local Planning Authorities concerning such matters. They have already prepared Statements of Common Ground with several Councils and will always be happy to work on this necessary documentation where and when needed.	Please contact our Future Growth Team via the Southern Water website: https://www.southernwater.co.uk/ourservices/planning-your-development
Wealden District Council Ref: 4001	Southern Water confirms that affordability for the customer is a significant challenge, particularly given the current cost of living crisis and that Southern Water needs to carefully consider the costs of how to manage the future challenges and achieve its environmental ambitions. Although WDC agrees this is a significant challenge, it is considered appropriate that first Southern Water consider reducing profits and shareholder dividends, in order to increase investment, in conjunction with a greater level of central government funding to correct historic issues rapidly. Finally, it may be necessary for increased customer contributions, but only where it is evidenced that the step change in delivery is taking place on the ground. Simply 'maintaining' our water infrastructure in light of the identified challenges above is not a genuine option; investment to correct the mistakes of the past is clearly required. Developer contributions received by Southern Water also needs to be spent where growth is taking place, rather than putting the funding emphasis on existing bill payers in the first instance.	Thank you for raising these points. We are always concerned about affordability for our customers with financial vulnerabilities and have specific programmes to help them. This has been exacerbated and made even more widespread by the current economic climate. Our shareholders have not received dividends since 2017. We are committed to addressing the issues and risks the DWMP has highlighted and will begin by tackling the most significant risks to our customers and the environment.	See the Affordability section on our website: https://www.southernwater.co.uk/account/what-if-i-can-t-pay-my-bill

Source	Topic	Response	Where addressed in the Plan / website
West Sussex CC Ref: 4058	Major stakeholders and consumers will need convincing that the goals are achievable and be reassured that this effort will be applied not only now, but in the years to come.	The DWMP will become statutory so it will become an ongoing process that we are committed to. We believe that the goals are definitely achievable especially if we work in partnership with the relevant organisations such as the Risk Management Authorities. However, delivery of the goals ultimately depends on the funding envelope determined by Ofwat at each Price Review and the resources available to commit to planning, design and construction of any schemes, even when working in partnership.	Level 1 Plan section on "Next Steps"
West Sussex CC Ref: 4058	If the automatic right for developers to connect, currently under review by the Government, is to continue, then SW needs to be much more explicit as to the 'how' in its responses to major planning applications. Permitting incremental occupation of new developments in step with sewer improvements has too often been unsatisfactory. Adherence to and enforcement of conditions must be more rigorous during construction.	The Government is reviewing the automatic right to connect, as part of the implementation of schedule 3 of the Floods and Water Management Act 2010. We support this change. We have found that even when we set explicit conditions for a connection, this is often not enforced. Enforcement of planning conditions is the remit of Local Planning Authorities.	Further text added in the section on "Our Plan to Reduce Flows and Spills"
West Sussex CC Ref: 4058	SW's 2017 DAP Summary draft for the Sidlesham catchment shows DG5 flooding clusters on the Manhood Peninsula. These and associated proposed improvement options have been known	We have identified a number of flooding investment needs for the Sidlesham system including: SIDL.SC01.2 and SIDL.PW01.6 to implement separation and storage solutions, and SIDL.OT01.5 to improve our models on surface and foul flows in the catchment.	Sidlesham investment needs table: https://www.southernwater.co.uk/media/6807/sidlesham-
4030	about for years and most are still outstanding.	Solutions, and Side. Of 01.5 to improve our models on surface and four nows in the catchinent.	sidl-ineeds.pdf
West Sussex CC Ref: 4058	Is it correct that Peacehaven Brighton is not flagged under PO8 for DWF compliance?	Yes. Our records, submitted to the EA, show there have not been any DWF compliance issues at Peacehaven.	N/A
West Sussex Councillor Ref: 3004	There is a lack of sewage capacity to meet Government house building plans. Three out of ten CDC area sewage works were beyond EA Q90 DWF limits in 2021. Within five years, and before Ofwat AMP8 funding round starts in April 2025, it is likely that seven out of ten CDC area sewage works will be out of permitted sewage capacity which causes immediate concern for current residents in the area and restricts any new housing to around 30% of Government required levels. There are serious limitation that impact sewage processing capacity and local water quality in the system of waiting five years for Ofwat funding rounds before suitable sewage treatment works and pumping station upgrades.	The purpose of our DWMP is to plan investment over a longer period than the traditional 5 year price review period used in the water industry. Through the DWMP we can identify the future risks and plan investment at the right time to avoid the risks to customers and the environment from increasing. We work closely with planning authorities and developers to support growth. Where developers wish to connect to our systems then there is a connection charge which partly funds the work to our wastewater system. Our approach to future growth is explained fully in our technical summary "Growth and Urban Creep". Our BRAVA has assessed all the risks from and to our wastewater systems and this includes capacity. Where the BRAVA identifies future capacity limitations on development, we will work closely with the relevant planning authority to either identify and plan the upgrades required or determine the conditions that must be applied to the new development. If the development is of such as scale that it cannot be accommodated in the nearest system, then we will plan to either divert wastewater for treatment elsewhere or to identify the need for a new treatment works to be planned and delivered.	Factoring in Growth Technical Summary: https://www.southernwater.co.uk/media/5257/technical- summary-growth-and-creep-final.pdf
West Sussex Councillor Ref: 3004	As regards Thornham the 6 storm overflows within the system spilled 111 times over the last three years. The international importance of Chichester Harbour and the current nitrate levels in the harbour mean that storm overflows are contributing to the risk and Southern Water needs further investment to prevent this, including a second onsite storm tank at Thornham or suitable storm water storage system.	We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10).	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical-summaries
West Sussex Councillor Ref: 3004	Regarding Bosham, the major risks are groundwater pollution, nutrients being passed into Chichester Harbour as well as any potential impact from SW works on bathing water quality and shellfish waters. The international importance of Chichester Harbour and the current nitrate levels in the harbour mean that storm overflows are contributing to the risk and Southern Water needs further investment to prevent this, including a second onsite storm tank at Bosham or suitable storm water storage system.	We have identified 11 investment needs for Bosham, which address the issues you have raised. We have identified one investment need (ref BOSH.PW01.4) associated planning objective 12 (PO12) for groundwater protection. We also have an investment need identified to reduce nutrients entering Chichester Harbour (see ref BOSH.WINEP.PO2.1) and we are looking at all our storm overflow discharges as part of our Regional Storm Overflows Programme. For Bosham, these are the investment needs BOSH.WINEP01.1 and BOSH.WINEP01.2. The latter specifically addresses your concern about the storm storage at Bosham WTW.	Investment Needs tables for Bosham: https://www.southernwater.co.uk/dwmp/arun-and-western- streams-catchment/options-development-and-appraisal-for- arun-and-western-streams
West Sussex Councillor Ref: 3004	SW should support increased fines for all organisations that breach environmental and health standards. Ofwat should promote investment in sewage, sewer and water processing by water companies but not pass those costs on to consumers.	We work hard to comply with permits issued by our environmental regulator, the Environment Agency. If we cause pollution then we are fined. The fines come from our investors (not from customer bills) and go back to the Government. It may mean there is less money to invest in protecting and enhancing the environment. The investment by water companies is funded from customer bills, and some from shareholders and other income, which is governed by the regulatory processes from our economic regulator, Ofwat. The majority of our funding is from customer bills. The potential impact on Customer bills is shown in our technical summary on "bill impacts".	Bill Impacts Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
West Sussex Councillor Ref: 3004	SW should also work more closely with Councils to ensure that Highways drains are cleared and that any infrastructure issues or failures relating to SSOs are regularly reviewed and resolved before the key period of October to March when 90% of storm sewage overflows occur.	We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10). We hope these types of partnerships will ensure highway drains are cleared more regularly.	
West Sussex Councillor Ref: 3004	What is not adequately addressed are plans to conquer future water source limitations and water neutrality due to the increasing affects of climate change. More money needs to be spent on joint water company, government and Council sponsored public education programs to reduce water use across the board, which will in turn reduce sewage processing requirements.	Water recycling and water neutrality are likely to be key issues for water resources across the region. These issues have not been within the remit of the DWMP but we ware working closely with our Water Resources Management Plan (WRMP) to develop the pilots on water recycling and ensure we meet all future challenges.	Our Water Resources Management Plan (WRMP) : https://www.southernwater.co.uk/our-story/water-resources-management-plan
West Sussex County Council Ref: 4015 & Chichester District Council Ref: 4021	In terms of preventing sewer flooding and storm overflows, if a traditional engineering approach to storage and as effective and easier than SuDS then that is preferable. The plan should be guided by reducing the negative amenity effects for residents and the options that will provide the best outcomes rather than least cost. Catchment-wide and nature based solutions are more durable and effective, even more readily accepted by the public, than artificially engineered solutions, even though the processes might be slower. There is still a place for engineered solutions.	permits. We are committed to preventing sewer flooding and discharges from storm overflows in the most sustainable and affordable way. Addressing the most urgent risks in AMP8 (2025 - 2030) means our plan will incorporate a mix of grey and green solutions whilst we progressively move towards separating surface and foul drains and implementing SuDS wherever practical in both the short and long term.	
West Sussex County Council Ref: 4015 & Chichester District Council Ref: 4021	This consultation should not be a completed event but a continuing process leading to PR24 and the submission to OFWAT in which stakeholders remain involved. Southern Water cannot possibly solve so many problems on its own. It needs to work with flood risk management authorities, LPAs, neighbouring water companies (fre supply as well as sewage) and organisations that protect the environment.	We agree. It is vital that we continue to work with all the organisations that have helped us develop the DWMP and fully intend to do so - especially once we have a degree of certainty over the funding available to us during 2025 – 2030 and can begin detailed planning and progress the potential partnership opportunities which were identified in our DWMP. We will continue our engagement with local councils, other flood risk management authorities, planning authorities and environmental groups to develop plans for co-funding and co-delivery of actions.	
West Sussex County Council Ref: 4015	the government has announced further requirements for Water Companies to upgrade treatment	A proposed amendment to the Levelling Up and Regeneration Bill tabled in November 2022, will set nutrient pollution standards to apply to certain sewage disposal works in nutrient sensitive catchments. The Bill is due to be enacted in 2023 and we are working with the Environment Agency to develop a plan to meet the standards at applicable sewage disposal works in PR24. We have updated our DWMP investment needs tables to include the investments required at the sites within the nutrient neutrality areas. There are 44 WTWs across our region where investment is being proposed in the Water Industry National Environment Programme (WINEP) to prevent deterioration from Natural England's rCSMG targets for Total Phosphate and Total Nitrate from our Treatment Works. The investment will be needed in the short term to meet the proposed Government target of 2030.	All 61 investment needs tables in the 11 ODA River Basin Catchment pages

Source	Торіс	Response	Where addressed in the Plan / website
West Sussex County Council Ref: 4015	The DWMP draft is still quite top level and the task ahead to have the necessary detail ready for OFWAT to assess and agree PR24 in time for AMP8 is immense. The demand for consultants and qualified contractors to pull all this together and prioritise across eleven river basins and their catchments will be a huge effort over many years.	Our DWMP risk assessments, evidence and the proposed investment needs that have been identified for AMP8 informs our PR24 submission to Ofwat and the WINEP submission to the Environment Agency (EA). All this work progresses in tandem with other plans, including the WRMP and Drought Plans, and is currently in hand. Ofwat and the EA will make funding decisions based on a range of factors, including the quality of the evidence submitted and whether the identified investments will fulfil government requirements and regulations, meet customer expectations, the extent of customer and stakeholder support and the evidence provided on customers' willingness to pay for the investments. Once these funding determinations are made, we the develop a year on year execution plan to ensure the highest priority risks are addressed in the timescales identified.	More information about these processes is provided on the Ofwat website: https://www.ofwat.gov.uk/regulated-companies/price-review/2024-price-review/pr24-and-beyond-creating-tomorrow-together/ and the government's WINEP site: https://www.gov.uk/government/publications/developing-the-environmental-resilience-and-flood-risk-actions-for-the-price-review-2024/water-industry-national-environment-programme-winep-methodology
West Sussex County Council Ref: 2043	Much of the surface water drainage in West Sussex is reliant upon gravity outfalls to the sea or to estuaries. These outfalls are subject to tide-locking that creates backwater in the drainage network contributing to the risk of surface water flooding, particularly over winter months when surcharged surface water drainage networks coinciding with significant storm events results in surface water flooding and inundation in the foul sewer system. This problem is going to be exacerbated with predicted sea-level rise that is forecast to increase. This problem was identified and discussed in the DWMP workshops but does not currently feature in the 'Investment Needs' documents. Upgrading sewerage infrastructure to take into consideration tide-locking associated with sea level rise is a major challenge that has not been clearly identified in the DWMP documentation.	sea level rise is likely to have a serious impact on our coastal systems which will get worse through time. In the first cycle of the DWMP, we followed the national DWMP framework guidance. It has created a foundation for future DWMPs and identified where we need to enhance the planning for future cycles. Coastal issues, such as sea level rise, erosion, tidelocking and cumulative impacts are one area for further consideration in the next cycle of the DWMP.	The section on Infiltration from groundwater and coastal water under Wastewater recycling in the DWMP explains this in more detail. The investment needs for all the systems in the Adur and Ouse and Arun and Western Streams RBCs can be found on our website at: https://www.southernwater.co.uk/dwmp/adur-and-ouse-catchment/options-development-and-appraisal-for-adur-and-ouse and https://www.southernwater.co.uk/dwmp/arun-and-western-streams-catchment/options-development-and-appraisal-for-arun-and-western-streams respectively.
West Sussex County Council Ref: 2043	Specific reference should be made to the fact that the south east region is under serious water stress and that there is currently a moratorium on development within North West Sussex due to the environmental impact of groundwater abstraction at Pulborough, and the negative impact this is likely having on the integrity of designated sites including Amberley Wild Brooks Site of Special Scientific Interest (SSSI), Pulborough Brooks SSSI and Arun Valley Special Protection Area/Special Area of Conservation and Ramsar site. Although it is referred to elsewhere in the DWMP, it should be referred to as an important challenge as a reduction in water demand would also impact on drainage and wastewater management as water resources should be planned and managed in an integrated way.	"Water Neutrality" is a serious issue that is currently affecting development in West Sussex and is likely to be a requirement in other council areas in the coming years. Water stress and supply is looked at under the Water Resources Management Plan (WRMP) rather than the DWMP although there are a number of vital links between the two. As a business, we are working to reduce consumer demand on our precious water supplies to ensure there is a sustainable supply to meet the future demands of people and the environment, and many of our rivers and streams rely on our effluent to augment flows in hot, dry weather. We need to find ways to recycle effluent back into water supply through intermediatory means that are acceptable to our customers, such as via reservoirs. The rate of per capita consumption also affects the flow in our sewers and the wastewater that arrives for treatment at our works. We need to monitor the position to ensure that a decrease in flow as a result of a decrease in consumptions does not increase the risk of blockages in the sewers. We are developing plans to further integrate the DWMP and the WRMP in future cycles of both.	section called "Links with the Water Resources
West Sussex County Council Ref: 2043	There should be greater focus on the opportunities to align with Local Nature Recovery Strategies and the potential for schemes to address drainage and wastewater management to contribute to Biodiversity Net Gain for developments to meet their requirements off site.	It is our intention to develop plans that integrate more effective drainage whilst protecting and enhancing the natural environment and 'greening' our communities. We cannot do this alone and will develop appropriate partnerships with relevant organisations once we know what funding is available for AMP8.	We set out our intentions in the section on developing partnership projects under Customer and Stakeholder Engagement in the DWMP.
West Sussex County Councillor Ref: 4058	The prioritised investment needs in West Sussex do not feature the systems of the highest level of concern which is based only on the highest number of applicable planning objectives in Band 2 and does not necessarily include those systems with the most pressing and longstanding issues.	We agreed which systems needed to be prioritised within each River Basin Catchment with the relevant partners based on the risks identified under the BRAVA. In the Arun and Western Streams RBC, we agreed to include Bosham, Tangmere and Pagham, Loxwood and Lavant because these systems had the most long-standing risks in the RBC rather than the highest number of Band 2 risks, and in Adur and Ouse we agreed to include Scaynes Hill and Goddards Green. However, we eventually had to defer detailed work on developing the ODA for Loxwood, Lavant, Scaynes Hill and Goddards Green until cycle 2 as we simply did not have the resources to complete these in the timescale available for cycle 1.	We have explained the reasons for postponing the ODA on a total of 10 systems across the region in our Technical Summary on the Catchment Selection: https://www.southernwater.co.uk/media/8417/b0055-technical-summary-catchment-selection.pdf
West Sussex County Councillor Ref: 4058	Major stakeholders and consumers will need convincing that the goals are achievable and be reassured that this effort will be applied not only now, but in the years to come. The organisational effort, prioritisation and marshalling of limited financial, contractor, and human resources across the operating regions will be very demanding not only for the water companies and their contractors, but also for OFWAT, for the Environment Agency, and for the Lead Local Flood Authorities. The main stakeholders must be given the opportunity to remain involved in SW's detail business planning stage before any agreement with OFWAT on PR24 and AMP8, rather than being consulted after the scene is set.	We agree with these points. Much work has been undertaken to ensure that the goals and ambitions are achievable in the timescales set out, although much depends on the funding available to develop and deliver the plans. We definitely see the DWMP as a shared endeavour and that none of us can realise the benefits that should come from implementation unless we work together. It is our full intention to continue to work with all involved and to co-create solutions to the risks so that the DWMP and the plans that result from it can achieve multiple benefits and the costs can be shared. We will also involve local communities in any plans that affect where they live and the environment around it.	partnerships under customer and stakeholder engagement
West Sussex County Councillor Ref: 4058	Population Growth is an important and high priority issue for local people. Existing sewer systems have been and still are regularly overwhelmed. Allowing for additional housing by continually making cumulative and piecemeal least-cost additions to the foul network cannot continue: a more radical and forward-looking approach to planning, financing, and implementing of waste infrastructure before future development takes place, will need to be adopted. SW needs to be much more explicit as to the 'how' in its responses to major planning applications.	We work with Water UK highlight water related issues to Government and to influence policy decisions. Under current legislation, developers have the 'right to connect' to existing sewer systems where these are available. Our systems predominantly cover urban areas. Major new developments tend to rely on including discrete 'package plants' as part of the development rather than funding connections to our sewer systems where these are not in close proximity. We are not responsible for adopting or maintaining these package plants and this situation is far from ideal. We would welcome the opportunity to work with you to explore your thoughts on solutions to these challenges.	The section in the Regional DWMP on First Time Sewerage Schemes and the Impact of growth looks at this in more detail.
Westbourne Parish Council Ref: 3003	In view of the storm discharges which have impacted so disastrously on beaches in the south of the country in the last week or so, I am not convinced that enough investment is foreseen.	We are prioritising separation of surface water and nature based, green solutions as part of our programme to reduce discharges from our storm overflows (see our investment needs associated with Planning Objective 5). Our approach is explained fully in our technical summary on storm overflows. We need to develop further the collaborative management of surface water through cycle 2 of the DWMP, to effectively deliver our planning objective on surface water management (PO10).	Storm Overflow Technical Summary : https://www.southernwater.co.uk/dwmp/technical- summaries
Winchester City Council Ref: 4046	Southern Water needs to set out a detailed and transparent programme and start entering into a much more proactive dialogue with City Council/Town/Parish Councils on when there will be planned investment to the existing waste water treatment facilities in the district in order to meet the Government's timetable of 2030.	We have identified a range of investment needs for the Winchester system and this including indicative timescales for delivering the improvements including those for blockages, flooding, CSOs GES, NN and pollutions.	See our Investment Needs table for Winchester: https://www.southernwater.co.uk/media/6973/morestead- road-winchester-more-ineeds.pdf
Winchester County Council Ref: 4046	We have a number of totally unacceptable local issues which relate to the capacity of the existing waste water treatment systems (for example, tankers that are on a daily basis removing sewerage from Sutton Scotney) which is having a significant impact on the lives of local communities. The Council needs assurance that issues like this will be prioritised in the emerging investment plan.	Although we have assessed the BRAVA risks for the whole of our region, due to resource limitations we have only been able to develop options to meet investment needs for 61 of our wastewater systems in Cycle 1 of the DWMP. These include our highest risk systems; see our technical summary on Catchment Selection for full details of how we have done this. We will be extending coverage of our DWMP to all 381 systems for cycle 2. Tankering is disruptive and unpleasant for local communities but it provides a short term solution to wastewater removal whilst alternative infrastructure is being planned and implemented.	Catchment Selection technical summary: https://www.southernwater.co.uk/dwmp/technical- summaries
Winchester County Council Ref: 4046	Our draft Local Plan including details of proposed location and phasing of individual site allocations to meet the development strategy. Southern Water will be formally consulted on the draft Local Plan and we look forward to receiving comments from you in terms how future growth will be managed and what future investment will be needed so that we can include this information in our Infrastructure Delivery Plan. One of the main areas of tension is that Local Plans look over a period of at least 15 years from the date of adoption, yet Southern Water only looks over a much shorter time period		Growth and Urban Creep Technical Summary: https://www.southernwater.co.uk/media/5257/technical-summary-growth-and-creep-final.pdf

Source	Торіс	Response	Where addressed in the Plan / website
Worthing BC Ref: 4044	Improvement work to existing models (including flow surveys for storm and dry weather flow, and model calibration to better model both sewer flooding and surface water flooding) at the BRAVA locations highlighted in the DWMP, should be developed with a clear timetable, clearly communicated with regular updates from SW to the Councils.	We have identified investment needs to improve our models in the East Worthing (WOEA.OT01.8), Shoreham (PORT.OT01.3) and Peacehaven (BRIG.OT01.4) catchments. We will share any updates to our modelling of sewer and surface water flooding with relevant partners that result.	Options development and appraisal for Adur and Ouse (southernwater.co.uk)
Worthing BC Ref: 4044	We regret that the risk of drought has not been factored into the draft DWMP and see this as a missed opportunity. The draft DWMP only makes passing reference to drought in terms of climate change but offers no method of managing that risk. We would value a more holistic approach seeking to manage flood and drought risk together.	Drought impacts on water supply are considered in our WRMP. Drought impacts on drainage and wastewater are less significant, but could potentially impact on river water quality where our effluent in less diluted, although the discharges of recycled water from our treatment works plays a major role in sustaining rivers and the ecology during drought conditions. We will raise this with the national DWMP working group to ensure future national DWMP Guidance takes this into consideration.	To be raised at the DWMP National Working Group for future cycles of the DWMP
Worthing BC Ref: 4044 & Adur DC Ref: 4050	We expect the DWMP to recognise the role of Local Plans in allocating development sites and the presence of significant shortfalls in meeting local housing needs across the area. We would expect the DWMP process to take account of the plan-making process and ensure emerging proposals are taken into account.	This is helpful feedback, and it needs further consideration in the updating of the national DWMP Framework for the next cycle of DWMPs so we can make sure the DWMPs provide the information needed to support the planning process.	To be identified to the national DWMP working group for inclusion within future DWMPs
Worthing BC Ref: 4044 & Adur DC Ref: 4050	We recommend that reference to bathing waters is included in the text. Residents and visitors to Adur and Worthing value our coastline and bathing waters. Shoreham is designated for bathing waters and the Council has aspirations to have further areas designated in the future including the river Adur. We would welcome the opportunity to set up a group to push forward river quality improvements for the Adur and ultimately achieve bathing water designation.	propose an investigation for the River Adur due to concerns expressed about public safety of swimming in this tidal river with strong currents, and the impact on water quality from the Houseboats.	Level 1 DWMP sub section on Bathing Waters in the "Storm Overflows" section
Worthing BC Ref: 4044 & Adur DC Ref: 4050	We support the intention in the DWMP to move towards integrated and cross sector water management planning and the greater use of nature based solutions and sustainable drainage systems. However we consider further evidence is needed to establish where opportunities best exist to accommodate these. Within Adur it is certainly unclear where any nature based solutions could be implemented which will deliver the improvements necessary to reduce CSO use and flooding. Collaborative relationships are the foundation to deliver rainwater separation and we look forward to a detailed plan that brings key stakeholders together to start in earnest to achieve this in Worthing.		See updated section on Collaboration and Partnerships in our Level 1 DWMP.
Worthing BC Ref: 4044 & Adur DC Ref: 4050	Separating systems is very expensive and disruptive to our already occupied communities. Southern Water has indicated that they will be expecting contributions from LPAs, LLFA, EA etc. Worthing Borough Council looks to Southern Water to financially assist this effort - including the provision of water butts for public buildings and domestic properties that will capture and harvest rainwater that can, in turn be used to sustain parks and green spaces. Inclusion of target sites in Worthing would make an ideal Pathfinder project to enable this. Engaging with householders to use water butts could be very successful.	We want to work with partner organisations to deliver more sustainable drainage systems, and our plan identifies potential organisations to work with to create water resilient communities. Our Storm Overflow Taskforce has a "Pathfinder" programme with a number of pilot projects already underway to understand which solutions will be the most effective in a range of different, predetermined locations. These pilots are already proving effective, including rolling out "leaky" waterbutts, and so we intend to roll out the programme with the involvement of partners.	See Level 1 Plan subsection on our Storm Overflows Taskforce in the "Our Plan for Reducing Flooding and Spills"

Source	Topic	Response	Where addressed in the Plan / website
Worthing BC Ref: 4044 & Adur DC Ref: 4050	Southern Water should align with the LLFA Surface Water Drainage Policy. 1-in-50 year Annual Exceedance Probability model has been applied to the risk of flooding in storms. Given the effects of climate change and the increase in prevalence and intensity of storms, we believe that an Annual Exceedance Probability model operating on a 1-in-75 year storm (or 1.333%) would be more suitable and sufficient in terms of operating within a sound risk based approach.	Alignment of policies and approaches with us and local councils would be helpful and enable us to all work together to tackle the issues of localised surface water and sewer flooding, and reduce discharges from storm overflows. The implementation of Schedule 3 of the Floods and Water Management Act will help organisations to work together to promote and implementation of SuDS to manage surface water. We will take this into account during cycle 2 of the DWMP.	To be raised at the DWMP National Working Group for future cycles of the DWMP
Worthing BC Ref: 4044 & Adur DC Ref: 4050	It would be sensible for Southern Water to request higher standards for sewers which reduce infiltration potential. It would also help collaboration if Southern Water's criteria for adoption of SuDS is also aligned with the LLFA policy. Southern Water should require compliance with the SuDS hierarchy and where the combined sewer is the only option requiring greenfield QBar where possible, or as close to this as achievable with a minimum of 50% betterment.	Our advice to developers is to adopt the Civil Engineering Specification for the Water Industry (CESWI) guidelines which currently states that the "hydraulic design horizon for all pipes / sewers shall be 60 years; for outfalls, tunnels, 'strategic pipes / sewers', water pipes over 600mm and wastewater pipes / over 900mm, the design horizon shall be 100 years." This may need to be revised as recent surveys have shown that even good condition sewers can still allow considerable infiltration from groundwater. We expect SuDS to be part of all new development consents and particularly where the only option is a combined sewer. These should be contracted to meet the CIRIA (C753F) industry standards. We support the implementation of Schedule 3 of the Floods and Water Management Act 2010.	N/A