Portsmouth Water

STATEMENT OF RESPONSE APPENDICES

This Appendix includes additional information and evidence supporting the statement of response for the revised draft Drought Plan 2021

APPENDICES

APPENDIX A. LIST OF STAKEHOLDERS CONTACTED FOR CONSULTATION

The list of stakeholders that were contacted for consultation of the draft drought plan are provided in Table A1.

Stakeholder Type	Organisation	Number of Recipients	Number of Responses
Regulator	Defra (individual)	2	0
Regulator	Ofwat (individual)	1	0
Regulator	Environment Agency	6	27
Regulator	Natural England	2	15
Regulator	CC Water	3	5
Regulator	DWI	1	0
Regulator	Historic England	1	0
Regulator	National Infrastructure Commission	1	0
Regulator	Waterwise	1	0
WRSE Water Company	Affinity Water	2	0
WRSE Water Company	Thames Water	3	0
WRSE Water Company	South East Water	3	0
WRSE Water Company	SES Water	2	0
WRSE Water Company	Southern Water	3	0
WRSE Water Company	WRSE	4	0
MP	Bognor Regis and Littlehampton	1	0
MP	Chichester	1	0
MP	Arundel and South Downs	1	0
MP	East Hampshire	1	0
MP	Eastleigh	1	0
MP	Fareham	1	0
MP	Gosport	1	0
MP	Havant	1	0
MP	Meon Valley	1	0
MP	Portsmouth North	1	0
MP	Portsmouth South	1	0
MP	Winchester	1	0
MP	Romsey and Southampton North	1	0
MP	Southampton Itchen	1	0
MP	Southampton Test	1	0
CCG	Winchester City Council	1	0
CCG	Federation of Small Businesses	1	0
CCG	Consumer Council for Water	1	0
CCG	John Hall Consulting	1	0
CCG	Gosport Borough Council	1	0
CCG	Jacobs	1	0
CCG	CCG Independent chair	1	0
CCG	South Downs National Park Authority	4	1
CCG	Chichester District Council	1	0
CCG	Natural England	1	0
CCG	Environment Agency	1	0
CCG	Havant Citizens Advice Bureau	1	0
CCG	West Sussex County Council	5	0
CCG	Havant Housing Association	2	0
Council	Hampshire County Council	5	3
Council	Arun District Council	2	0
Council	Chichester District Council	2	0
Council	East Hants Borough Council	1	0
Council	Eastleigh Borough Council	2	0
Council	Gosport Borough Council	1	0
Council	Fareham Borough Council	2	0
Council	Havant Borough Council	2	0
Council	Havant Borough Council/East Hampshire District Council	1	0
Council	Portsmouth City Council	3	0
Council	Portsmouth City Council / Gosport Borough Council	1	0
Council	Arundel Town Council	1	0
Council	South East Councils	1	0
Council	Local resilience forum	1	0
Council	Allbrook Parish Council	1	0
Council	Bishops Waltham Parish Council	1	0
Council	Boarhunt Parish Council	1	0
Council	Buriton Parish Council	0	5
Council	Church Crookham Parish Council	1	0
Council	Clanfield Parish Council	1	0
Council	Colemore and Priors Dean Parish Meeting	1	0
Council	Denmead Parish Council	1	0
Council	East Meon Parish Council	1	0

Stakeholder Type	Organisation	Number of Recipients	Number of Responses
Council	Fair Oak and Horton Heath	1	0
Council	Farringdon Parish Council	1	0
Council	Hambledon Parish Council	1	0
Council	Hawkley Parish Council	1	0
Council	Headley Parish Council	1	0
Council	Horndean Parish Council	1	0
Council	Kingsley Parish Council	1	0
Council	Lindford Parish Council	1	0
Council	Micheldever Parish Council	1	0
Council	Petersfield Town Council	1	0
Council	Rowlands Castle Parish Council	2	0
Council	Sheet Parish Council	1	0
Council	Steep Parish Council	1	0
Council	Stroud Parish Council	1	0
Council	Swanmore Parish Council	1	0
Council	Tichborne Parish Council	1	0
Council	West Meon Parish Council	1	0
Council	Whitehill Town Council	1	0
Council	Whiteley Parish Council	1	0
Council	Wickham Parish Council	1	0
Environment	Chichester Canal Trust	1	0
Environment	Wessex Chalk Stream and Rivers Trust	1	0
Environment	Sussex Wildlife Trust	1	0
Environment	Hampshire and Isle of Wight Wildlife Trust	3	0
Environment	Hampshire Ornithological Society	2	0
Environment	RSPB	1	0
Environment	Staunton Country Park	1	0
Environment	Arun & Western Streams Catchment Co-ordinator (EA)	1	0
Environment	East Hants Catchment Partnership	1	0
Environment	Arun & Rother Rivers Trust	1	0
Environment	Wild Trout Trust	1	0
Environment	Blueprint for Water	1	0
Environment	Havant & Hampshire Friends of the Earth	1	0
Environment	Meon Valley Partnership	1	0
Environment	NFU	2	0
Environment	CLA	1	0
Environment	Arundel Wildfowl and Wetlands Trust	1	0
Environment	WWF	2	0
Environment	Salmon and Trust Conservation	2	0
Environment	Forestry England	4	0
Environment	Test and Itchen Association	1	0
Environment	Hants CPRE	2	0
Environment	Friends of the Ems	1	0
Environment	Arundel Estate	1	0
Environment	Friends of Hermitage Stream	1	0
Environment	HIWWT South Downs Group	1	0
Environment	Water UK	1	0
Environment	Chichester Harbour AONB	1	0
Housing and Support Services	Portsmouth City Council Resident Participation	1	0
Housing and Support Services	Paulsgrove Housing Office	1	0
Housing and Support Services	Landport Area Housing Office	1	0
Housing and Support Services	Leigh Park Housing Office	1	0
Housing and Support Services	Buckland Housing Office	1	0
Housing and Support Services	Portsea Housing Office	1	0
Housing and Support Services	Somerstown Housing Office	1	0
Housing and Support Services	Wecock Farm Housing Office	1	0
Housing and Support Services	Arun District Council Housing	1	0
Housing and Support Services	Home Group	1	0
Housing and Support Services	Community Integrated Care	1	0
Housing and Support Services	The Lord Mayor of Portsmouth's Coronation Homes	1	0
Housing and Support Services	C E S S A Housing Association	1	0
Housing and Support Services	Knightstone Housing Association Ltd/Live West	1	0
Housing and Support Services	Society of St James	1	0
Housing and Support Services	Choice Care	1	0
Housing and Support Services	Vivid	1	0
Housing and Support Services	Portsmouth Churches Housing Association	1	0
Housing and Support Services	Southsea Self Help Housing Co-operative	1	0
Housing and Support Services	Salvation Army Housing Association	1	0
Housing and Support Services	Portsmouth Rotary Housing Association	1	0
Housing and Support Services	Ability Housing Association Ltd	1	0
Housing and Support Services	Anchor Hanover	1	0
Housing and Support Services	Rlha Retirement Leasing Housing Association	1	0
Housing and Support Services	Agamemnon Housing Association Ltd	1	0
Housing and Support Services	Housing 21	1	0
Housing and Support Services	Thorngate Almshouse Trust Elizabeth Court	1	0

Stakeholder Type	Organisation	Number of Recipients	Number of Responses
Housing and Support Services	Home Instead Hayling Island	1	0
Housing and Support Services	Citizens Advice Portsmouth	1	0
Housing and Support Services	Havant CAB and Park Families	2	0
Housing and Support Services	SMART Community Solutions	1	0
Housing and Support Services	NHS Coastal West Sussex CCG	1	0
Housing and Support Services	Age UK Portsmouth	1	0
Housing and Support Services	Community First	4	0
Housing and Support Services	Action Hampshire	1	0
Housing and Support Services	Action Portsmouth	1	0
Business	Hampshire Chamber of Commerce	1	0
Business	Portsmouth & District Committee (Chamber of Commerce)	1	0
Business	Solent LEP	2	0
Business	Partnership for South Hampshire (PUSH)	1	0
Business	Scottish & Southern Energy Plc	1	0
Business	Business in the Community	1	0
Business	Shaping Portsmouth and Future Together	1	0
Business	West Sussex Growers	1	0
Business	CBI	1	0
Business	Food and Drink Federation	1	0
Business	Angling Trust	3	0
Business	Car Wash Federation	1	0
Business	British Swimming Pool Federation	1	0
Business	Horticultural Trades Association	0	3
Business	British Golf Industry Association	1	0
Business	Turfgrass Growers Association	2	0
Business	Mineral Products Association	1	0
Business	Petrol Retailers Association	1	0
Business	Waterjetting association	1	0
Business	National society of allotment and leisure gardeners	2	0
Business	British Association of Landscape Industries	1	0
Business	UK Golf Federation	1	0
Business	Grounds Management Association	1	0
Business	Racecourse Association	1	0
Business	Club Managers Association of Europe	1	0
Business	National Farmers Union	1	1
HTSG	Havant Thicket Stakeholder Group Independent Chair	1	0
HTSG	British Horse Society	3	0
HTSG	Cycling UK	1	0
HTSG	East Hampshire District Council	1	0
HTSG	Forestry Commission	1	0
HTSG	Friends of Staunton Country Park	2	0
HTSG	Frog Life	1	0
HTSG	Staunton Country Park (HCC)	1	0
HTSG	Hampshire Fire and Rescue Service	1	0
HTSG	Horndean Protection Group	1	0
HTSG	Hampshire County Council Councillor	3	0
HTSG	Havant Borough Councillor	2	0
HTSG	Havant District Scouts	1	0
HTSG	Park Community School	2	0
HTSG	Leigh Park Area Housing Manager	1	0
HTSG	Portsmouth City Council Housing	1	0
HTSG	Portsmouth and District Angling Society	1	0
HTSG	Ramblers Association	1	0
HTSG	Rowlands Castle Historical Society	1	0
HTSG	Rowlands Castle Heritage Centre	1	0
HTSG	Havant Borough Residents Association	1	0
HTSG	St Frances and St Clare churches	1	0
HTSG	Local resident / representing accessability interests	1	0
HTSG	Portsmouth City Council (Estates)	1	0
Retailer	ADSM	1	0
Retailer	Castle Water	1	0
Retailer	Anglian Water Business	1	0
Retailer	Business Stream	2	0
Retailer	Cambrian Utilities	1	0
Retailer	Everflow Limited	2	6
Retailer	First Business Water	2	0
Retailer	Greene King	1	0
Retailer	Marstons	1	0
Retailer	Pennon (South West Water)	2	0
Retailer	Whitbread	1	0
Retailer	Regent	1	0
Retailer	Northumbrian	1	0
Retailer	SES	1	0
Retailer	Water 2 Business	1	0
Retailer	Stonegate Pub Company/BT/John Lewis	1	0

Stakeholder Type	Organisation	Number of Recipients	Number of Responses
Retailer	Three Sixty	1	0
Retailer	Water Choice	1	0
Retailer	Water Plus (Severn Trent)	2	0
Retailer	TWRC	1	0
Retailer	Water Scan	1	0
Retailer	Leep	1	0
Retailer	Wave	1	0
Retailer	Yu Water	1	0
Retailer	Smarta Water	1	0
Community	Denmead Horticultural Society	1	0
Community	Portsmouth Pensioners' Association	1	0
Community	Hampshire Federation of Horticultural Societies	1	0
Community	Customer	NA	2
Total	233 Organisations	300 recipients	68 Respondents

APPENDIX B. ONLINE DROUGHT PLAN CONSULTATION QUESTIONNAIRE

The online questionnaire for the drought plan consultation is shown in Table B1.

Table B1. Online questionnaire for drought plan consultation.

We'd like to hear your thoughts on our plans to meet the challenges of drought.

Please fill in our questionnaire below and your response will be sent directly to Defra; the Department for Environment, Food and Rural Affairs. We will also be sent a copy of your responses to allow us to pick up any queries you may have.

You can also email Defra at water.resources@defra.gsi.gov.uk or write to:
Drought Plan Consultation (Portsmouth Water)
Defra
Water Resources
Seacole 3rd Floor
2 Marsham Street
London, SW1P 4DF

Name*:
Organisation* (if not applicable to you, please type N/A in this field):
Email*:
Pop up saying: *We will use the email provided to respond to any queries you may raise in your feedback and to share a summary of the feedback and updates to the drought plan after the consultation.*

1. Do you think the different levels of drought and the associated actions are easy to understand?
   Yes
   No
   Not sure
   Free text box

2. Are the proposed restrictions on using water for households and businesses easy to understand?
   Yes
   No
   Not sure
   Free text box

3. Do you agree with introducing restrictions on using water for households first and businesses afterwards? (To protect jobs and businesses for as long as possible)
   Yes
   No
   Don't know
   Free text box

4. Do you agree with the **automatic exemptions** from restrictions on using water which apply to everyone? (These are agreed by all water companies in the UK)
   Yes
   No
   Don't know
   Free text box

5. Do you agree with all the **discretionary exemptions** from restrictions on using water? (We agree these for our customers)
   Yes
   No
   Don't know
   Free text box

6. Do you support the need to use the North Arundel Drought Permit in severe droughts to abstract more water to maintain supplies? (Please get in touch if you'd like to read an environment assessment of the impact of using this permit)
   Yes
   No
   Don't know
   Free text box

7. Would you support the introduction of emergency restrictions such as standpipes (water pipes in streets) or rota cuts (where water is only available for a few hours each day) in an emergency to safeguard essential supplies?
   Yes
   No
   Don't know
   Free text box

8. Would you be willing to significantly reduce your water use to 50-80 litres of water each day in order to avoid standpipes or rota cuts?
   Yes
   No
   Don't know
   Free text box

9. Do you think we have got the right balance between reducing demand for water, using the drought permit to produce more water and protecting the environment?
   Yes
   No
   Don't know
   Free text box

10. What do you think is the best way to tell customers about a drought and restrictions? *(Please choose top three)*

    Email
    Letter
    TV
    Radio
    Newspapers (printed)
    Newspapers (online
    Portsmouth Water website
    Community and council websites
    Social media
    Posters in public places
    Other (free text box)

Thank you for your time, we'll update our plans with your feedback and share them with you later this year by using the email address you have provided.

Box Out: For every individual response Defra receives during the consultation, we'll donate £1 to WaterAid. (With WaterAid logo)

APPENDIX C. WRITTEN REPRESENTATIONS AND OUR RESPONSE TO THE COMMENTS

Each section within this appendix contains a summary of all representations received, a summary of our response and details of whether the draft drought plan has been updated as a result of the representation(s). Actions arising from responses to representations have been categorised according to the following list:

- No change to draft Drought Plan: We acknowledge the representation but do not consider a change in the draft drought plan is appropriate.
- Minor change to draft Drought Plan: We will make a minor change to clarify the issue raised or address the minor amendment noted.
- Provision of further information: We will provide further information in response to the representation to support the way in which we propose to manage drought events.
- Major change to draft Drought Plan: As a result of the representation, we will consider making a significant change to our draft drought plan. This may have the potential to affect customers and other plans (e.g. the water resources management plan)

C.1. Environment Agency

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
EA(1)WRMP Consistency	Portsmouth Water states in its draft drought plan that it's "WRMP19 highlights that there may be occasions where demand may outweigh supply. Such occasions will occur during periods of drought, and the expected frequency is linked to our Level of Service". We understand that these occasions are being investigated though the WRMP, but there is a risk that the company may need to rely on drought actions more frequently than currently presented. There is a risk to security of supply if the company needs to rely on drought actions more frequently. The impact to the company's drought plan of any changes to the company's WRMP19 must be assessed. If this results in changes to the drought plan, the company must determine if these changes are material and require it to re-consult on its draft drought plan.	Following the EA Guidance on Drought Plans , we ensure that our draft Drought Plan is consistent with our WRMP19. As part of our Annual Review process, we review both of these plans annually to report progress with, and any changes to the plans. For our next water resources plan, WRMP24, we have developed a system model of our Portsmouth Water supply system, and currently working to determine individual source Deployable Outputs (DOs) as well as our conjunctive system DO. We are using this updated model to produce our Revised WRMP19, which is ongoing work and we have included a programme of works in Appendix F. As we continue to investigate the need for any further drought options, we will continue to work closely with the Environment Agency to ensure any potential risks to the environment are assessed and mitigated against. We will continue to review implications of on-going work to our plans annually as part of the annual review process and keep the EA informed of any changes if they arise.	No change to draft Drought Plan
EA(2)Extreme drought actions	The company should not be relying on using extreme drought actions to manage a drought that could a frequent as 1 in 125 years. The company should confirm its resilience through its WRMP. If it finds that it is able to manage a drought of >1 in 125 without the need for extreme drought actions, then these should be sequenced in the options for > 1 in 200 severe drought, along with EDOs. The sequence of using extreme drought actions before emergency drought orders must be explicit. If the company ascertains that it needs to use extreme drought actions for a 1 in 125 year drought then it must develop drought actions that are fully assessed and ready to be implemented (see issue 1.4)	During a meeting with the Environment Agency, following the draft Drought Plan consultation period, it was discussed that this was not the case and that was due to the misinterpretation of Table 3. We have updated the table to make it clear what the sequencing of actions is, and that extreme drought actions would be enacted for more extreme frequency of droughts than the 1 in 125 years. However, it was discussed and agreed that options for droughts with frequency higher than 1 in 200 year are covered in our emergency plan and therefore not included in our drought plan.	Minor change to draft Drought Plan
EA(3)Extreme drought actions	The plan lists 3 general extreme drought options currently being considered by the WRSE project, with little detail. The company's lack of useable extreme drought actions causes a risk to security of supply in a severe drought. The company should consider the supply side options it details in Appendix F of the draft plan as potential extreme drought actions. It should include in its statement of response a full list of company specific extreme drought actions, including further detail on these options and a view of prioritisation of use, as specified in section 4.3 and appendix G of the WCDPG.	Our security of supply is investigated under the process of producing our Water Resources Management Plan (WRMP). In developing our plan, we ensure the resilience of our supply to a 1:200 year Return Period. During this process, we have caried out an exercise to consider feasible options that could be taken forward in our WRMP. Several options were excluded for a variety of reasons, from technical feasibility to environmental impacts. Following the consultation period, we held a meeting with the Environment Agency and discussed that we would review these rejected options and identify any that could be technically feasible to be implemented under an extreme drought on a short term basis. We have carried out an internal exercise of reviewing these and added three options	Provision of further information

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
		in our revised draft plan that will need to be explored further with some added detail on what the options would look like and the likely barriers. These are included in section 3.4.	
EA(4)Drought vulnerability assessment	The company has not undertaken a drought vulnerability assessment using the UKWIR drought vulnerability framework as part of its WRMP. However, in Section 2.4 (page 27) the company has stated that it will be updating this assessment for our next drought plan to maintain consistency with its next WRMP. The company is required by government and regulators to understand and demonstrate the resilience of its systems to a range of droughts. There is a small risk to security of supply if an event of this nature was to occur. The company should explore this vulnerability for its WRMP work and test its drought plan against this scenario. It should present a worked example to show how it would manage a drought of this sort.	We carried out a Drought Vulnerability Assessment (DVA) for our Final Drought Plan 2019 and have included this in Appendix G of our draft Drought Plan 'Drought Scenario Testing'. Further to this, our WRMP24 programme of works includes carrying out a DVA, based on updated stochastic data set as used in the WRSE regional plan modelling, to determine design droughts and subsequently, source deployable outputs. This DVA will show how resilient the Portsmouth Water supply system is to droughts of varying intensity - characterised in terms of duration and Long Term Average (LTA) Rainfall. Based on this assessment, design droughts will be identified for each appropriate planning return period for use in the WRMP24 and the subsequent drought plan. The design droughts selected by disaggregating the supply area WRSE supply forecast and considering the DVA will be used in conjunction with operational knowledge of physical infrastructure constraints to determine individual source Deployable Outputs. This programme of work is included within the wider preparations for WRMP24 and will be included in the pre-consultation and formal consultation phases. We will continue to understand any implications of this work on Drought actions and agreed levels of service as part of our annual review process and keep the EA informed of any changes if they arise.	No change to draft Drought Plan
EA(5)Supply side actions	North Arundel yield has not been verified since its original pump test in 1991. We are concerned that this yield may not be obtainable in drought conditions. The plan relies on the additional water from this source in severe drought. There could be risk to supply security under these circumstances if the yield is not obtainable. In its statement of response, the company should commit to carrying out a pump test if suitable conditions occur and assess the proposed authorisation it will require to do so. The company should consider carrying out geophysical logging to determine at what depth the majority of the yield is coming from at any time to add confidence to its yield assessment in a drought worse than 1992. The company should specify the magnitude, duration and return period of the 1992 drought. We have experience relatively	The North Arundel drought permit identifies an increase of abstraction from the currently licenced 2.5 Ml/d, back to the original capacity of 11 Ml/d. We have previously analysed historic data, which confirmed that the source has been pumped at over 10 Ml/d for extended periods in the past. Most significantly, the source was operated at an average abstraction of 9.9 Ml/d for 85 days between July-September 1992 which is considered one of the most severe in the historic record, with groundwater levels similar to the 1973 groundwater drought. Further analysis of the draw down curve shows that it is considered highly likely that the source could achieve the yield quoted in the drought permit, unless there is a notable increase in the rate of drawdown at higher abstraction rates. It would only be possible to investigate this risk by carrying out a pump test under low groundwater conditions. We are committed to investigating more fully the requirements, costings, and viability for a pump test at this site over the next 18-24 months, taking into consideration the ability to carry out investigations without impacting	No change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
	dry weather in recent years (2018/19). Pump testing under these dry conditions may have been beneficial.	neighbouring sites during peak demand during dry weather. We will continue to work with the Environment Agency on this matter.	
EA(6)ESOR case	The company is not permit application ready as no preparation for its ESOR case is presented. We are concerned that by leaving it till its final plan, we may not have been able to comment or review the companies draft ESOR case. The company should present an example or draft ESOR case in its statement of response, referring to the Environment Agency's ESOR guidance. This could be an appendix, showing what data would be used, how it would be analysed and presented, with the graphs/figures shown.	Since each drought situation is unique, it is not appropriate to set a prescriptive approach to assessing the case for ESOR. In our draft Drought Plan we listed the types of analysis we would use to demonstrate we have been experiencing an 'exceptional shortage of rain'. To enable better visualisation of how we would present this case in a drought situation, we have added an example ESOR case template, illustrating our approach, closely following the Environment Agency's 'Hydrological guidance for the assessment of an Exceptional Shortage of Rain (ESoR)'. We have developed a template for the analysis in MS Excel which would be updated at the time when an application is needed. The example ESOR template included as Appendix E to this SoR and would be updated and included in our statement of need at the time of the drought permit application.	No change to draft Drought Plan
EA(7)EAR	There is a considerable amount of work needed for Portsmouth Water's North Arundel EAR to become application ready, although we acknowledge the company has improved its EARs significantly. The company should provide its programme of work and timetable for completing its EAR in its statement of response. Portsmouth Water should ensure that it continues to engage appropriately with the Environment Agency and Natural England as it develops and refreshes the North Arundel EAR, particularly in regard to the monitoring and mitigation options. The company needs to consider those features not yet assessed adequately, such as giving a greater consideration to assessing potential geomorphological issues impacting sites/reaches. The company should use its additional baseline data to assess any further risks to WFD compliance. The company should include further information to demonstrate how it has taken into account the Review of Consents for its North Arundel drought permit EAR.	We have commissioned further EAR updates for our North Arundel drought permit option, taking into account all the recommendations, improvements and issues raised in this representation. Following the draft Drought Plan consultation period, we held meetings with the Environment Agency and Natural England where further work on the EAR was discussed. Specifically: -monitoring and mitigation requirements and a programme for future monitoring and mitigation to support the drought plan. - recognising the previous Review of Consents (RoC) work - including a section on 'Protected Species' that covers all relevant protected species The programme of works for this update was presented and discussed with both the Environment and Natural England, this stated that the updated EAR will be issued at the end of November 2021.	No change to draft Drought Plan
EA(8)EAR	Monitoring plan is not complete with insufficient baseline monitoring on a range of environmental parameter (water voles, chalk streams and hydromorphology) and does not appear to consider the period before and after the drought permit is applied and used. We are pleased to see a joint monitoring plan with Southern Water. This is not finalised and there are a few site details in the	We have commissioned further EAR updates for our North Arundel drought permit option, taking into account all the recommendations, improvements and issues raised in this representation. Following the draft Drought Plan consultation period, we held meetings with the Environment Agency and Natural England where further work on the EAR was discussed. Specifically: - monitoring and mitigation requirements and a programme for future monitoring and mitigation to support the drought plan. - recognising the previous Review of Consents (RoC) work	No change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
	plan where it is not clear whether this monitoring is being carried out by the water companies, Environment Agency ore other third parties. Further baseline monitoring data collection should start as soon as possible, as it can take 5 years to develop a good baseline dataset. Details and timelines of the baseline monitoring/data collection for pre-drought, during and post drought and how data will be analysed should be shared and discussed with the Environment Agency in its statement of response. Discussions should take place with the Environment Agency in order to ensure that all relevant Environment Agency secondary data forms part of the drought permit environmental assessments. For example, macroinvertebrate data is available from 2001 and 2004, which can be supplied by the Environment Agency. The company should assess the reliance on a number of Environment Agency monitoring sites, as there is no guarantee they will exist into the future or the metrics collected are what is needed. The company should continue to develop and finalise its joint monitoring plan with Southern Water. It must clarify responsibility for all monitoring sites within the joint plan.	- including a section on 'Protected Species' that covers all relevant protected species The programme of works for this update was presented and discussed with both the Environment and Natural England, this stated that the updated EAR will be issued at the end of November 2021.	
EA(9)EAR	The company has included some mitigation measures in its EAR this time, which is welcome, although the mitigation measures outlined have not yet been discussed with the Environment Agency and other relevant stakeholders. The company need to provide more detail to assess whether these mitigation measures are feasible, appropriate, effective and adequate. This should be discussed with the Environment Agency and other relevant stakeholders. They may also be able to recommend additional measures which should be considered. We will continue to work with the company as it develops its mitigation plan. It should also consider mitigation measures to reduce the risk of deterioration, and involve Southern Water in these discussions to discuss any options that can reduce the risk of deterioration as a result of cumulative impacts.	We have commissioned further EAR updates for our North Arundel drought permit option, taking into account all the recommendations, improvements and issues raised in this representation. Following the draft Drought Plan consultation period, we held meetings with the Environment Agency and Natural England where further work on the EAR was discussed. Specifically: - monitoring and mitigation requirements and a programme for future monitoring and mitigation to support the drought plan. - recognising the previous Review of Consents (RoC) work - including a section on 'Protected Species' that covers all relevant protected species The programme of works for this update was presented and discussed with both the Environment and Natural England, this stated that the updated EAR will be issued at the end of November 2021.	No change to draft Drought Plan
EA(10)Comms plan	The plan provides a useful timeline of implementation of the North Arundel drought permit in section 3.2.1.2 (page 41). The first stage	We have added the following information to our revised draft Drought Plan to specify the type of engagement we would expect to have with the Environment	Provision of further information

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
	is a 1 in 20 year trigger for starting the permit application process. The timetable does not list preapplication steps with the Environment Agency, as required under Direction 3(f). Table 7 details communications the company will carry out and includes liaising with other water companies and environmental groups on the drought permit. Communications with the Environment Agency, that issues the permit, are not included. The company should include details of the pre-application steps, triggers and timelines it will take as part of its drought permit application process. The company's communications plan should be updated to include when it will liaise with the Environment Agency at all stages of its drought permit application. For clarity, the triggers listed as return periods in the section should be linked to trigger levels (1 to 4) used in the rest of the plan.	Agency as we cross our drought trigger levels: "Level 0: We will include updates on the water resources situation at regular meetings with the Environment Agency. Level 1: We will provide updates to the Environment Agency on the Water Resource position in meetings and explain actions we are taking. Level 2: We will continue to provide updates on drought development in regular meetings with the Environment Agency (and via email) and discuss upcoming drought permit application where appropriate. Level 3: We will continue frequent meetings with the Environment Agency to update on drought development. This is likely to involve discussions about drought permit applications prepared."	
EA(11)Supply side actions	Companies must include details of any compensation payments that it expects to make as a result of the implementation of a drought management measure (Direction 3(h)). Portsmouth Water do not include any information on any compensation payments as a result of implementing its North Arundel drought permit. The company should include information as to whether it will provide any compensation payments as a result of implementing its drought permit.	In our revised draft Drought Plan, we have included the following additions to the compensation arrangements: "Compensation Water companies normally have a duty to provide a constant supply of water that is sufficient for domestic purposes. However, if there is (or if there is a danger of) a serious supply shortage because of exceptionally low rainfall, then a drought order may be sanctioned by the Secretary of State for Environment, Food and Rural Affairs. A drought order can change a water company's water supply obligations including quantity pressure and the means of supply. There is a statutory duty for Water Companies to compensate owners of other sources of water when drought orders are in force, whilst Condition Q of our Regulatory Licence now requires us to compensate our own customers if, in the event of a drought, we need to restrict customers use. We encourage commercial users who are dependent on mains water supplies for their business operations to consider taking steps to protect themselves from the effects of water use restrictions which are imposed under drought measures. It may be that a number of businesses need to consider pooling resources and if possible, accessing alternative supplies from, say, an area outside that affected by drought. Where we impose an emergency drought order and need to interrupt or cut off a person's supply as a result of the order which means there is no water for cooking,	Provision of further information

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
		washing, drinking or flushing the toilet, Condition Q would apply. This states that household customers are entitled to £10 for each day where the supply is interrupted or cut off. The total amount shall not exceed the average amount of water charges payable by household customers in the charging year preceding on average circa £100. Business customers are entitled to £50 for each day where the supply is interrupted or cut off. The total shall not exceed the average amount of water charges payable by that customers in the charging year preceding or if that customer was not liable to pay those charges, £500."	
EA(12)Supply side actions	Table 4 on page 45 of the draft plan lists "permissions required and constraints" for the North Arundel Drought permit as "drought order", although it is described as a drought permit. The company should confirm if a drought permit or drought order is required.	Noted. This was changed to 'permit'.	Minor change to draft Drought Plan
EA(13)Bulk supplies	The company states it is working with Southern Water to review the requirements of the Itchen Drought Order, and will be holding a number of joint workshops with our regulators and some stakeholders in May 2021. The company should clearly state any impact the implementation and use of Southern Water's Itchen drought order will have on its plan, including whether the timing of actions is affected by the application or implementation of the drought order. The company should confirm the expected frequency of use of the drought order and whether this affects the company's levels of service. This should be presented in its statement of response to allow us to review any changes ahead of its final plan publication. We will continue to work with Portsmouth and Southern Water in this work.	During the public consultation period we have held meetings and had discussions with Southern Water on the work that needs to be carried out around their Itchen drought order. A project has been commissioned to carry out conjunctive system simulation modelling using the PyWR platform to test Southern Water's drought triggers. As part of this work, there will be an investigation into the coherence of the Test and Itchen drought orders and an assessment of the timings and frequency of permit/order applications. This will enable us to understand if there are any implications for the levels of service for both Southern Water and our own. We are reliant on preceding work with SWS before we are able to obtain the Portsmouth Water specific implications, and timings of the project will not allow us to include any outcomes in our SoR Revised Drought Plan. As discussed and agreed with the Environment Agency, we will therefore include a programme of work (Appendix F to this SoR) and will continue to work with Southern Water on this project and keep working with the Environment Agency as the work progresses.	No change to draft Drought Plan
EA(14)Bulk supplies	Southern Water assume that in more extreme drought events these imports would reduce by 50%. Portsmouth's plan states in extreme droughts (>1 in 200 year event) "the bulk supplies will be delivered on a best endeavours basis." Appendix G, section 3.5 of Portsmouth Water's plan states "The WRZ model does not take account of Portsmouth Water's bulk transfer arrangement with Southern Water. The bulk supply has been excluded from this testing as it may not be possible to export	In our Drought Plan we state that "Our bulk supply agreements guarantee that water will be available to Southern Water up to the most extreme drought scenarios (a 1 in 200 year event). After that trigger, when we would be subject to Emergency Planning, the bulk supplies will be delivered on a best endeavours basis." There is a common understanding of these supplies contained in the bulk supply agreement between both companies. However, for modelling purposes, Southern Water went beyond the 1:200. It is difficult to define a 'best endeavour basis' and therefore, for model configuration purposes Southern Water have	Minor change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
	water during a severe drought." The assumptions around these transfers between Portsmouth Water and Southern Water do not align. Southern Water list a third transfer in its draft drought plan for 4Ml/d to North Arundel rather than Pulborough in extreme drought conditions such as outage events. This is not listed in Portsmouth's draft plan. Portsmouth Water should work with Southern Water to ensure the assumptions around volumes of water available in a drought and extreme events align. It should detail any changes to the volumes of this bulk transfer in drought conditions and describe how both companies will operate this part of their network in a drought.	included a modelling assumption that the volume will be reduced by 50% in such extreme scenarios. Droughts more extreme than the 1:200 return period are not currently covered in our company's water resources or drought planning, however, for our next WRMP (WRMP24), there is a requirement to increase our levels of resilience to more extreme droughts (1 in 500 year event). WRSE regional modelling will also better model the interactions of the two supply systems and how bulk supplies might be affected during those scenarios. We will therefore be updating our assumptions in events above a 1 in 200 event, and will continue to work with Southern Water as different project streams progress. The North Arundel transfer mentioned in Southern Water's drought plan, can be used as an alternative to the Sussex North 15Ml/d transfer to be used in exceptional circumstances, such as to mitigate outage events. As such it provides a resilience benefit not a permanent supply-demand balance benefit. In our plan we state that the Sussex North bulk supply can "be used to supply water into Southern Water's Sussex Worthing Zone. This would be required if Southern Water experienced outage events in this zone, and cannot exceed 15 Ml/d". This refers to the North Arundel transfer.	
EA(15)Drought triggers	Section 2.2. (page 27) states "For this plan we have not added these levels as formal drought triggers, and therefore we will not be enacting our drought actions solely on when they are crossed. Instead, they are intended to provide additional early warning, prior to crossing our formal groundwater triggers." Appendix B gives the response to this issue being raised in pre-consultation and states "This will be investigated further for the next round of plans." The company should continue to work on developing a rainfall trigger, as this looks like it can be a useful trigger, along with its current groundwater trigger as a tool to help in decision making in a drought. This work should be continued and included in its final drought plan. If not possible, a programme of work should be included and the outputs integrated into its drought plan ahead of its' new drought plan. Portsmouth Water need to consider using catchment rainfall rather than depending on Havant rain gauge (as noted as a recommendation by Atkins in Appendix D). The	As well as contributing to our understanding of the events to plan for in WRMP24, identifying the rainfall scenarios that our supply system is most vulnerable too will also inform future drought plans by contributing to the identification of SPI indices. SPI indices can appropriately be used as drought rainfall triggers to provide early warning that the region is moving into a drought and link with the 'exceptional shortage of rainfall' case that will need to be prepared if a Drought Permit application is necessary. Along with current groundwater triggers, rainfall triggers will be used to prompt a pro-active drought response decisions and actions. These will be considered as part of our technical work for WRMP24. Our next drought plan will be updated to include these updated triggers, consistent with WRMP24.	No change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
	company should review its 1975-76 rainfall data and the period it uses. This could affect the analysis presented in the plan.		
EA(16)Drought triggers	The plan states in section 2.2.1 (page 26) that "Through the process of planning for WRMP24, we are going to be updating our groundwater triggers, basing them in future on a full stochastic sequence of groundwater levels. These triggers and the testing information around these, will be included in our next drought plan update." We support this work to move the triggers to a more rigorous development. Portsmouth Water will need to update its drought plan to integrate its updated groundwater triggers and what impact these have on the timing and sequencing of actions. It should assess if this impact is a material change to its drought plan. If so, it will need to update its plan ahead of the normal 5 year cycle. The company should action the recommendation in Appendix D.	These are being considered and developed as part of our technical work for WRSE and WRMP24. The impact of these on our deployable output are being assessed as part of this technical work and the work is due to be completed by January 2022. Our next drought plan will be updated to include these updated trigger levels, consistent with WRMP24 and the actions associated with each. Any outcomes of this work that have an impact on the drought plan will be reported in our Annual Review process, as agreed with the Environment Agency.	No change to draft Drought Plan
EA(17)Testing our triggers	The plan has been tested to a 1 in 200 event, which equates to 3 dry winters. This is presented in scenario D, in appendix C. This worked example doesn't illustrate the system showing any recovery by the end of year 3. Scenario D shows that the action for "prepare for drought permit application" is triggered at level 3. In all other scenarios it is triggered at level 1. The company should extend its worked example to show the recovery of its system into year 4 and how long restrictions will be in place as the drought abates. The company should ensure the trigger for preparing its drought permit application in scenario D is presented consistently.	Noted. We have extended our Scenario D to show the drought recovery in Year 4 and when the restrictions would be lifted. We have also shown that the preparation for a drought permit would start after Level 1 trigger has been crossed, under all scenarios. These are updated in Appendix C of our revised drought plan.	Provision of further information
EA(18)Testing our triggers	Portsmouth Water has not presented a heatwave or high demand or outage worked example. Without this information in the plan, customers cannot be assured the company could cope with a heatwave and/or high demand event.	The impacts of high demand and heatwaves are addressed through the measures to require customers to reduce their demand and these would all be in place under the severe drought scenarios included in the assessments described above.	Minor change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
	The company should include a worked example within its final plan to demonstrate and provide assurance to its customers that a heatwave and/or high demand scenario would not cause any supply problems. Its plan should provide assurance that during these types of event the company would still seek to minimise outage and control demands.	There may be a requirement to communicate with our customers to request that they take steps to reduce demand in circumstances where there is not a drought or a threat of drought. This could arise due to a period of high demand that puts stress on the water treatment or water distribution infrastructure, or it could be due to a period of outage at a water treatment works or a failure of a strategic main. Under such circumstances it would not be appropriate to implement drought measures to restrict demand such as implementation of a TUB as the situation would not have arisen due to an exceptional shortage of rain. Therefore, the implementation of a tailored communications campaign is the best means of trying to achieve a reduction in customer demand in such circumstances and a short lived and targeted campaign using the most appropriate means of communications would be used in these circumstances. It is likely that the use of social media and methods such as text messaging could be used during a campaign of this type. This type of communication was used in the high demand situations experienced in 2018, 2019 and 2020. This approach would also be used in a situation where unforeseen circumstances may occur such as in 2020 as a result of Covid19 which led to high demand in parts of our supply area which when coupled with very hot weather, led to stress on our operational network. In these circumstances it is necessary to mobilise a communications campaign quickly, this process is known as 'agile comms'. We will add this additional information to our revised draft plan.	
EA(19)Environmental triggers	The water company's draft plan does not include consideration of any actions to mitigate impacts of environmental droughts or support other sectors in a drought (droughts not affecting public water supply). The company doesn't demonstrate it has considered if it could take action to help in a non water supply drought.. The company should update its draft plan to show how/ whether it has considered these and what actions it plans to take/could be taken as a result. For example, the company already has an augmentation scheme on the River Ems and could explore if it could do more in a drought.	We have not adopted any specific environmental triggers as the primary function of our Drought Plan is to make provision for the actions to ensure security of supply for our customers. Environmental triggers would indicate periods where the environment is stressed because of dry weather or drought but our supply system is not. During such periods when the Environment Agency declare an environmental drought, we will liaise with the Environment Agency and produce dedicated communication to reflect these impacts on the environment and promote water efficiency (section 4.3.5). Under such circumstances, we would consider requests from other water users such as private water suppliers or other sectors such as agriculture, for example where there are needs for livestock during a drought and we will make best endeavours to provide supplies in these circumstances. However, we are only able to do this where it does not adversely affect the security of supply for our own customers, and we will give priority to supply to our own customers.	Minor change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
EA(20)Testing our triggers	The trigger for application or implementation of Southern Water's Itchen drought order is not shown on the worked examples in appendix C. The company should include the trigger for this action in its worked examples to show when it would be used.	A project has been commissioned to carry out conjunctive system simulation modelling using the PyWR platform to test Southern Water's drought triggers. As part of this work, we aim to understand if there are any implications of the frequency of use of the Itchen Drought Order to our agreed levels of service. A programme for this work is included in Appendix F of this SoR. We will continue to work with Southern Water on this project and keep working with the Environment Agency as the work progresses.	No change to draft Drought Plan
EA(21)Testing our triggers	It is good to see that supporting technical information has been removed to appendices to make the draft plan more tactical. However, section 2.5 (page 28) on testing triggers, doesn't include any information on the results of the testing. It is not clear in the main plan what the outcome of the testing is. The drought plan would benefit from including high level findings from appendix C. For example, a graph and table for an illustrative scenario will show the reader how a drought is managed.	Noted. We have added further information in Section 2.5 to summarise the overall findings from Appendix C.	Provision of further information
EA(22)SEA	The company does not include information on whether it has considered the need for an SEA. There is a possible risk to the environment if an SEA is considered to be required and not completed. The company should include justification for its decision to not complete an SEA.	As part of our WRMP19, we have completed an SEA assessment for all our options. This included our drought permit option and therefore no separate assessment was carried out for the drought plan. As part of our WRMP24 we are revisiting this and are updating our SEA. This will again include our drought permit option. We have included additional information in section *3.2.1.4 Environmental Assessment Summary* of our revised draft plan to reflect this.	Provision of further information
EA(23)Comms plan	The drought plan does not say how the company will monitor and evaluate the effectiveness of your communications activities during a drought. This information can then be used to help develop more effective communication plans for future drought events or even during a drought. The company should explain in its plan how it will monitor, measure and evaluate the demand savings resulting from customer communications prior to the need to implement TUBs.	The following wording has been added to our revised draft plan: *We have in place quick and efficient monitoring of daily demand, which is used to assess usage during peak summer periods and has been used throughout the Covid pandemic. Continuous monitoring of representative sample sets of households and non-household customers allow for robust analysis of changes in usage. This is currently used to forecast future demand. This same dataset would be used to monitor the effect of our communication campaigns during a period of drought. We would look to collaborate with other water companies and organisations, such as the Environment Agency, to share data, behaviours and lessons learned*.	Minor change to draft Drought Plan
EA(24)Demand side actions	The draft plan does not specify how long customers would have for making representations ahead of a TUB being implemented. The company state's in s3.1.5.1 (page 36) that for a NEUB it would conduct as a minimum a two-week public consultation with customers and stakeholders. The plan should state how long will be given for representations to	The following wording has been added to our revised draft plan, in section 3.1.4.1. *We will clearly communicate the implementation of the Ban and what is restricted, using the communication channels listed in Table 6. We would ensure that prior to application we would conduct as a minimum a two-week public consultation with customers and stakeholders. We will ensure that representations are given appropriate consideration, particularly where stakeholders raise issues that have not been previously considered.*	Minor change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
	be made on a planned TUB implementation. The worked examples in appendix C could also usefully reflect this time period, showing "representation period" before the action of "TUBs".		
EA(25)Comms plan	Table 1 in appendix E lists "Discretionary concessions to the Temporary use ban". It lists Elderly and disabled customers and states the company will "put information on how to apply for an exemption on our website". Customers may not be informed. The company should consider the applicability of its communications methods to the audiences its targeting and whether additional forms or communication channels could be used to ensure all customers are reached.	Noted. This is something we have particularly asked to get the views and feedback as part of our public consultation. Our questionnaire included the question ' What do you think is the best way to tell customers about a drought and restrictions?' and the responses to this are included in section 2 of this SoR document. We will be taking into account all the feedback received to ensure our communication activities and methods are appropriate and effective.	No change to draft Drought Plan
EA(26)Comms plan	Section 4.3 details research being carried out by the regional group WRSE on customer engagement. The plan states that when findings of this work are available, the company will create a specifically tailored communication plan to be use with its drought plan. The company should include its tailored communication plan in its statement of response, if the research findings are available.	This work is due to be published and therefore will be considered for the final plan with the aim being to lead to a joined-up strategy for the region.	No change to draft Drought Plan
EA(27)Drought actions	Table 4 on page 45 lists an "implementation timetable" for drought management actions. 'Time of year effective' is listed as: • 'appeals for restraint and enhanced' –spring • TUBs – spring • NEUBs – summer • North Arundel drought permit - summer The drought permit is listed as "renewable" but the NEUB is not. The company should evaluate when its actions will be effective and amend table 4. Appeals for restraint, TUBs and NEUBs could be considered effective throughout the spring, summer and possibly autumn and in case of NEUBs potentially all year. Table 4 should include that NEUBs can be extended for 6 months too.	Noted. We have updated our Table 4 in our revised draft plan to increase the clarity around this.	Minor change to draft Drought Plan

C.2. Natural England

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
NE(1)HRA	The HRA is not in a clearly identifiable document and the correct procedures for undertaking an HRA have not been undertaken. It is unclear if the relevant habitats sites and their interest features have been identified as this information has not been presented, only a summary table has been provided. At this stage it cannot be determined if all likely significant effects to the suite of designated sites have been identified. Natural England advises that an HRA assessment following HRA guidance is undertaken. This must be undertaken before the plan is published.	Following the consultation period we have held a meeting with Natural England and the Environment Agency to discuss this. We have discussed that an HRA has been undertaken as part of our Water resources Management Plan 2019 (WRMP19). The options considered in this, included our drought plan option (North Arundel Drought Permit), and therefore we did not carry out a separate HRA as part of our drought plan. As we prepare our WRMP24 we are updating our HRA assessment and this will again include the options included in our drought plan. These updates will feature in our next drought plan, to be consistent with the WRMP24. Following discussions, we have updated our revised draft plan Section 3.2.1.4 Environmental Assessment Summary to include a summary of the assessment for our North Arundel Drought Permit.	Minor change to draft Drought Plan
NE(2)HRA	An appropriate assessment should be undertaken for all options where likely significant effects cannot be excluded on objective evidence. The appropriate assessments should have regards to the relevant sites' conservation objectives and supplementary advice to the conservation objectives (SACOs) where these exist. For Ramsar sites the overlapping SACOs and/or favourable condition tables should be used as a proxy. At this stage with the data presented it is unclear if mitigation will be needed, if it is this should be included in any appropriate assessment to remove any adverse effects with sufficient certainty.	Following the consultation period we have held a meeting with Natural England and the Environment Agency to discuss this. We have discussed that an HRA has been undertaken as part of our Water resources Management Plan 2019 (WRMP19). The options considered in this included our drought plan option and therefore we did not carry out a separate HRA as part of our drought plan. As we prepare our WRMP24 we are updating out HRA assessment and this will again include the options included in our drought plan. These updates will feature in our next drought plan, to be consistent with the WRMP24. Following discussions, we have updated our revised draft plan *Section 3.2.1.4 Environmental Assessment Summary* to include a summary of the assessment for our North Arundel Drought Permit.	Minor change to draft Drought Plan
NE(3)HRA	The HRA summary table provided does not make reference to the Southern Waters Lower Itchen Drought Order which also influences Portsmouth Waters Gater's Mill abstraction on the lower Itchen, but section 1.4.6.3 Itchen drought order of the drought plan, does mention how the companies are working together, but all environmental commitments and costs lay with Southern Water. As a minimum this section should be updated to include details of the Itchen IROPI case and compensatory habitat, along with the associated monitoring, mitigation and compensation packages. The plan should also acknowledge the ongoing issues with implementation of these packages. It should also state how these options are time limited, with a review at the next plan round and how the expectation is these will not be needed after 2030	The River Itchen Drought Order is undergoing further work, and the project is explained further in section 1.4.6.3 of the revised plan, with the proposed timelines available in Appendix F of this SoR document. The outcomes of the project will not be available in time to include in the Revised Drought Plan, but we will be working closely with Southern Water and the regulators to ensure that all outcomes are included in subsequent reviews of the Drought Plan, as agreed by the EA and NE following the consultation period.	Minor change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
NE(4)SEA	An SEA has not been undertaken for this drought plan, as outlined in Annex 2 due to the groundwater nature of Portsmouth Waters drought plan option an SEA is required. An SEA must be undertaken before this plan is published. The conclusions of the SEA and HRA must be consistent with each other and all relevant SSSI, habitats and species of principal importance and protected habitat sites must be identified. The SEA should also assess the in-combination effects of other water companies drought orders and permits in particular Southern Waters North Arundel drought order.	Following the consultation period we have held a meeting with Natural England and the Environment Agency to discuss this. We have discussed that an SEA has been undertaken as part of our Water resources Management Plan 2019 (WRMP19). The options considered in this included our drought plan option and therefore we did not carry out a separate SEA as part of our drought plan. The existing SEA assessment is available upon request. As we prepare our WRMP24 we are updating our SEA assessment and this will again include the options included in our drought plan. These updates will feature in our next drought plan, to be consistent with the WRMP24.	No change to draft Drought Plan
NE(5)EAR	A monitoring plan must also be written with additional monitoring that has been identified in this process outlined. It is unclear why this drought plan does not have an associated environmental monitoring plan as an appendix as was the case with the 2019 drought plan. This should be a clearly identifiable document and be included as an appendix. Natural England notes a monitoring plan is associated with the North Arundel drought permit EAR.	We have commissioned further EAR updates for our North Arundel drought permit option, taking into account all the recommendations, improvements and issues raised in this representation. Following the draft Drought Plan consultation period, we held meetings with the Environment Agency and Natural England where further work on the EAR was discussed. Specifically: - monitoring and mitigation requirements and a programme for future monitoring and mitigation to support the drought plan. - recognising the previous Review of Consents (RoC) work - including a section on 'Protected Species' that covers all relevant protected species The programme of works for this update was presented and discussed with both the Environment and Natural England, this stated that the updated EAR will be issued at the end of November 2021.	No change to draft Drought Plan
NE(6)EAR	The in-combination assessment of this option with Southern Waters North Arundel drought permit also needs further investigation, as uncertainty remains over the in-combination impact on some site features. Portsmouth Water's North Arundel EAR states that the likely cumulative impacts of these two options are assessed the same as Portsmouth Water North Arundel alone, but assessments could change with further data and information. NE suggests further data and information is collected so these scenarios can be updated and any in-combination impacts identified. For this reason and the other reasons stated in this letter it is NE view that the drought option is not application ready	We have commissioned further EAR updates for our North Arundel drought permit option, taking into account all the recommendations, improvements and issues raised in this representation. Following the draft Drought Plan consultation period, we held meetings with the Environment Agency and Natural England where further work on the EAR was discussed. Specifically: - monitoring and mitigation requirements and a programme for future monitoring and mitigation to support the drought plan. - recognising the previous Review of Consents (RoC) work - including a section on 'Protected Species' that covers all relevant protected species The programme of works for this update was presented and discussed with	No change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
		both the Environment and Natural England, this stated that the updated EAR will be issued at the end of November 2021.	
NE(7)SEA	The SEA should look at landscape impacts generally and those to protected landscapes. This should also include where important recreational sites are impacted in protected landscapes. Any necessary mitigation should be clearly identified. North Arundel is within the South Downs National Park and is likely to effect in combination, an important recreational and landscape feature. The drought option with the least identified environmental impact (North Arundel) appears to have been selected as the drought permit option taken forward, but further details on the conclusions drawn on this option should be presented.	As we prepare our WRMP24 we are updating our SEA assessment and this will again include the options included in our drought plan. We will take these recommendation into consideration as we are updating our SEA assessment for WRMP. We will keep the discussion channels open with Natural England and the Environment as we develop this. Updates will feature in our next drought plan, to be consistent with the WRMP24. The EAR for Slindon is available on request has been provided to Natural England, and includes full details and conclusions. It is not thought to be appropriate to include full details within the Drought Plan document, with the requirements to keep the Drought Plan as an operational document.	No change to draft Drought Plan
NE(8)SEA	The SEA assessment should consider impacts on all SSSIs in the plan area affected by the drought options. The SSSI assessment should be a clearly identifiable section of the SEA and not just included within the biodiversity section. All notified features of the designated sites should be identified, for options where impacts cannot be excluded the relevant SSSI favourable condition tables should be referred too. Any mitigation proposed should protect the SSSI. It is unclear if the North Arundel option impacts any of the nearby water dependant features of designated sites in combination as insufficient information was presented on this option.	As we prepare our WRMP24 we are updating our SEA assessment and this will again include the options included in our drought plan. We will take these recommendation into consideration as we are updating our SEA assessment for WRMP. We will keep the discussion channels open with Natural England and the Environment as we develop this. Updates will feature in our next drought plan, to be consistent with the WRMP24. The EAR for North Arundel is available on request has been provided to Natural England, and includes full details and conclusions. It is not thought to be appropriate to include full details within the Drought Plan document, with the requirements to keep the Drought Plan as an operational document.	No change to draft Drought Plan
NE(9)SEA	The SEA assessment should consider biodiversity impacts including the impacts to priority habitat and species. This should include duties to restore priority habitat and species and any necessary monitoring.	As we prepare our WRMP24 we are updating our SEA assessment and this will again include the options included in our drought plan. We will take these recommendation into consideration as we are updating our SEA assessment for WRMP. We will keep the discussion channels open with Natural England and the Environment as we develop this. Updates will feature in our next drought plan, to be consistent with the WRMP24.	No change to draft Drought Plan
NE(10)SEA	The SEA assessment should take account the impact of climate change on the drought plan options and whether the drought options have made it harder for wildlife to adapt to climate change. Any necessary monitoring should also be proposed.	As we prepare our WRMP24 we are updating our SEA assessment and this will again include the options included in our drought plan. We will take these recommendation into consideration as we are updating our SEA assessment for WRMP. We will keep the discussion channels open with Natural England and the Environment as we develop this. Updates will feature in our next drought plan, to be consistent with the WRMP24.	No change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
NE(11)EAR	The North Arundel drought permit EAR does not currently have a section covering protected species, reference has however been made to data being identified for protected species including otter and water vole and bats are also mentioned in relation to Swanbourne Lake and Fountain Pond and Eels within the fish section. NE notes the EAR does have a section titled, other species of importance, but this section does not cover all relevant protected species currently. Monitoring of protected species are not currently specifically mentioned in the EAR monitoring plan, but it is noted in the main report as potential for monitoring. NE suggests further monitoring for protected and priority species and habitats is added to the monitoring plan. It is NE view that the EAR is not currently application ready. To be 'application ready' the drought plan Environmental Assessment Reports (EARs) should include a clear, timetabled approach to monitoring and mitigating any impacts on priority habitats and protected species potentially affected by options. For protected species impacts the company should assess whether a licence would be required in the EAR.	We have commissioned further EAR updates for our North Arundel drought permit option, taking into account all the recommendations, improvements and issues raised in this representation. Following the draft Drought Plan consultation period, we held meetings with the Environment Agency and Natural England where further work on the EAR was discussed. Specifically: - monitoring and mitigation requirements and a programme for future monitoring and mitigation to support the drought plan. - recognising the previous Review of Consents (RoC) work - including a section on 'Protected Species' that covers all relevant protected species The programme of works for this update was presented and discussed with both the Environment and Natural England, this stated that the updated EAR will be issued at the end of November 2021.	No change to draft Drought Plan
NE(12)WFD	Comments on WFD are a matter for the Environment Agency however Natural England notes the WFD assessment is also summarised in the HRA screening summary table. This should form part of a separate assessment on the impact on WFD compliance	Noted.	No change to draft Drought Plan
NE(13)Supply side actions	The drought option with the least environmental impact appears to have been taken forward as the drought option in this plan; however, without the HRA and SEA assessments it is hard to determine the impact of this option or whether the sequence is correct. The relevant sections of the EAR for the North Arundel drought permit have been read as part of this review, but detailed advice has not been provided in this letter.	Noted. We only include one drought permit option currently in our plan. We have sequenced demand and supply side actions in order to prioritise least environmentally damaging demand side options first when experiencing and managing a drought event.	No change to draft Drought Plan
NE(14)Natural capital	A natural capital assessment has not been undertaken as part of this drought plan	A Natural Capital assessment is not considered appropriate to be carried out and included as part of a drought plan as this is an operational document and tactical plan. The natural capital assessment would therefore be assessed under our water resources strategic plans rather than our drought operational plan.	No change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
NE(15)Demand side actions	Assessment of compliance with the policy and legislation set out in Annex 2 on demand management is a matter for the Environment Agency and Secretary of State. The plan includes details of the companies leakage reduction and the voluntary measures proposed in the pre-drought period and therefore appears to be taking steps to reduce demand that could increase environmental impacts in drought.	Noted.	No change to draft Drought Plan

C.3. Hampshire County Council

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
HCC(1)Exemptions	The County Council does not consider that either drought strategy has provided a clear definition of 'vulnerable' customers. Whilst it is recognised that the Blue Badge as it relates to vulnerable residents is referenced in the documents, the County Council request that Southern Water and Portsmouth Water provide clarification on the definition of vulnerable customers so that the County Council can be reassured that all vulnerable residents of Hampshire will be included within the definition of vulnerable customers within the context of the respective drought strategies.	Vulnerable customers are those on our Priority Services Register, which is a free service for those requiring additional support and consideration. There is no definitive definition of a vulnerable customer, and anyone is able to contact us to be included on our list if they have specific requirements due to age, ill health, a disability or mental illness. This could be for example, receiving their bills in appropriate formats such as braille, or it could be those who rely on water due to medical conditions and so would be prioritised during times of reduced supply. This clarification has been added to Appendix 'E' of our revised Drought Plan.	Minor change to draft Drought Plan
HCC(3)Exemptions	The use of water for dust suppression is an important criterion that may need to be considered on a case-by-case basis in respect of residential amenity in locations where specific industrial activities require dust suppression to be conducted as part of a planning condition or legal agreement. Hampshire County Council as the local minerals and waste planning authority is concerned that if the dust suppression measures are not conducted in a Level 2 drought scenario, the enforcement issues for the site will increase as, at some sites, nearby residents may be impacted by dust increasing from the operations of a site nearby. Some more consideration may need to be given to specific industrial activities that require dust suppression via planning conditions or legal agreements as part of their operations on a case-by-case basis in the list of exemptions as discretionary, otherwise some mineral extraction or waste sites may potentially have to shut down for extended periods during droughts or operate without the required dust suppression measures in place to protect the environment and local residential amenity.	During a Level 2 drought, we would implement Temporary Use Bans, which restricts use for domestic customers only. We would not restrict use to businesses until we reached a Level 3 drought, with the implementation of Non Essential Use Bans. There are exemptions from these restrictions, one of which is the use of water to protect health and safety. If these industrial activities fall under this category then they would be exempt. Furthermore, prior to any implementation of TUB's or NEUB's, there will be a 2 week public consultation period with customers and stakeholders in which objections would be looked at on a case by case basis.	No change to draft Drought Plan
HCC(4)Emergency Drought Actions	Hampshire County Council as the local highway authority will also need to be satisfied that any emergency restrictions such as standpipes do not restrict the safe operation of the public highway and so consultation and coordination will be required by the water companies with the local highway authority should emergency restrictions be required.	Noted. We have included a paragraph in section 4.1.3 to explain that we would liaise with Hampshire County Council as the local highway authority to ensure that they are satisfied that any emergency restrictions such as standpipes do not restrict the safe operation of the public highway, should the drought reach those levels.	Minor change to draft Drought Plan

C.4. CCW

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
CCW(1)Comms plan	Include more information on how the company will respond if there are any problems in communication during a drought. For example, what action will the company take if the conditions increase the number of customer contacts.	During a drought, a large range of communication methods and channels will be used to reach as many people and different groups as possible. Our communication plan is constantly being informed by new findings from regional research and stakeholder feedback. In a drought situation we will ensure customer facing staff in our call centre and others, are well briefed and able to respond to enquiries about the water shortage and restrictions. We will also consider extending the opening hours of our Customer Service centre for the initial period following the publication of the water use restrictions in order to ensure we are able to best respond to enquiries. Table 6 in our draft plan lists the different communication channels we will be using for drought messaging, to reach as many customer groups as possible with the type of information we would provide.	No change to draft Drought Plan
CCW(2)Comms plan	Include more information on how the company will engage with non-household customers about water efficiency, both before and during a drought. The plan should cover how companies will help water dependant non-household customers improve their resilience during a drought situation. It should also cover what action Portsmouth Water plans to take to ensure that NAVs and retailers engage with their own customers.	During a drought event, our Communications Manager has the responsibility for implementing communications with non-household customers. We will work collaboratively with other organisations to ensure a joined up and co-ordinated approach to the management of drought in the region. Moreover, we will look to formally notify all our NAVs and retailers operating in our area of any change in our drought status levels and will be providing them with all the communications we send our customers. This would be done both to keep them and their customers informed, since we would be urging them to proactively relay that information to their customers through their own communication channels. Working with Retailers in particular there is an opportunity to influence large commercial users of water alongside our household customers. Since the nature of any particular drought is unique in terms of its extent, duration and severity we need to deploy a Communication Plan in an agile way, so that we can best respond to the particular drought characteristics being experienced. This information is included in section 4.3 of our draft plan.	No change to draft Drought Plan

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
CCW(3)Demand side actions	How the company plans to tackle leakage on customers' supply pipes	We understand the importance of maintaining low leakage levels. If we ask customers to curb their demand, then we think it is very important that we act to reduce any leakage that may be happening. We don't expect customers to voluntarily restrain their use of water, if we are not also active in minimising any wasted water. In our draft drought plan we detail our commitment to reducing leakage and what we have achieved so far and provide an overview of the measures we would specifically take during periods of hot, dry weather and drought to reduce it. This is included in section 3.1.2. of our draft plan.	No change to draft Drought Plan
CCW(4)Non-technical summary	We feel that the non-technical summary needs to cover the following issues: · Information on the impacts of low rainfall and drought on the environment. This will help readers to engage with the need to save water in the longer term, even when there is no drought situation. · A summary of what the company will do to reduce leakage and wastage from its own supply network. Again, this will help customers to engage with water efficiency messaging. · Detail of how Portsmouth plans to communicate with NAVs and retailers during a drought, and information about any other arrangements that may be in place for those customers.	The additional document provided with our drought plan was a stakeholder summary to provide an overview and help communicate what is included in our drought plan. The issues raised here are in fact covered in our main drought plan, and this is accessible through our website.	No change to draft Drought Plan
CCW(5)Comms plan	While exemptions for certain circumstances are helpful and essential in some cases, it is also important that customers, both household and non-household, are given early notice of a developing situation, and the possible introduction of restrictions. This will give them an opportunity to plan ahead and possibly mitigate any direct impacts – for example by deferring plans to undertake major landscaping projects or seeking to utilise alternative water supplies or technologies. We feel that there should be more information about what the notice period might be.	Communication plays an essential role in managing drought and is a key aspect to any action we undertake. Since each drought is unique, we will deploy an agile communication plan to inform our customers of a developing drought situation, and will be providing more information as our monitoring indicates changes in our drought status levels and the possible introduction of restrictions. The timings of this will be affected by the nature of the drought but with our monitoring and triggers in place we will be providing updates and early warning as the drought develops. Furthermore, before any implementation of demand restrictions, we will be holding a 2 week public consultation period with customers and stakeholders to obtain customer feedback and any specific objections.	No change to draft Drought Plan

C.5. South Downs National Park Authority

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
SDNPA(1)EAR	I would like to see the Environmental impact assessment for this permit.	We have provided the EAR report as requested in the response.	No change to draft Drought Plan

C.6. Individual Customers

SoR Ref.	Summary of Representation	Our response	Proposed change to draft drought plan
Cust(1)Demand side actions	A business can water ornamental plants but an allotment holder can't water essential food. I think you should apply similar restrictions at the same time for businesses and households - eg not using water non-essentially (ie will not destroy jobs or businesses). By definition this should not impact the business as it is non-essential.	We carried out dedicated research with customer focus groups in our region, to ensure we heard the views of a wide range of representative customers during the consultation period. Overall, customers have told us that they are willing to reduce their water consumption first to protect businesses and the economy. Moreover, such restrictions do not always prevent people from using water for the mentioned purposes, but specifically restricts the use of a hosepipe. This is because hosepipes can use a lot of water very quickly. Using a watering can or a bucket is a much more efficient use of water and this could still be carried out in such instances.	No change to draft Drought Plan
Cust(2)Exemptions	If one household has someone with a blue badge, why should they be able to water their garden or have their car cleaned when their neighbour can't? I understand that vulnerable customers need some exceptions, but they have to be related to need. I would struggle to justify well watered roses or a clean car as essential for someone with mobility issues or over a certain age.	We would call upon customers to safeguard our precious water resources and ensure their use and enjoyment of water is in keeping with the restrictions and does not impact unfairly on others. Our aim in imposing restrictions is to ensure a fair and equitable distribution of potable water for all, and protect the environment in the early stages of drought. It is difficult to police these restrictions, and we hope that customers will use water wisely.	No change to draft Drought Plan

C.7. Everflow Water

SoR Ref.	Summary of Represetation	Our response	Proposed change to draft drought plan
EW(1)Demand side actions	It isn't explained what the 'levels' involved would be, or how often it's estimated that they will occur. Maybe a bit of historical context to reassure business customers what they can expect would help. You could also suggest that business customers and vulnerable customers plan for what they could do if their water supply is restricted, to make their businesses more resilient.	In our main drought plan we have a section (Section 2.1) on the levels of restrictions and how often they might need to be implemented, these are our agreed Levels of Service (LOS). These are consistent with our current Water Resources Management Plan 2019 (WRMP19) and Drought Plan and are set out below: • Temporary Use Bans > 1 in 20 years, representing an annual risk of 5%. • Non-Essential Use Bans > 1 in 80 years, representing an annual risk of 1.25%. • Emergency Drought Orders > 1 in 200 years, representing an annual risk of 0.5%. We also describe the different stages of drought and the associated levels of restriction and a summary of this is included in Table 3 of our drought plan. Furthermore, under a drought situation we will reach out to our business customers and vulnerable groups and maintain communication as the drought progresses. This is described in our management and communication strategy of our draft plan (section 4).	No change to draft Drought Plan
EW(2)Exemptions	All businesses are not equally reliant on water. Those with vulnerable customers should be prioritised, e.g. care homes, hospitals and schools.	During a Level 2 drought, we would implement Temporary Use Bans, which restricts use for domestic customers only (with exemptions for vulnerable customers). We would not restrict use to businesses until we reached a Level 3 drought, with the implementation of Non Essential Use Bans. There are exemptions from these restrictions as well, one of which is the use of water to protect health and safety. If these activities fall under this category then they would be exempt. Furthermore, prior to any implementation of TUB's or NEUB's, there will be a 2 week public consultation period with customers and stakeholders in which objections would be looked at on a case by case basis. Under a drought situation we will reach out to our business customers and vulnerable groups and maintain communication as the drought progresses. This is described in our management and communication strategy of our draft plan (section 4).	No change to draft Drought Plan
EW(3)EAR	It would be better to briefly summarise the impact on the environment within the main consultation document, rather than refer customers to another document, which they're unlikely to read. Business customers with leisure services such as water sports and hotels in the affected area will want to know how they're likely to be affected. We could support with consulting our relevant customers directly.	Our main drought plan document does include a section that summarise our environmental assessment for our North Arundel drought permit option. This is included in section 3.2.1.4 Environmental Assessment Summary. The additional document provided with our drought plan was a stakeholder summary to provide an overview and help communicate what is included in our drought plan, rather than intended as the main consultation document.	No change to draft Drought Plan

SoR Ref.	Summary of Represetation	Our response	Proposed change to draft drought plan
EW(4)Demand side actions	An 'emergency' and 'essential supplies' would need to be better defined to help our business customers plan, as well as explaining how vulnerable customers would be protected in such circumstances	In our drought Plan document we define the stage of the drought where our emergency plan would become effective and emergency restrictions such as standpipes or rota cuts would be implemented. This would only be the case if we experience a drought scenario more extreme than 1 in 200 years. We also describe how vulnerable customers will be exempt from certain restrictions and how we aim to be contacting them through the stages of drought progression.	No change to draft Drought Plan
EW(5)Extreme drought actions	Reducing to 80 and 50 Ml/d per day. This question is probably directed at household customers (many of whom will not know how this compares to 'normal' usage). It might be better to ask whether customers would be willing to halve their usual water use). This question could also be asked of many non-household customers. However, for a water-dependent business like a car wash, farm or manufacturer halving their output would be difficult. If the question does not apply to water dependent non-household customers, then this should be made clear.	During our public consultation period, we carried out dedicated research with different customer focus groups in our region and following feedback, we will be including more information and clarity in our communication plan around what 'normal' water use is and what 50-80 litres per day looks and feels like. This restriction mainly relates to household customers, however, we will be asking non-household customers to reduce their consumption in a drought scenario, through the ban on Non Essential Use.	No change to draft Drought Plan
EW(6)Drought actions	There is no mention of other options that can be considered, such as water trading between UK regions, and why these have not been included.	Long term options to increase the resilience of supply, such as water trading between regions are considered in our water resources management plans, whilst the Drought Plan is an operational and tactical plan.	No change to draft Drought Plan

C.8. National Farmers Union

SoR Ref.	Summary of Represetation	Our response	Proposed change to draft drought plan
NFU(1)Exemptions	There is text and detail and around trickle irrigation, but there is no reference to agriculture and horticulture exemptions in the PWS region. As you are aware Horticulture, Arable, and Livestock farming is a key user of water in the region. For any restrictions to be placed on those sectors would impact food production in the south east. Would you consider adding in a section of exemptions to Agricultural activities where food production is crucial. Such example activities which we would like to see exemptions applied to are as follows • Irrigation of arable and horticultural crops • Use of water in the spraying application of arable and horticultural crops • Use of water for supplying livestock with suitable drinking water • Use of water in the use of washing down clean areas for food and livestock preparation / treatment Can we have a paragraph which does stipulate Agriculture use. Horticulture, arable, and livestock farmers will require a water source. Farmers & Growers in the South East contribute to the food chain, and any restriction on water use will affect food production in the South East	A number of the water uses raised here would not be restricted by Temporary Use Bans (TUBs) and Non-essential use bans (NEUBs). TUBs are targeted at discretionary use in the home, and NEUBs are targeted at homes and some business activities which are reliant on water from the water companies mains. Therefore, these restrictions would not be applicable for businesses such as farms who typically have their own water supplies for agricultural purposes. WRSE are happy to co-ordinate a session with the NFU if they would like to discuss the Drought Plan and how it may impact their agricultural activities. We work closely with the other companies in WRSE to align the discretionary exemptions associated with the implementation of temporary restrictions, in order to apply a consistent approach across the region. Our approach seeks to balance the need to reduce demand for water in a drought while mitigating any disproportionate socio-economic impacts. We will continue to work together with our neighbouring companies in the South East to assess our agreed discretionary exemptions, and any updates will be included in our drought plans. Furthermore, prior to any implementation of TUB's or NEUB's, there will be a 2 week public consultation period with customers and stakeholders in which objections would be looked at on a case by case basis. At a more local Portsmouth Water scale, we would welcome further collaboration with the NFU to seek sustainable solutions to reduce any reliance on mains water in the future if that is the case as we do recognise that some of the uses for water are critical, particularly for animal welfare and food preparation and hygiene. We already do a lot of work with farmers, landowners and businesses, to look at the feasibility and design of water capture and over-winter storage, and also provide grants for water efficiency measures. There are other potential solutions available to the NFU in terms of water management, and the NFU can work with the Environment Agency through the Priority Catchment work to further explore these areas.	No change to draft Drought Plan

C.9. Horticultural trades association

SoR Ref.	Summary of Represetation	Our response	Proposed change to draft drought plan
HTA(1)Exemptions	The devastating impact of a ban on 'watering outdoor plants on commercial premises' on our members be recognised in the plan, and that an exemption for horticultural businesses be introduced in non-essential use bans.	We would like to clarify that the bans stop the use of a hosepipe to draw water from the mains system to water trees and plants, however, watering could still take place using a bowser, which could be filled at a water supply works or wastewater treatment works, or using a watering can or an efficient trickle irrigation system. We work closely with the other companies in WRSE to align the discretionary exemptions associated with the implementation of temporary restrictions, in order to apply a consistent approach across the region. Our approach seeks to balance the need to reduce demand for water in a drought while mitigating any disproportionate socio-economic impacts. We will continue to work together with our neighbouring companies in the South East to assess our agreed discretionary exemptions, and any updates will be included in our drought plans.	No change to draft Drought Plan
HTA(2)Exemptions	The temporary provision for 'watering newly bought plants for the first 28 days after the ban is introduced' be nuanced so that irrigation of plants and trees being introduced to green infrastructure projects can continue, and that longer term environmental benefit is not lost.	We would like to clarify that the bans stop the use of a hosepipe to draw water from the mains system to water trees and plants, however, watering could still take place using a bowser, which could be filled at a water supply works or wastewater treatment works, or using a watering can or an efficient trickle irrigation system. We work closely with the other companies in WRSE to align the discretionary exemptions associated with the implementation of temporary restrictions, in order to apply a consistent approach across the region. Our approach seeks to balance the need to reduce demand for water in a drought while mitigating any disproportionate socio-economic impacts. We will continue to work together with our neighbouring companies in the South East to assess our agreed discretionary exemptions, and any updates will be included in our drought plans.	No change to draft Drought Plan
HTA(3)Other	Portsmouth Water (and other water companies) work with us to accelerate the introduction of measures and best practice that will reduce our members' reliance on mains water. This includes support for water capture infrastructure projects, such as more self-sufficient water systems like reservoirs and efficient irrigation systems.	We welcome the opportunity to work with HTA more closely. We are working with other companies and other sectors in the region through the Water Resources in the South East of England (WRSE) multi-sector group. This initiative considers a broader set of requirements for water; a more diverse range of solutions which could benefit other sectors, the environment as well as the water companies; and aims to deliver an improved understanding of how resilient some of the other sectors are to drought events. HTA should be able to be represented and have your specific points represented within the multi-sector group and we have contacted you directly with information on how to do this.	No change to draft Drought Plan

C.10. Buriton Parish Council

SoR Ref.	Summary of Represetation	Our response	Proposed change to draft drought plan
BPC(1)Demand side actions	Water Companies should reduce leaks.	We understand the importance of maintaining low leakage levels. If we ask customers to curb their demand, then we think it is very important that we act to reduce any leakage that may be happening. We don't expect customers to voluntarily restrain their use of water, if we are not also active in minimising any wasted water. In our draft drought plan we detail our commitment to reducing leakage and what we have achieved so far and provide an overview of the measures we would specifically take during periods of hot, dry weather and drought to reduce it. This is included in section 3.1.2. of our draft plan.	No change to draft Drought Plan
BPC(2)Other	Water Companies should look to bring extra storage capacity on-line (such as the proposed Havant Thicket Reservoir)	Noted. The need for the development of a reservoir was identified in a regional long-term plan by the Water Resources in the South East Group, which we are part of, along with five other water companies. Our Havant Thicket reservoir would ensure we capture excess water from the Bedhampton and Havant springs, which normally flows out to sea during winter, and store this to use in the summer. This would enable us to share water from our network and make water supplies much more resilient across the whole region.	No change to draft Drought Plan
BPC(3)Demand side actions	Water Savings (by reducing supplies to customers) could be considered - but usage by farms producing food for the nation should not be hampered	TUBs are targeted at discretionary use in the home, and NEUBs are targeted at homes and some business activities which are reliant on water from the water companies mains supply. Therefore, these restrictions would not be applicable for businesses such as farms who typically have their own water supplies for agricultural purposes. However, where this may be the case, we aim to collaborate with farmers to seek sustainable solutions to reduce any reliance on mains water in the future as we do recognise that some of the uses for water are critical, particularly for animal welfare and food preparation and hygiene. We already do a lot of work with farmers, landowners and businesses, to look at the feasibility and design of water capture and over-winter storage, and also provide grants for water efficiency measures. Furthermore, prior to any implementation of TUB's or NEUB's, there will be a 2 week public consultation period with customers and stakeholders in which objections would be looked at on a case by case basis. We work closely with the other companies in WRSE to align the discretionary exemptions associated with the implementation of temporary restrictions, in order to apply a consistent approach across the region. Our approach seeks to balance the need to reduce demand for water in a drought while mitigating any disproportionate socio-economic impacts. We will continue to work together with our neighbouring companies in the South East to assess our agreed discretionary exemptions, and any updates will be included in our drought plans.	No change to draft Drought Plan

SoR Ref.	Summary of Represetation	Our response	Proposed change to draft drought plan
BPC(4)Supply side actions	Additional extraction should only ever be considered from rivers - not from aquifers which are relatively finite sources	Noted. Our North Arundel Drought Permit was selected as the option with the least environmental impact following the Environment Agency guidance on drought planning. In a drought situation we will always select to enact our least environmentally impacting options first, for example demand management, before we resort to additional abstractions from the environment.	No change to draft Drought Plan
BPC(5)Other	In addition, Water Companies should consider providing financial support to Community Buildings (such as village halls) to increase the efficiency of their water usage (introducing grey water recycling etc) so that they can be showcased as exemplars for local businesses and residents to follow.	Although we are not in a position to provide financial support, we provide water saving devices and water efficiency incentives through our GetWaterFit website. We provide a wide range of advice and support on using water wisely and free online sessions with water-saving experts. We would be happy to have further communication and provide more information as needed.	No change to draft Drought Plan

APPENDIX D. QUESTIONNAIRE RESPONSES ADDITIONAL COMMENTS

This appendix presents additional comments made to the questionnaire, a summary of the issues raised and our consideration of the responses.

1.Do you think the different levels of drought and the associated actions are easy to understand?

Themes and issues raised in representations	**Our consideration of representation**
I understand that there is a ladder of increasing severity but not what triggers the step from one level to another – e.g. reduction in water level or flow through Brockhampton Springs.	Declining groundwater levels trigger these changes. We use Well 'X' as an observation borehole to monitor our groundwater level situation. This has been monitored for over eighty years providing a good record of data. Well 'X' is not affected by abstraction and hence is a very good indication of groundwater resource availability from the South Downs Chalk aquifer.
It isn't explained what the 'levels' involved would be, or how often it's estimated that they will occur. Maybe a bit of historical context to reassure business customers what they can expect would help. You could also suggest that business customers and vulnerable customers plan for what they could do if their water supply is restricted, to make their businesses more resilient.	In our main Drought Plan we have a section (Section 2.1) on the levels of restrictions and how often they might need to be implemented, these are our agreed Levels of Service (LOS). These are consistent with our WRMP19 and Drought Plan and are set out below: • Temporary Use Bans > 1 in 20 years, representing an annual risk of 5%. • Non-Essential Use Bans > 1 in 80 years, representing an annual risk of 1.25%. • Emergency Drought Orders > 1 in 200 years, representing an annual risk of 0.5%. We also describe the different stages of drought and the associated levels of restriction and a summary of this is included in Table 3 of our Drought Plan. Furthermore, under a drought situation we will reach out to our business customers and vulnerable groups and maintain communication as the drought progresses. This is described in our management and communication strategy of our draft plan (Section 4).
The importance of saving water should be promoted all year round, not simply as a drought is anticipated. For example, supporting vulnerable customers and through social media.	Noted and we agree that communications around the importance of water are not only important during a dry year or drought situation. We currently have a wide ranging water efficiency programme which includes a 'Smart' metering trial, and a water efficiency portal/app for customers known as GetWaterFit. Customers can complete household usage surveys, get water saving advice and support, order free water savings devices, and complete tailored daily challenges to help reduce

	consumption, where prizes can be won and the 'virtual coins' can be donated to local charities. These are all promoted year round through social media , ads, local publications, local communities, charities and schools.
The County Council considers that the different levels of drought and the associated actions are an appropriate traffic light system for citizens and businesses of Hampshire to understand water shortages and the actions that might need to be taken by water companies. The County Council is pleased to note that 'Contact vulnerable customers' is highlighted as an associated action at Level 2. The County Council consider that to be an essential part of the process. Protecting vulnerable people and treating them as a key stakeholder in this process is an important part of safeguarding and protecting Hampshire's vulnerable residents.	Noted.

2. Are the proposed restrictions on using water for households and businesses easy to understand?

Themes and issues raised in representations	**Our consideration of representation**
Easy to understand the restrictions, but not the exceptions.	Our exemptions are outlined in detail in our main draft Drought Plan.
You could mention that Portsmouth has been classified as water stressed recently.	Noted. We do include this in our Drought Plan document.

3. Do you agree with introducing restrictions on using water for households first and businesses afterwards? (To protect jobs and businesses for as long as possible)

Themes and issues raised in representations	**Our consideration of representation**
A business can water ornamental plants but an allotment holder can't water essential food. I think you should apply similar restrictions at the same time for businesses and households – e.g. not using water non-essentially (i.e. will not destroy jobs or businesses). By definition this should not impact the business as it is non-essential.	We carried out dedicated research with customer focus groups in our region, to ensure we heard the views of a wide range of representative customers during the consultation period (Section 4 of this document). Overall, customers have told us that they are willing to reduce their water consumption first to protect businesses and the economy.

	Moreover, such restrictions do not always prevent people from using water for the mentioned purposes, but specifically restricts the use of a hosepipe. This is because hosepipes can use a lot of water very quickly. Using a watering can or a bucket is a much more efficient use of water and this could still be carried out in such instances.

4. Do you agree with the automatic exemptions from restrictions on using water which apply to everyone? (These are agreed by all water companies in the UK)

Themes and issues raised in representations	**Our consideration of representation**
If one household has someone with a blue badge, why should they be able to water their garden or have their car cleaned when their neighbour can't? I understand that vulnerable customers need some exceptions, but they have to be related to need. I would struggle to justify well-watered roses or a clean car as essential for someone with mobility issues or over a certain age.	This is a valid point. We would call upon customers to safeguard our precious water resources and ensure their use and enjoyment of water is in keeping with the restrictions and does not impact unfairly on others. Our aim in imposing restrictions is to ensure a fair and equitable distribution of potable water for all, and protect the environment in the early stages of drought. It is difficult to police these restrictions, and we hope that customers will use water wisely.
We are keen to be involved in discussions when these UK agreed exemptions are next revised and we think all retailers should be.	Noted.

5. Do you agree with all the discretionary exemptions from restrictions on using water? (We agree these for our customers)

Themes and issues raised in representations	**Our consideration of representation**
Couldn't distinguish between these and the automatic ones.	These are included in sections 3.1.3 and 3.1.4 of our draft Drought Plan and more information is included in Appendix E.
<u>Level 1: Promoting water savings</u> The list of water saving measures is considered to be an appropriate set of measures that could be applied across Hampshire. The County Council is pleased to note that the agreed exemptions to these restrictions are in place to help protect vulnerable customers and support businesses and jobs for as long as possible. It is an important element of the recovery from the pandemic that businesses and jobs are provided with the support they require to continue trading. The impacts of droughts on some businesses across rural Hampshire in certain sectors (agricultural, agri-business, leisure, etc.) could	Noted.

have negative impacts on these businesses so the County Council is supportive of the provision of some exemptions at the Level 1 stage as part of the Drought strategy. The County Council also considers that the measures listed which will be allowed in any drought are also appropriate to ensure that vulnerable residents and the health and safety of Hampshire residents alongside the interests of essential business uses are protected and effectively managed. <u>Non-essential use bans</u> Although the list of non-essential use bans is more restrictive than Level 1, the County Council does consider it to be an appropriate set of measures that could be applied across Hampshire subject to the exemptions listed remaining in place to protect Hampshire's vulnerable residents.	
While exemptions for certain circumstances are helpful and essential in some cases, it is also important that customers, both household and non-household, are given early notice of a developing situation, and the possible introduction of restrictions. This will give them an opportunity to plan ahead and possibly mitigate any direct impacts – for example by deferring plans to undertake major landscaping projects or seeking to utilise alternative water supplies or technologies. We feel that there should be more information about what the notice period might be in the consultation/non-technical summary "	Communication plays an essential role in managing drought and is a key aspect to any action we undertake. Since each drought is unique, we will deploy an agile communication plan to inform our customers of a developing drought situation, and will be providing more information as our monitoring indicates changes in our drought status levels and the possible introduction of restrictions. The timings will be affected by the nature of the drought but with our monitoring and triggers in place we will be providing updates and early warning as the drought develops. Furthermore, before implementation of any demand restrictions, we will be holding a 2 week public consultation period with customers and stakeholders to obtain customer feedback and any specific objections.

6. Do you support the need to use the North Arundel Drought Permit in severe droughts to abstract more water to maintain supplies? (Please get in touch if you'd like to read an environment assessment of the impact of using this permit)

Themes and issues raised in representations	**Our consideration of representation**
It would be better to briefly summarise the impact on the environment within the main consultation document, rather than refer customers to another document, which they're unlikely to read. Business customers with leisure services such as water sports and hotels in the affected area will want to know how they're likely to be affected. We could support with consulting our relevant customers directly.	Our main Drought Plan document does include a section that summarise our environmental assessment for our North Arundel drought permit option. This is included in Section 3.2.1.4 Environmental Assessment Summary. The additional document provided with our drought plan was a stakeholder summary to provide an overview and help communicate what is included in our drought plan, rather than intended as the main consultation document.

Yes, however we would like to be assured that this is sensible and precautionary and will not lead to further unintended consequences. The viability of this as being a 'Plan A' will need to be kept under constant review with associate Environmental and Sustainability Due Diligence undertaken through appraisals and impact assessments.	Noted. We have prepared an environmental assessment report for this drought option which we will be submitting as part of the drought permit application. We are continuing to work with the Environment Agency and Natural England on the development and improvement of these assessments as we develop our drought plans.
We would hope that this permit would only be used when absolutely necessary and would look to the Environment Agency to determine this.	In our Drought Plan we state that we would only apply for this permit under a Severe Drought scenario, and we include the associated triggers that we would follow for this. Before we use this option we have to go through a permit application process with the Environment Agency, and must satisfy specific criteria in order to be granted approval.

7. Would you support the introduction of emergency restrictions such as standpipes (water pipes in streets) or rota cuts (where water is only available for a few hours each day) in an emergency to safeguard essential supplies?

Themes and issues raised in representations	**Our consideration of representation**
An 'emergency' and 'essential supplies' would need to be better defined to help our business customers plan, as well as explaining how vulnerable customers would be protected in such circumstances.	In our drought Plan document we define the stage of the drought where our emergency plan would become effective and emergency restrictions such as standpipes or rota cuts would be implemented. This would only be the case if we experience a drought scenario more extreme than 1 in 200 years.
Yes although we would want to be reassured that our most vulnerable residents are supported, and are keen to work with water companies through our Resilience and Emergencies teams. This would be part of our remit as Category One Responders under the duties of the Civil Contingencies Act (CCA) and used alongside our multi Agency Plans via the Sussex Resilience Forum.	In our plan we describe how vulnerable customers will be exempt from certain restrictions and how we aim to be contacting them through the stages of drought progression. We welcome the opportunity to work with West Sussex County Council more closely on this.
The County Council does not oppose the introduction of emergency measures such as standpipes or rota cuts in an emergency, as long as the impacts of those actions do not negatively impact the County Council's ability to continue to provide key services to vulnerable residents of Hampshire during a period of severe drought when emergency measures are considered to be essential as per the drought strategy. Hampshire County Council as the local highway authority will also need to be satisfied that any emergency restrictions such as standpipes do not restrict the safe operation of the public highway and so consultation and coordination will be required by the water companies with the local highway authority should emergency restrictions be required.	Noted. We have included a paragraph in Section 4.1.3 of our revised draft plan to explain that we would liaise with Hampshire County Council as the local highway authority to ensure that they are satisfied that any emergency restrictions such as standpipes do not restrict the safe operation of the public highway, should the drought reach those levels.

It is not acceptable to rely on emergency measures to manage a drought situation. Companies should plan to avoid the need to resort to these measures. That said, it is important that companies consider worst possible case scenarios and therefore have plans to deal with these situations if they were to occur	Noted. Our emergency plan will only be instigated if we experience an extreme drought more severe than 1 in 200 years. We are also working with other water companies in the region, to develop a set of actions, that would be implemented during extreme drought, with the aim to delay the implementation of the Emergency Plan, these are included in section 3.4 of our draft Drought Plan.

8. Would you be willing to significantly reduce your water use to 50-80 litres of water each day in order to avoid standpipes or rota cuts?

Themes and issues raised in representations	**Our consideration of representation**
This question is probably directed at household customers (many of whom will not know how this compares to 'normal' usage). It might be better to ask whether customers would be willing to halve their usual water use). This question could also be asked of many non-household customers. However, for a water-dependent business like a car wash, farm or manufacturer halving their output would be difficult. If the question does not apply to water dependent non-household customers, then this should be made clear.	During our public consultation period, we carried out dedicated research with different customer focus groups in our region and following feedback, we will be including more information and clarity in our communication plan around what 'normal' water use is and what 50-80 litres per day looks and feels like. This restriction mainly relates to household customers, however, we will be asking non-household customers to reduce their consumption in a drought scenario, through the ban on Non Essential Use.
This step would require careful messaging to our residents and we would want to ensure our most vulnerable residents are fully supported, again taking a risk based decision.	Noted. In our plan we describe how vulnerable customers will be exempt from certain restrictions and how we aim to be contacting them through the stages of drought progression.
We recognise the reasons why it may be necessary to ask customers to reduce their water use to this level. The company will need to ensure that it has a good communications strategy, and offers practical support to customers, if it wants customers to respond effectively to the request. For example, most people don't know how much water they currently use so would find it difficult to answer this question with any certainty. Customers would probably find it helpful to be told what 50 litres equates to, in relation to normal levels of usage, in order for them to answer this question. It will be important for companies to start communicating with consumers as soon as the water resource situation reaches a stage where such a request is likely to be made, if not sooner.	Noted. We will be including more information and clarity in our communications during drought around what 'normal' water use is and what 50-80 litres per day looks and feels like.

9. Do you think we have got the right balance between reducing demand for water, using the drought permit to produce more water and protecting the environment?

Themes and issues raised in representations	Our consideration of representation
Water consumption is essentially consumption of carbon, infrastructure materials and chemicals so we support the need to reduce demand as part of the solution to droughts rather than exclusively looking to supply side solutions. There is evidence that most non-household customers support this, although many often prefer prevention to cure when it comes to resilience, and water providers should be cautious about placing too much expectation on customer behaviour change – which we ultimately cannot guarantee. There is no mention of other options that can be considered, such as water trading between UK regions, and why these have not been included.	Noted. The feedback from our customer insight work also shows that customers are predominantly accepting of the proposed restrictions and understand the need for them. We will continue to also promote water efficiency through our messaging outside of drought situations. Long term options to increase the resilience of supply, such as water trading between regions are considered in our water resources management plans, whilst the Drought Plan is an operational and tactical plan.
We do consider that Portsmouth Water has got the right balance between reducing demand for water, using the drought permit to produce more water and protecting the environment, however there are still significant challenges to reducing water demand in society at large and achieving that water use reduction (avoiding Level 2 and beyond) will require a great deal of engagement and behaviour management to reduce water use per household and indeed by businesses.	Noted. Communication plays an essential role in managing drought situations. Throughout the drought, we will monitor the effectiveness of our communications and assess the impact of each action we take before applying further measures. We also recognise the importance of changing behaviours and we will continue to promote water efficiency through our campaigns and messaging outside of drought situations.

10. What do you think is the best way to tell customers about a drought and restrictions? (Please choose top three)

Themes and issues raised in representations	Our consideration of representation
As a national, independent (unassociated) water retailer, we have a close relationship with our business customers and promote water efficiency behaviours, services and devices to them. We are willing to coordinate communication with our customers on proactively improving their resilience to drought and how they can minimise the need for restrictions and reduce the impact on their business. In a drought situation, we would expect wholesalers to play more of a role in communicating with customers, although where possible we would like them to do this jointly with us as the customer's primary point of contact.	Noted. We will be formally notifying all our retailers operating in our area of any change in our drought status levels and will be providing them with all the communications we send our customers. Working with Retailers in particular there is an opportunity to influence large commercial users of water alongside our household customers. This information is included in section 4.3.1 of our draft Drought Plan.
We like the approach taken last summer, when you emailed customers in very specific supply zones to ask them to help conserve water. This targeted and timely ask we understand was very effective. Using trusted partners such as the County Council to reach as many residents as possible is also important to consider, and being aware that social media isn't appropriate for all. Water Resources should be an all year round message or 'alert level' communicated with respect to climate change adaptation and resilience.	Noted and we would be happy to work with the County Council in the future, to ensure wider reach of our messaging. We agree that social media is not appropriate for all and we are planning to employ a wide range of communication methods in order to reach different groups.

The County Council would encourage publicity and awareness campaigns across all channels regarding droughts and potential restrictions. This should include public information campaigns across social media platforms and traditional media (TV and radio advertising; poster campaigns in public spaces and on buses alongside postal drops, public events, and roadshows) so that all sections of society are captured including Hampshire's most vulnerable residents.	Agreed. We will be taking into account all the feedback received to ensure our communication activities and methods are appropriate and effective.

APPENDIX E. EXCEPTIONAL SHORTAGE OF RAINFALL CASE

This appendix presents the Exceptional Shortage of Rainfall case report. This report is currently presented as a template, [xxxxx] indicates non-generic text that needs to be amended with relevance to the specific ESoR analysis. This type of analysis will be used in the event of a drought when there is a need for a drought permit application as part of the Statement of Needs. The 1976 drought is used as an example to show the type of analysis that will be carried out and how it will be presented.

1. Introduction

Portsmouth water has undertaken an exceptional shortage of rainfall (ESoR) assessment as evidence of the need for a drought permit for [xxxxxxx]. The evidence and case put forward for the ESoR has been conducted under Environment Agency guidance[1]. Given that there is no prescriptive method or set definition for assessing an ESoR, this document outlines:

- The period and duration of relevant metrics for ESoR analyses
- The range of methodologies employed for analyses
- Presentation of analyses, defining the current drought period relative to previous droughts and long-term average (LTA) conditions by evaluating:
  - Percentage deviation from LTA across relevant drought metrics
  - Ranking and graphical representation of return periods for relevant drought metrics and Standard Precipitation Indices (SPI)
  - Graphical representation of cumulative rainfall and cumulative rainfall deficit

2. Assessment

2.1. Rainfall data

For the ESoR assessment, Portsmouth Water have used HadUK aerial rainfall for Portsmouth Water's water resource zone (WRZ), supplied by Defra as per Environment Agency requirements. As Portsmouth Water have only one WRZ, this represents one geographical area (see section 2.3 for geographical extent of analysis). Use of aerial rainfall provides an advantage over individual rain gauge datasets as uncertainty associated with individual gauges is reduced.

The case for ESoR is made for the period of xxxx to xxxx [*To prevent a delay in the application, the end can be extended by quantitative weather forecast data up to 15 days ahead to enable a full month to be analysed*]. The start date corresponds with when the rainfall deficit begins to impact upon the water resource situation, as is demonstrated in subsequent analysis in section 2.4. The end date stated is the date of drought permit application, when drought triggers within the Drought Plan have been crossed. The period of analysis has been agreed upon with the Environment Agency hydrologist, the Area Drought Coordinator and water company lead (OCS) prior to analysis, and is shown on Figure 2-1, including the period of record 1891 to present day [*Confirm action has been taken*]. Long term average (LTA) precipitation values and drought metrics have been determined using the period of 1891 to present day (specify end date).

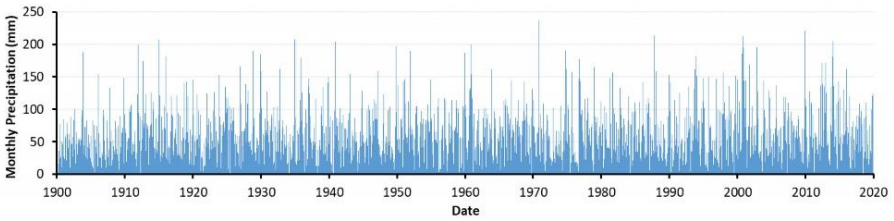


Figure 2-1 - Monthly rainfall data used within ESOR analysis 1891-2019.

[1] Environment Agency, March 2021. Drought permits and drought orders. Supplementary guidance from the Environment Agency and Department of Environment, Food and Rural Affairs

Update the rainfall plot to include most recent rainfall and since 1891 or selected period of analysis

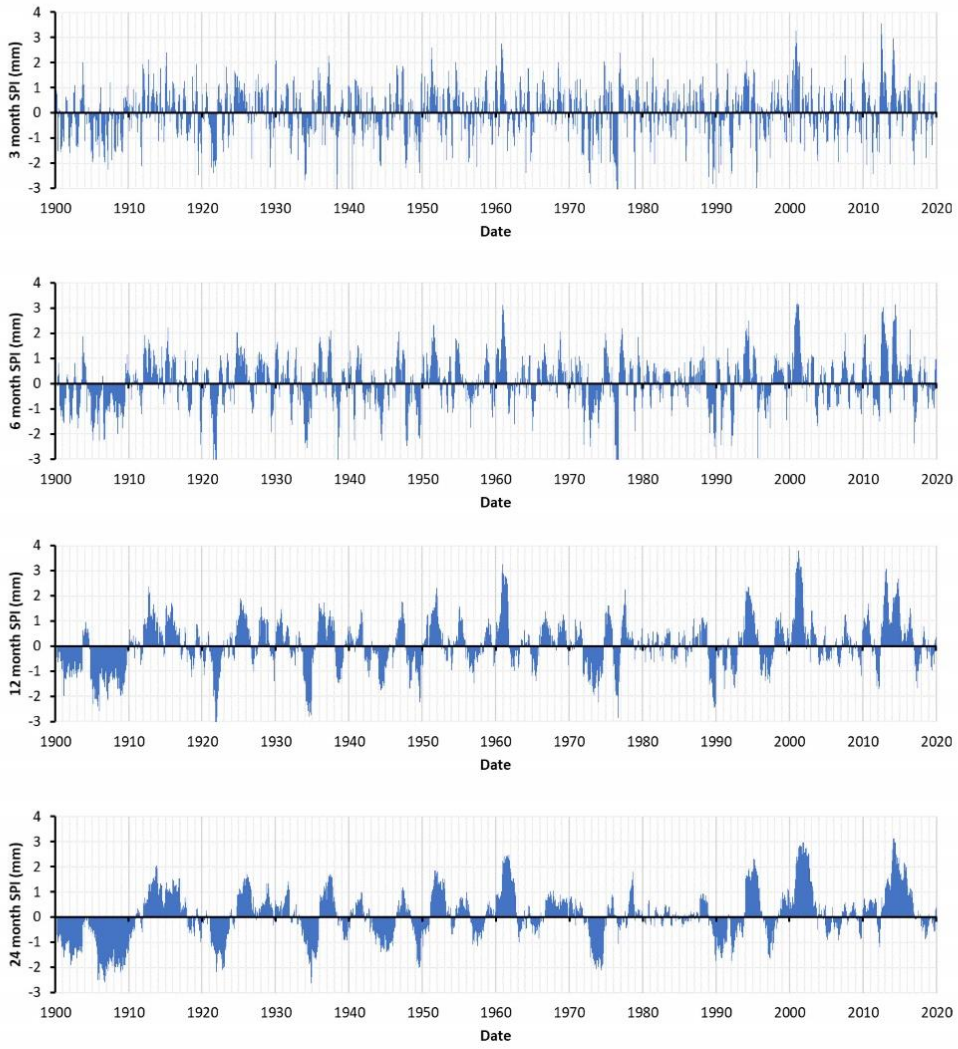


Figure 2-2 - Monthly rainfall SPI data (calculated over 3 months, 6 months, 12 months and 24 months) used within ESOR analysis 1891-2019.

Update SPI rainfall plot to include most recent data

2.2. Geographical extent of analysis

The ESoR assessment has been conducted for the area of Portsmouth Water's water resource zone (WRZ; Figure 2-3). As our only WRZ, the assessment aligns with our catchment and supply area.

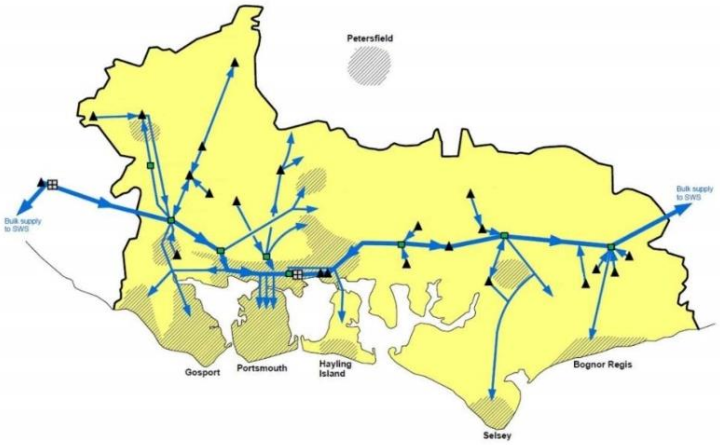


Figure 2-3 - Map of Portsmouth Water Strategic Water Resource Zone and the area of analysis for ESoR.

2.3. Technical rainfall analysis methods

The assessment completed by Portsmouth Water uses the following technical analysis methods outlined in Table 2-1.

We have employed methods of analysis proposed by the EA including ranking of droughts, graphical representation of cumulative rainfall and deviations from the long-term average (LTA). We include SPI metrics for 3 months, 6 months, 12 months and 24 months, and have also defined a range of drought metrics based upon different lengths (3 months up to 36 months) and seasonal focus (targeting winter drought or summer drought). As the ESoR identifies a shortage of rainfall over the period of xxxx to xxxx, the relevant metrics for this period of interest are xxxx and xxxx (e.g. winter drought 3 month end 12, 6 month end 3, SPI3). It is important to report upon appropriate drought metrics as drought conditions can transpire over different periodicities and intensities. The selected drought metrics of xxxx and xxxx for this ESoR associated with the period of analysis have been agreed upon with the EA, prior to commencing this analysis [*confirm this action has been taken*].

Table 2-1. Methods and input data for exceptional shortage of rainfall technical analysis

Method	Data/ Drought Metric/ Index	Rationale for analysis
Percentage deviation from the long-term average (LTA) rainfall	*[Amend to selected metric and omit/add other metrics as relevant]* 3 month, end 12 precipitation drought metric (LTA calculated from 1891 to 2021) (other options explored: 12 month, end 12;	Simple method for comparing current rainfall against expected rainfall. Method is insufficient evidence for ESoR if used in isolation. EA recommended LTA for standard periods of: 1961-1990[2] 1971-2000 1981-2010 And full record period of 1981-present day Probability ranking of rainfall can then be applied to determine whether current conditions are exceptionally

[2] Baseline used by EA

	12 month, end 9; 6 month, end 9; 18 month, end 9; 24 month, end 12; 36 month, end 12)	low, notably low, below normal, normal or above normal based on percentage thresholds, as an essential component of the ESoR analysis.
Cumulative rainfall plots, highlighting 3 driest years and the period of interest	Monthly rainfall for 6 month period (July to Dec) across all years (1891 to 2021)	Extension of percentage deviation from LTA method, visualisation of the cumulative deviation through time and evidencing the initiation and ending of the drought period.
Rainfall ranking and return periods	3 month, end 12 precipitation drought metric (other options explored as indicated above)	Ranking method used by EA - compares the current dry period against the historic record to understand the severity of the event by determining how many years were drier since 1891. Requires hydrological justification for period used. Return period, event probability or 'frequency analysis' not essential component of ESoR and requires robust analysis and fitting to a statistical distrubition, but return period plots using a cumulative distribution function provide a visualisation of event ranking.
Rainfall ranking and return periods	SPI (3 month, 6 month, 12 month, and 24 month) across all years (1891 to 2021)	Internationally recognised method and statistical indicator for cumulative rainfall deviation from the climatological average, recommended by EA for use in ESoR. Requires hydrological justification for period used.
Groundwater levels compared against historical drought years	Groundwater levels timeseries	Important for Portsmouth Water as public water supply sources are all groundwater based and with no significant raw water storage. Recharge of groundwater over the winter period is therefore very important.

2.3.1. Cumulative rainfall plots

Cumulative rainfall over 24 months indicates deviation from the LTA (1891-2019) in January 1976, with increasing departure until September 1976 (Figure 2-4). This is the recommended and agreed upon period of analysis for this ESoR.

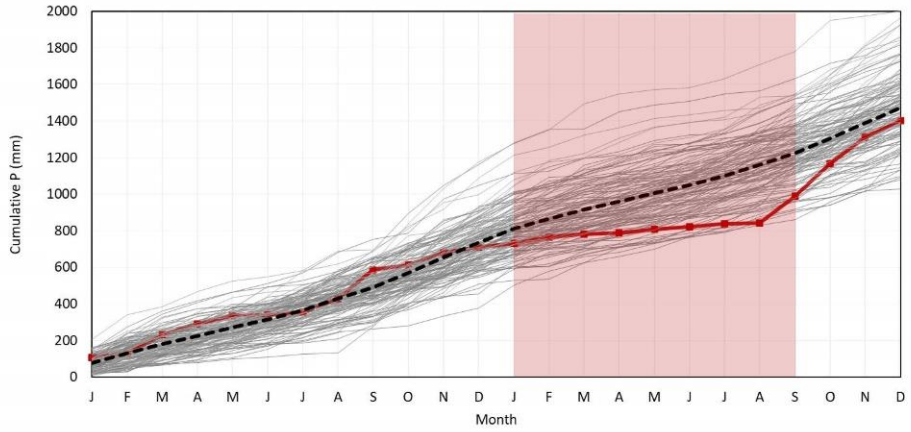


Figure 2-4 - 24 month cumulative rainfall plot. Black dashed line signifies the LTA, the red line indicates the period of interest. The red box delineates the period of analysis, as inferred from this figure.

2.3.2. SPI

SPI values calculated relative to 3 month, 6 month, 12 month and 24 month climatological averages indicate extremely dry conditions (< -2) for the period of xxx to xxxx for SPI3, xxx to xxxx for SPI3, and xxx to xxxx for SPI12 (Figure 2-5).

Ranking of SPI6 metrics indicates that the 3 driest SPI values on record occurred within the period of analysis (June to August 1976, Figure 2-6, Table 2-2). This includes an extremely dry SPI6 value of -4.36 in August 1976.

[*Add more details if necessary*]

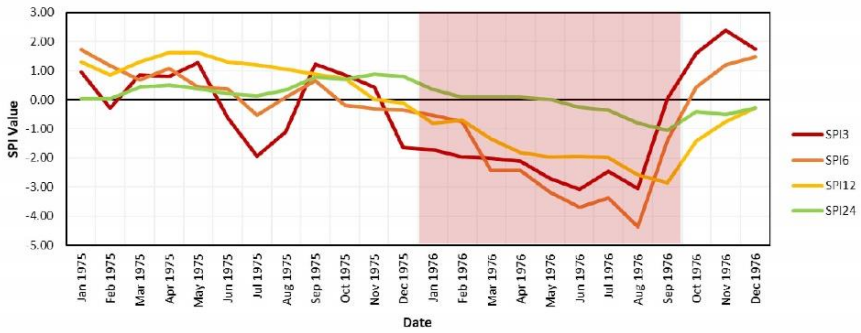


Figure 2-5 – SPI timeseries plot for the period of interest. The red box delineates the period of analysis, as inferred from this figure and previous analyses (Figure 2-4).

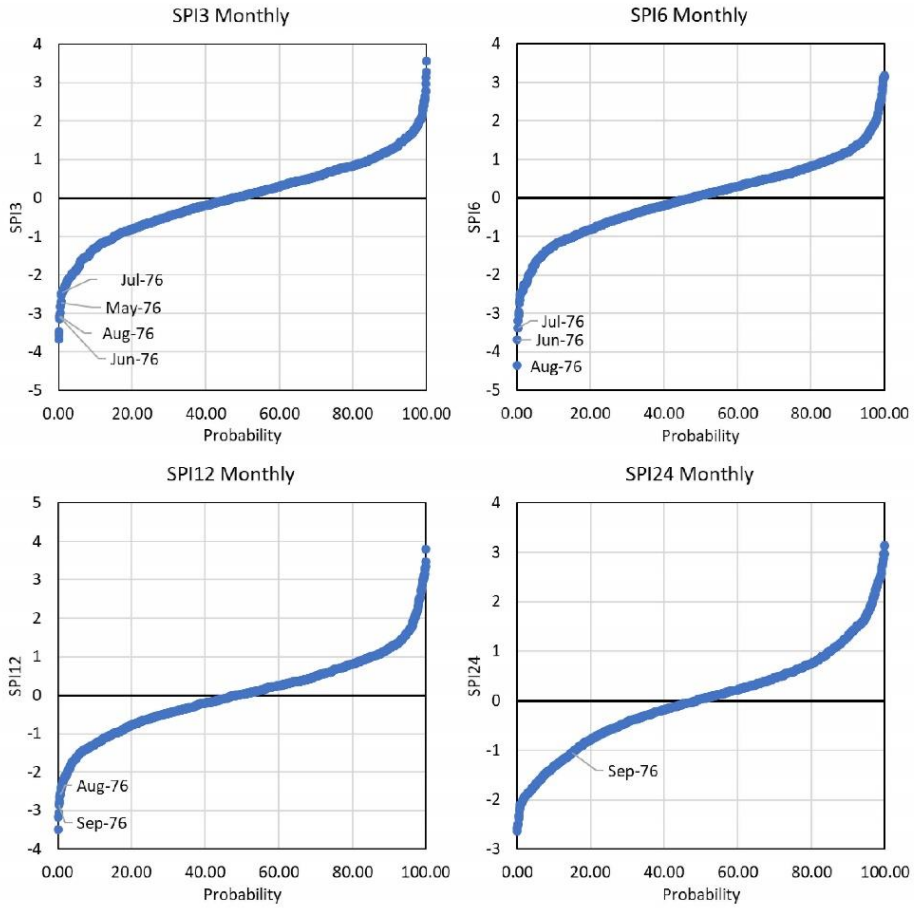


Figure 2-6 – Ranking of SPI values for 3, 6, 12 and 24 month SPI metrics. The period of analysis (1976) is labelled within each plot, and associated ranks and values are reported in Table 2-2 with the top 10 driest events.

Table 2-2. Top 10 ranked SPI metrics. Values occurring within the period of analysis are highlighted in red. Where the period of analysis does not rank within the top 10, the highest rank for that period is given.

Rank /1548 Months	SPI3		SPI6		SPI12		SPI24	
	Year	Value	Year	Value	Year	Value	Year	Value
1	Apr 1938	-3.66	**Aug 1976**	**-4.36**	Dec 1921	-3.49	Oct 1934	-2.63
2	Nov 1978	-3.55	**Jun 1976**	**-3.69**	Oct 1921	-3.16	Sep 1906	-2.57
3	May 3793	-3.47	**Jul 1976**	**-3.37**	Nov 1921	-3.06	Dec 1905	-2.51
4	Jun 1940	-3.14	Jul 1921	-3.37	**Sep 1976**	**-2.85**	Aug 1906	-2.50

5	Jun 1976	-3.08	Oct 1921	-3.19	Jan 1922	-2.83	Oct 1905	-2.49
6	Aug 1976	-3.07	May 1976	-3.18	Jul 1934	-2.80	Nov 1934	-2.38
7	Jun 1995	-2.98	Nov 1921	-3.06	Oct 1934	-2.74	Oct 1906	-2.33
8	Oct 1972	-2.83	Jul 1938	-3.02	Sep 1934	-2.65	Jul 1906	-2.31
9	Jul 1989	-2.81	Aug 1995	-2.96	Aug 1976	-2.59	Nov 1905	-2.23
10	May 1976	-2.72	Feb 3791	-2.74	Jun 1934	-2.59	Feb 1908	-2.21
231	-	-	-	-	-	-	Sep 1976	-1.05

2.3.3. Deviation from long term average (LTA)

[Amend/add more detail as necessary]

Monthly rainfall expressed as a percentage of the LTA (Figure 2-7) indicates extremely low (<65% of LTA) from October 1975 to August 1976, with below normal (<90% of LTA) rainfall in November 1975. The period of analysis concludes with above normal rainfall in September 1976.

Consideration of a suite of drought metrics, calculated over a range of durations and starting dates emphasises the impact of the temporal distribution of rainfall on drought conditions, and demonstrates the importance of selecting appropriate metrics for ESoR analysis (Figure 2-8). Short drought metrics (12 months and 9 months) that conclude at the end of the period of analysis (September 1976) indicate extremely low rainfall, at xx% of LTA for 12end9 and xx% for 9end9. These selected metrics are important for the water resources management of Portsmouth water because [*add justification for metrics. i.e. they haven't been selected because they make the best case for the ESoR, but because they are important for water resource management because*]and have been considered in further detail in section 2.3.4.

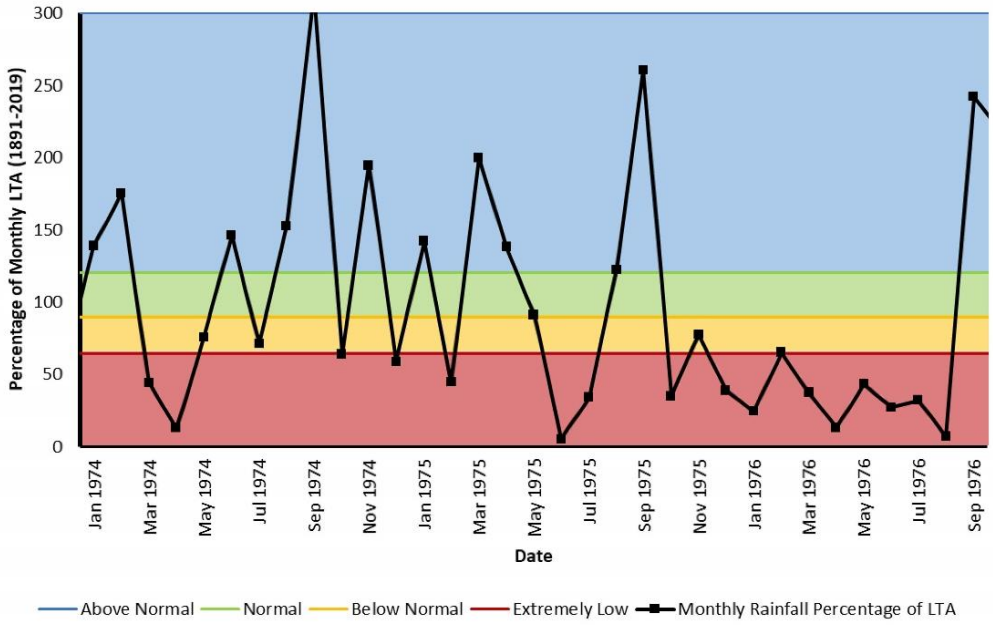


Figure 2-7 – Timeseries of monthly rainfall expressed as a percentage of monthly LTA (1891-2019). Values are then classified as above normal (>120%), normal (90-120%), below normal (65-90%) and extremely low (<65%).

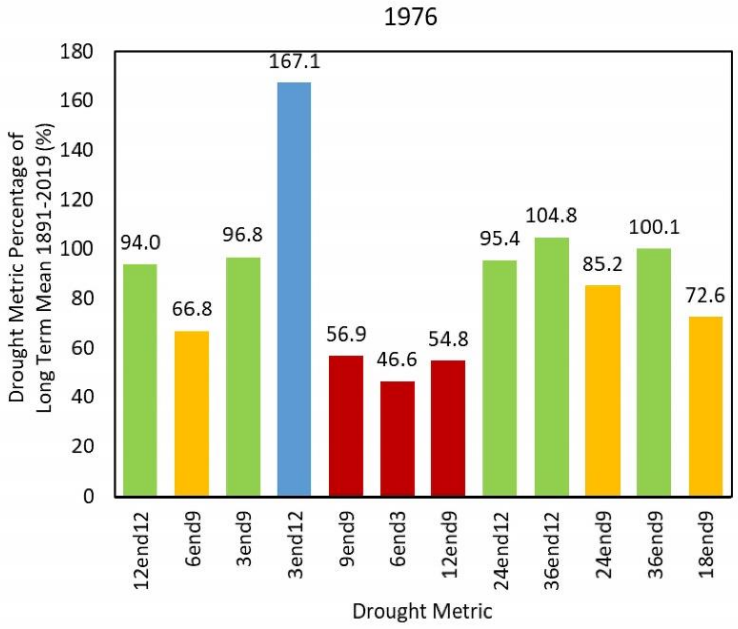


Figure 2-8 – Drought metric values as a percentage of LTA (1891-2019) for the period of analysis. Values are then classified as above normal (blue, >120%), normal (green, 90-120%), below normal (yellow, 65-90%) and extremely low (red, <65%). A full suite of metrics are presented to indicate the relevance of specific metrics due to the temporal distribution of rainfall.

2.3.4. Ranking of drought metrics

Ranking of relevant drought metrics indicates that the event within the period of analysis ranked first within the historic record for 12end9 and second for 9end9. This represents 55% and 57% of LTA respectively, equating to xxx mm deficit of rainfall or the period of January to September 1976.

Amend/add more detail as necessary.

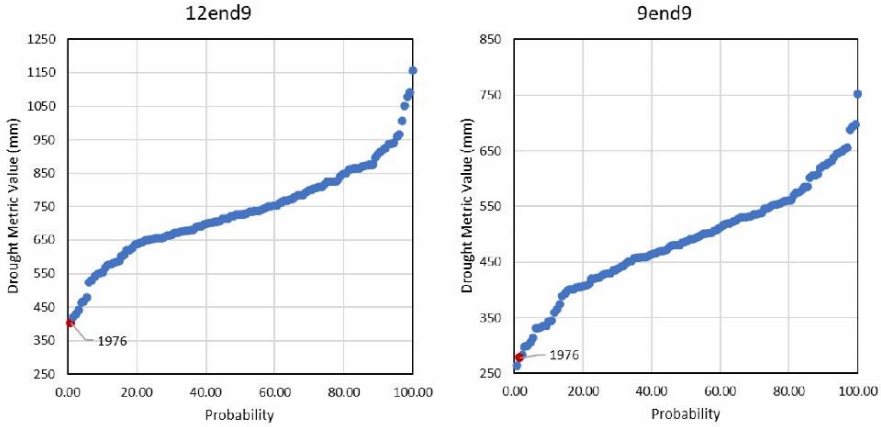


Figure 2-9 – Ranking of drought metric values for 12 months, end 9 and 9 months, end 9. The period of analysis (1976) is labelled within each plot, and associated ranks and values are reported in Table 2-3 with the top 10 driest events.

Table 2-3. Top 10 ranked drought metrics. Values occurring within the period of analysis are highlighted in red.

Rank /129 Years	12end9				9end9			
	Year	Drought Metric Value (mm)	Percentage of LTA 1891-2019	Percentage of LTA 1961-1990	Year	Drought Metric Value (mm)	Percentage of LTA 1891-2019	Percentage of LTA 1961-1990
1	**1976**	402.6	54.81	55.35	**1921**	264.4	54.13	54.06
2	**1934**	421.84	57.43	57.99	**1976**	277.7	56.85	56.78
3	**1898**	430.77	58.65	59.22	**1949**	282.91	57.92	57.85
4	**1989**	440.5	59.97	60.56	**1898**	296.91	60.79	60.71
5	**1921**	464.55	63.25	63.86	**1929**	299.71	61.36	61.28
6	**1905**	467.1	63.60	64.22	**1938**	305.77	62.60	62.52
7	**1949**	479.5	65.28	65.92	**1989**	313.4	64.16	64.08
8	**1906**	524.26	71.38	72.07	**1907**	330.45	67.65	67.57
9	**1944**	530.31	72.20	72.91	**1944**	330.93	67.75	67.67
10	**1938**	541.98	73.79	74.51	**2003**	332.5	68.07	67.99
LTA	-	-	734 mm	727 mm	-	-	488 mm	489 mm

2.4. Other meteorological and hydrometric measures

2.4.1. Groundwater levels

[*Add text discussing groundwater levels*]

[*Insert a figure of groundwater levels*]

Figure 2-10 – Timeseries of groundwater levels for the period of analysis in comparison to top 5 driest events.

3. Summary and conclusions

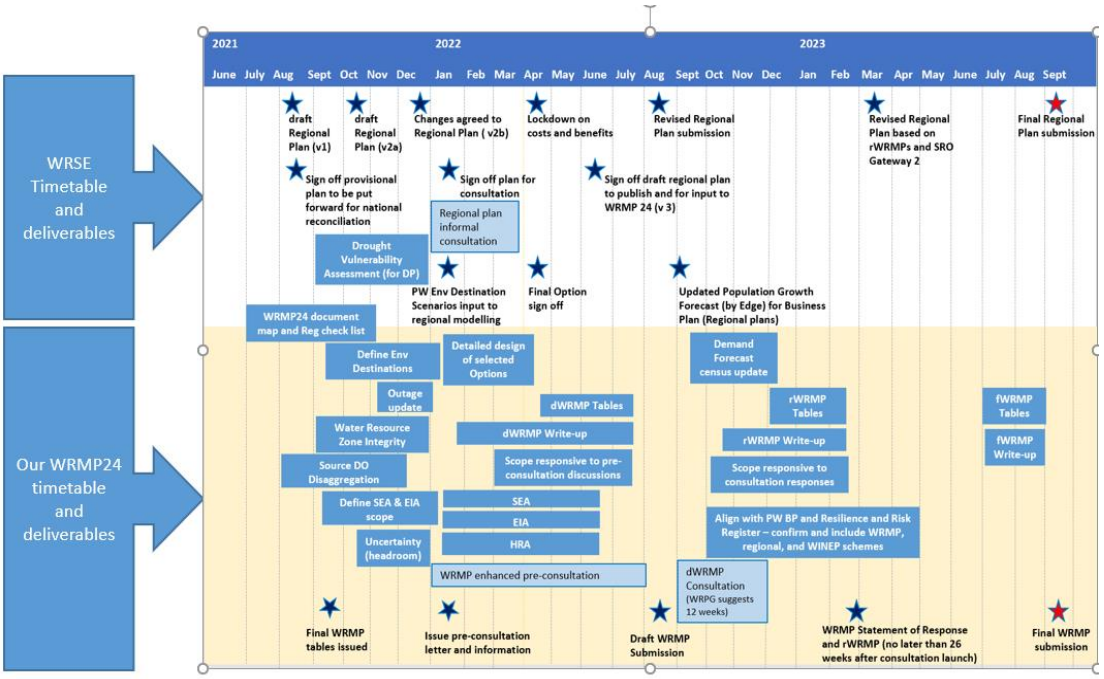
The analysis within this report employs a range of methodologies to evidence the ESoR and the need for the xxxxxx drought permit. We conclude that an exceptional shortage of rainfall occurred within the period of xxx to xxxx based upon the following evidence:

- Cumulative rainfall plots indicate that a deviation from the LTA begins in xxxx, and trends towards the LTA in xxxx, which has been used as the period of analysis for this ESoR. This cooccurs with very dry SPI values (<-2, [*indicate a metric*]) from xxxx to xxxx.
- Ranking of SPI metrics indicates that 3 months within the period of interest are within the top 10 driest events for SPI3 and top 3 driest events for SPI6 out of a record with a length of 1548 months. This includes an extremely dry SPI6 value of -4.36 in August 1976.
- Expressing monthly rainfall as a percentage of the LTA indicates predominantly exceptionally low (<65% of LTA) from October 1975 to August 1976, with below normal rainfall in November 1975.
- Twelve monthly of cumulative rainfall, concluding in September 1976 represents 54.8% of LTA and is ranked the driest event on record (1981-2019).
- Groundwater levels are ranked xxx in the historic record of xxxx to xxxx.

[Amend/add more detail as necessary]

APPENDIX F. PROGRAMME OF WORKS

F.1. WRSE and our WRMP24 programme of works*



**subject to change as the programme progresses*

F.2. Itchen Drought Order indicative programme of works

Tasks	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
Collate data					
Model set up					
System simulation modelling					
Assess timings and frequency of permit/order applications and assess implications for levels of service for both SWS and PW					
Reporting					

APPENDIX G. CUSTOMER ENGAGEMENT AND RESEARCH MATERIALS

G.1. Future customers and youth groups

This section presents the summary of findings for the Portsmouth Water Youth Drought Plan Feedback session (10 page document supplied by Britain Thinks).

The following slide pack (40 slides) contains the debrief of the methodology and key findings of Britain Thinks, Insight and Strategy: Southern Water and Portsmouth Water Drought Plan Youth Feedback (July 2021).

Portsmouth Water | Youth Drought Plan Feedback

Summary of findings | 21st July 2021

Background and methodology

Southern Water and Portsmouth Water commissioned a joint study to understand young people's views on their Drought Plans. This work is part of BritainThinks' and Southern Water's long-term deliberative research programme with young people in the South East to understand their views and needs in relation to the water industry as future customers.

Key questions for the research to answer in relation to Portsmouth Water's Drought Plan were:

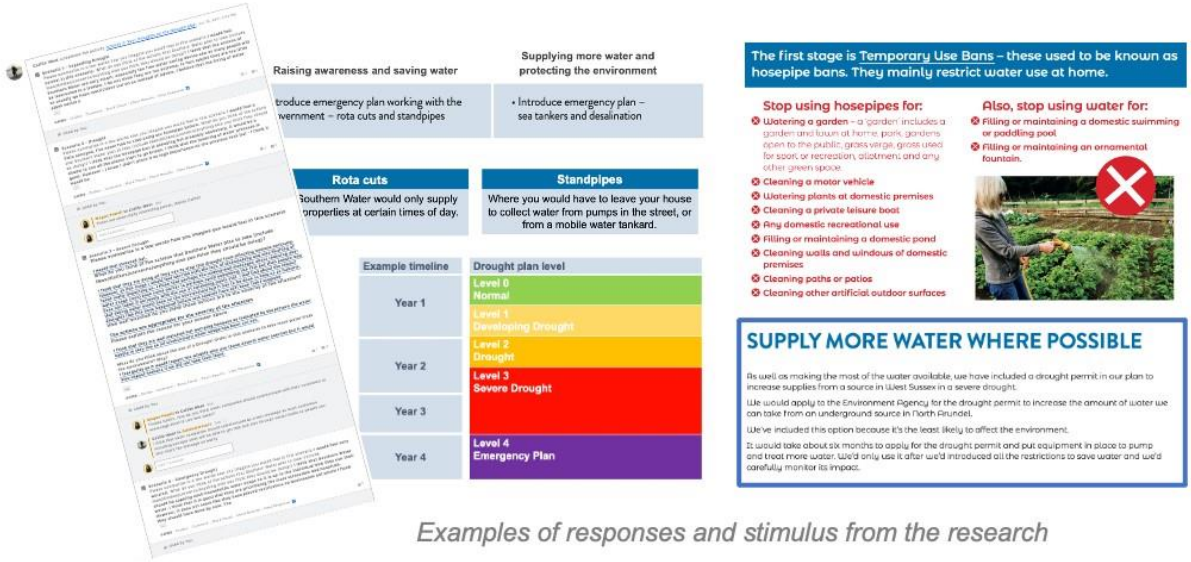
- How well thought through does the plan seem to young people?
- Are the different stages easy to comprehend and do they resonate with young people?
- How appropriate do the different stages of action feel?
- What is the best way of communicating the plan to young people?

A total of 10 young people from Portsmouth Water's service area and 36 young people from Southern Water's service area took part. Participants were split into three cohorts:

- **Super Future Customers** aged 14-15 years old, who are still in compulsory education and living with a parent/guardian;
- **Future Customers** aged 16-21 years old, who are not yet fully responsible for bill paying;
- **First Time Customers** aged 22-30 years old, who have just embarked on independent life.

This note outlines summary findings from the following engagements:

- **1-week online community** ○ *Fieldwork dates: 9th – 16th June 2021*
- **Mini focus group** ○ *Fieldwork date: 14th July 2021*



Examples of responses and stimulus from the research

Please note: The findings across the Southern Water and Portsmouth Water young people were largely consistent. Where this is not the case and there is nuance in the Portsmouth Water participant findings (e.g., responses to the Portsmouth Water drought plan), we will call this out directly. Otherwise, the note will contextualise the Portsmouth Water participant findings in the broader context of the Southern Water participants, as agreed with Portsmouth Water stakeholders.

Summary of findings

Overarching context

- **Young people generally have some basic knowledge of the water cycle which they have gained through their education, however there is an opportunity to expand their understanding of the water industry and inspire engagement.**
    - Knowledge of the water industry prior to the research was usually centred on the water cycle, however knowledge of specific concepts such as water sources or wastewater was limited. ○ The extent to which water companies are responsible for environmental protection was a surprise, with participants feeling more positive about the water industry as a whole after learning this.

"The information about protecting the environment is new to me and makes me view water companies in a more positive light." (First Time Customer)

- **Experiences of Covid-19 act as a reference point for young people's responses to crises and is the lens through which droughts are understood. This means there is an expectation for water companies to act quickly and decisively, if a serious problem occurs that's in their remit.**
    - Young people expected the government to step in during a drought emergency to inform the public, impress the gravity of the situation on them, and impose bans (and potentially even laws) to restrict behaviours.
    - They also expected the government to have the resources to protect incomes dependent on water, such as car wash business employees through a furlough scheme.

- The pandemic has also set expectations in terms of the extent to which authorities (including water companies) have the right to curb their freedoms to minimise the impacts of a crisis, with young people demonstrating a willingness to drastically limit their lifestyles.

"With the Covid-19 pandemic, people have shown the ability to change, and I think that if the situation required it, changes to our water use would be okay." (Future Customer)

Knowledge and awareness of droughts

- **Droughts are not a top-of-mind concern and are poorly understood amongst young people; there is therefore a need to educate them on this as a starting point for engaging with the drought plan.**
  - Both groups felt that those most impacted by droughts were distant from themselves/the UK, including people in hotter, less developed countries, in remote areas, farmers, and people living in poverty.
  - There was a lack of understanding about droughts overall and young people were not aware that:
    - Dry winters are the main cause of drought.
    - Rivers in the UK were at risk of drying up.
    - Droughts in the UK could have far-reaching consequences e.g., on food supply chains.
  - Without this contextual knowledge there is a risk that problems with water supply could be seen as the fault of water company mismanagement, although this isn't a top-of-mind view.
  - The word "drought" primes associations with extreme drought conditions, thus earlier phases of drought are not being considered when drought is spoken about.

"[Words associated with drought] Disaster, disruption, out of control, lack of water, problem." (First Time Customer)

"England isn't a country that I associate with drought as we're known for being rainy! I was surprised to see how widespread the effects of drought can be." (Super Future Customer)

- **Their misperception of what drought would look like in the UK means they are unprepared for the reality of how it would impact their lives.**
  - Young people had a narrow view of what water companies might have to do in different drought stages:
    - In preparation for drought, the only pre-emptive top-of-mind action was to store water for emergencies.
    - In times of drought, there was slightly better understanding, with suggestions of collaborating with councils, providing education, rationing water, reducing water pressure, and the use of water meters.
  - Similarly, they were unsure of what might be required of them in these scenarios and which actions would have the greatest impact.

"Water companies might reduce the amount of water it takes to flush a toilet and also reduce the amount of water they use in their water treatment facilities. They might

also reduce the water pressure to stop so much water being used." (Super Future Customer)

- **Encouragingly, young people showed a willingness to adopt necessary behaviours in times of drought, but would need clear instruction on what those behaviours are.**
  - Young people were happy to take action to help with the drought and to protect the environment where possible.
  - They showed a willingness to adopt general water saving behaviours such as having shorter showers, as well as frugal habits such as using washing up water for gardens.

Feedback on the Drought Plan

In the online community and in the focus groups, participants were introduced to the Drought Plan, including being shown information about Southern & Portsmouth Water's proposed actions when a drought starts and to protect the environment, and proposed restrictions and exemptions for households and businesses.

- **Overall, the Portsmouth Water plan was received positively and helps to reassure customers that droughts will be well managed should they occur.** ○ The drought plan was easily understood due to its concise language and clear visualisation of the drought stages.
  - Portsmouth Water is felt to act with the appropriate level of severity to manage each situation. However, there were some questions around whether actions were taken soon enough to safeguard the environment (e.g., some preferred bringing in restrictions earlier to delay the need for Drought Permits or Orders).
  - Overall, the actions outlined in the plan were considered fair. In particular, the inclusion of exemptions was seen as important to ensure fair access to water in severe and emergency drought situations. ○ The value of preventative action (e.g., reducing water pressure at Level 1) was increasingly appreciated as they learned about all four levels.

- **Young people are reassured by many elements of the plan, however, there were some areas that caused confusion and require further clarification in order to drive acceptance:**
  - Portsmouth Water's Priority Service Register was a reassuring support service to have in place to ensure fair access to water, but overall, it is unclear how vulnerable people would be supported throughout a drought. ○ 'Monitoring the environment' is viewed positively but further detail is needed to reassure young people that Portsmouth Water are doing everything possible to protect it.
  - The use of sea tankers is useful in demonstrating the variety of ways in which Portsmouth Water would try to increase the water supply, but young people are unsure of what these are or what this would entail practically.
  - The rationale behind imposing restrictions on businesses before customers was not explained, and so young people were unsure how appropriate this is, but could see that there are two sides to the argument.

- **Whilst measures are generally accepted, there is some hesitation around more extreme measures, particularly if they could be avoided through earlier action.**
    - For young people, Drought Permits and Orders raise an uncomfortable dilemma between providing people with a vital resource, and damaging the environment.
    - Ultimately, they do understand and accept that Drought Permits and Orders are appropriate, but they would prefer that these are used as a last resort to ensure that they are used fairly with regards to the environment.
    - They would prefer to significantly reduce their water consumption before emergency measures are introduced.

There were some restrictions that jarred with young people and were deemed unfair, whereas others felt more important than how the plan currently positions them.

Actions for households	Actions for businesses
Water uses that feel it would be <u>fair</u> to permit	
Preserving life Watering vegetables. Filling ponds with life, e.g., fish.	**Preserve incomes and community wellbeing** • Preserving the livelihood of businesses dependent on water – through allowing them to operate or protecting incomes. • Maintaining public swimming pools or parks for public wellbeing. • Distinguishing between essential and nonessential businesses through a tiered system.
Water uses that feel it would be <u>unfair</u> to permit	
Recreational uses of water • Filling a swimming pool or fountain.	**Cleaning for aesthetic reasons** • Cleaning graffiti unless offensive. • Cleaning windows and exterior parts of buildings.

"I think unless there is a danger to animals or people (such as not maintaining ponds) then it's fair to expect households to do their part or change the way they do things during a dry period." (Super Future Customer)

- **The Portsmouth Water plan gives additional contextual information that aids with comprehension of the plan overall.**
    - The timeline is a useful indication of how long it takes for a drought to develop.
    - The timings for applying for a Drought Permit make it easier to understand why this happens fairly early on.

- The location of the new sites for extracting water was information that Southern Water participants felt was missing from their plan; however, North Arundel was not a meaningful location for this group.

"I was surprised it would be that long. I thought it would get more extreme sooner." (First Time Customer)

Preferences for communicating the Drought Plan

- **There are key principles for Portsmouth Water to have in mind when communicating with young people about droughts:**
  1. **Clarity** – a clear explanation of the different measures and exemptions so that the rationale is understood, while informing customers of the broader context of the drought.
  2. **Equal culpability** – demonstrating that Portsmouth Water is also working hard behind the scenes, and that businesses as well as customers will be expected to reduce their water consumption.
  3. **Timeliness** – young people would rather know sooner so that they can begin to adjust their behaviours, and potentially prevent the situation from worsening.
  4. **Tangibility** – young people would like to know precisely the impact of the drought, of their adherence to restrictions, the potential impact on the environment, and how long the situation is likely to last.
     - Comms could illustrate how much water is used for different actions, to help customers understand how they can reduce their consumption.

- **Young people feel that social media would be the most appropriate way of reaching them, but value inclusivity of the entire community. As such, it's important that a multi-modal communications strategy is implored to ensure all customers are reached.**
  - To inform them of droughts and to share information on how to reduce their water consumption, young people suggest reaching them on social media.
  - However, in emergency situations, they expect the government to play a role in informing the public.
  - They encourage community engagement with councils and schools to educate young people before a drought occurs.

"Hold educational events at schools and colleges/universities, have more presence to educate people on what they can do and what the company is doing behind the scenes." (Super Future Customer)

Summary of implications

- Droughts are not well understood, and Portsmouth Water needs to **create new reference points** by showing all stages of drought, clearly linking these to **the impact they would have on the South East broadly, and local areas specifically**.

- **Contextualising all communications about drought actions** taken by Portsmouth Water in young people's local area, including restrictions and exemptions, will be critical to making them feel more real and relevant.
- Portsmouth Water should prioritise taking early action to mitigate the risk of escalation as drought worsens, and **dial this pre-emptive action up in communications to build trust and social currency** amongst customers, which will in turn encourage compliance with stricter restrictions later down the line.
- **Any actions taken that impact the environment should have a clear rationale**. Portsmouth Water should demonstrate **what has been done** to ensure this is a last resort, and **what will be done** to minimise the long-term environmental impact.
- **Clarity is needed around the use of exemptions**, including under what circumstances they will be imposed and who will be included. Any exemptions for businesses need to be clearly justified to ensure they are not seen by individuals as unfair or short-sighted.
- When communicating about drought, ensure **clarity, equal culpability, timeliness, tangibility and a balanced tone of voice** that conveys severity without scaremongering.
- At each level, Portsmouth Water should communicate **what they're doing, what they expect customers to do** and what might happen if they progress to next stage, i.e., **what they're trying to avoid,** all while using **clear and simple language.**
- Setting a clear goal and giving contextual information would reassure young people and motivate them to change their behaviours.

"It's a good plan but could sound scarier, without notifying this people will continue as normal and that is not how it should be, if they aren't normal times we shouldn't expect normal measures." (First Time Customer)

- **Social media** is the best channel through which to communicate with young people about drought – particularly TikTok, Instagram, Snapchat and Youtube. However, **young people value accessibility and inclusivity and also want to see Portsmouth Water using more traditional channels** to ensure that everyone in their local area receives important messages and updates, especially as drought conditions escalate.
- To encourage young people to act in line with the severity level of the drought, ensure that sufficient:
- **Capability** is built to conduct these behaviours by providing information on the different stages of drought and the increased likelihood of this occurring in the UK, as well as information around necessary actions to take at each stage.
- **Motivation** to want to conduct the behaviours is built by ensuring that customers understand how serious droughts can get and what the results of inaction would be, as well as reassurance that Portsmouth Water is working hard in the background to manage and mitigate as much risk as possible.

Appendix

Reactions to the Drought Plan levels

Participants were shown the four levels of drought within the Portsmouth Water Drought Plan and asked to share their reactions.

1: Developing Drought	
Emotional response	• Young people feel confident that Portsmouth Water will manage the situation, and their anticipated emotions range from feeling normal to somewhat concerned. • They would feel more conscious of their water consumption.
Response to Portsmouth Water's actions	**Elements young people feel are working well:** • Fixing leaks to increase the water supply. • Informing the public – this is felt to be necessary and reassuring so that they know what's happening. • It is reassuring that wildlife is being considered. • Lowering water pressure feels fair at this stage. **Elements young people feel are working less well:** • After seeing later stages, there was some view that retrospectively speaking, the actions don't necessarily feel strong enough to prevent the situation getting worse.
Response to what's being asked of them	• Young people don't feel that they would be restricted at all, which makes some worry that behaviours wouldn't change significantly at this stage to prevent the situation from getting worse.
Anything they feel is missing	• Educating young people on what they can do to reduce their water consumption. • Portsmouth Water could already introduce basic water saving measures. • Information on further stages so that customers are aware of what could be coming (if they don't change their behaviours now). • Expectations should be set that these are not normal times and so behaviours must change.

"I think if messaging from the water company was clear and consistent I would start to change my behaviour in this kind of scenario." (First Time Customer)

2: Drought

Emotional response	• Young people would be feeling a bit more worried, but not panicked.
Response to Portsmouth Water's actions	**Elements young people feel are working well:** • The actions feel appropriate for the severity of the situation. **Elements young people feel are working less well:** • Whilst Drought Permits ultimately seem necessary and justifiable, young people will resist them as long as there isn't clear evidence that the environment is being protected as much as possible.
Response to what's being asked of them	• Young people would feel ready to play their part, but there is some concern that not everyone will contribute to the collective effort. • As young people, these actions may still not impact them significantly e.g., if they don't drive or aren't responsible for their garden.
Anything they feel is missing	• Reducing costs of local pools (if they can't have paddling pools). • They would like to see a recovery plan detailing the way out of drought.

"This method is ok but reading it I think I wouldn't take it seriously as the things we are told not to do don't necessarily involve me as a young person, as I live in a flat and do not drive."
(First Time Customer)

3: Severe Drought	
Emotional response	• Young people would start to feel very worried, stressed and alarmed. • They would also be worried about the impact on wildlife.
Response to Portsmouth Water's actions	• The actions are appropriate for the severity of the situation, however, there is concern around the emerging trade-off between people and the environment, which young people are very hesitant to make.
Response to what's being asked of them	**Elements young people feel are working well:** • These actions are essential and therefore justifiable. **Elements young people feel are working less well:** • Young people would want to know which additional sources of water are being used and the potential impact, but North Arundel was not a meaningful location to participants.

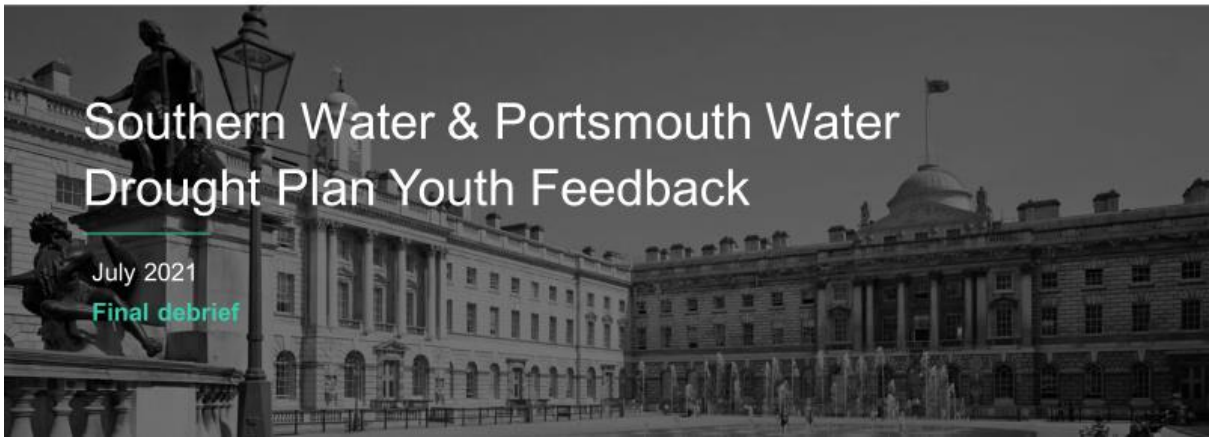
Anything they feel is missing	• The broader context of the drought isn't currently explained (e.g., how it was caused, the impact on nature etc.); this means that they have to gauge the severity of the situation on the basis of the restrictions. • They were missing an explanation showing how the necessary reduction in water consumption per customer was calculated.

"I feel bad about the impact that taking water would have on the environment but it has to be done to help us as humans." (Super Future Customer)

4: Emergency Drought	
Emotional response	• Young people would feel frightened as there is a threat to life, as well as overwhelmed and extremely concerned.
Response to Portsmouth Water's actions	• The actions are appropriate for the severity of the situation. • Drought Orders are accepted as necessary. • Young people feel that it's fair to prioritise the vulnerable and hospitals.
Response to what's being asked of them	• Rota cuts and standpipes are fair given the circumstances.
Anything they feel is missing	• It's suggested that the government should step in (beyond talks with the water company) and give regular briefings, similar to the Prime Minister's coronavirus briefings. • Laws or restrictions could be imposed to control water use or cap household usage. • There should be severe restrictions on businesses to ensure a balance in responsibility to manage the drought.

"It's aiming to help the most vulnerable first which in all honesty is the best course of action." (First Time Customer)

Britainthinks
Insight & Strategy



Southern Water & Portsmouth Water Drought Plan Youth Feedback

July 2021

Final debrief

Contents

1 Background and methodology

4

Private & Confidential

Background and objectives of the research

- Following the introduction of the Southern Water Customer Participation Strategy in September 2018, Southern Water is working to continue to bring customer thinking directly into their ongoing activity. As part of this, they commissioned BritainThinks to carry out an initial 12-month programme of deliberative research with young people.
- So far, this has involved three waves of research:

Pilot
October 2020

Aims:
- Start a process of engagement with young people to inform decision-making and communications.
- Gather initial feedback on supply and demand side solutions in relation to Water for Life Hampshire.

Wave 2
February 2021

Aims:
- Understand young people's views on Southern Water's 'Base Case' for addressing potential water shortages in Hampshire and the Isle of Wight.
- Explore what Southern Water can do to reassure young people about the impacts of building the Base Case.

Wave 3
June 2021

In this wave, participants were introduced to Southern Water's Drainage and Wastewater Management Plan (DWMP) and Drought Plan.

Aims:
- Build knowledge surrounding wastewater and gauge initial reactions to the DWMP.
- Inform the development of Southern Water's revised Drought Plan by assessing young people's views on the plan.

Britainthinks

5

Wave 3 involved a four-stage approach to hearing from young people in the Southern and Portsmouth Water catchment areas

Wave 3 included participants from the Portsmouth Water catchment area for the first time.

1. Launch event	2. Online community	3. Focus groups	4. Youth Committee
45-minute launch event with 36 Southern Water participants • 6 x Super Future Customers (14-15) • 24 x Future Customers (16-21) • 6 x First Time Customers (22-30)	**1-week online community involving 46 participants (10 additional Portsmouth Water participants)** • Exploring the topic of wastewater and gauging reactions to the DWMP. • Introducing the Drought Plan.	**6 x 75-minute focus groups involving the Southern Water participants** • Reflecting on the DWMP. • Discussing the Drought Plan in greater depth, including reactions to the different stages and proposed exemptions.	**1-hour focus group with 5 highly engaged Southern Water participants** • Review of the emerging findings. • Youth Committee feedback and input into recommendations.

The relevant icon will be used throughout when discussing the findings among a specific audience.

Britainthinks

Key findings: The Drought Plans

1. Contextually, it's important to understand that **current associations with 'drought' bring to mind an emergency drought only** – there is insufficient appreciation for the likelihood of droughts in the UK, so there is a need inform on this as a starting point to engagement with the drought plan.
2. Another lens through which young people understand droughts is their experiences of Covid-19. **The pandemic has made strict restrictions feel fairer and more acceptable**. They would therefore expect water companies to act quickly and decisively if required and would be willing to follow strict measures.
3. In this context, **both drought plans are accepted as important and necessary, given that advanced planning can minimise the impact** to themselves, people in vulnerable situations and the environment. It would reassure young people if these plans were made more salient by Southern and Portsmouth Water.
4. **Elements working particularly well in the plan are the demonstration of response escalation through stages** to help young people make sense of droughts, taking early and preventative action and demonstrating protection of the environment, so these should be clearly detailed and emphasised.
5. **An important element that requires additional clarity for greater acceptance is the provision for the vulnerable** as well as the rationale behind allowances of water usage that young people feel is unfair, such as prioritising businesses over households.
6. There are **different key messages** that young people expect to be communicated across the **different stages of drought**, and they expect a **multi-modal communication strategy** that can reach them and others regardless of digital engagement.

What do young people understand about droughts?

Participants were introduced to the topic of droughts in the plenary session, before being shown videos, visual stimulus and other online resources in the online community. The following section outlines key insights that have emerged from this testing.

Could the great British drought of 1976 happen again?


Fears of UK drought after months of low rainfall - Charlotte Lomas

YP do not know about the risk of drought, so there is a need inform on this as a starting point to engagement with the drought plan

- Before learning about droughts, participants rated the likelihood of a drought in the UK 5.2 out of 10.
- There hasn't been a serious drought in living memory for this generation, though some remembered a drought in 2018.
- Global warming was also a concern making extreme weather and crises feel increasingly likely.
- Still, it hadn't occurred to young people that drought planning is needed.

> *"Where I live is very near to the sea. It's a coastline town. It rains a lot. It can only be hot for a few days before it rains again, so it can happen, but I don't think it's very likely."*
>
> (Super Future Customer)

Images that participants associated with droughts included:

Their misperception of what drought would look like in the UK means they are unprepared for the reality of how it would impact on their lives

There were multiple impacts of drought and subsequent requirements that were not well understood	*Encouragingly, young people did have some appreciation for the actions Southern and Portsmouth Water needed to take in drought scenarios*
Young people don't anticipate…	Young people anticipate that…
• Severe restrictions on consumers that impinge on their freedoms or lifestyle. • Any impact on the environment or wildlife. • The impact on agriculture. • The extent of Southern and Portsmouth Water's role in managing droughts and that they would have a detailed plan regarding how this should be done. • That businesses would be prioritised in times of drought to allow them to remain open.	• Water companies will **increase the water supply** through initiatives like fixing leaks and harvesting rainwater, using water reserves and potentially water recycling or water transfers. • **Some smaller restrictions** would be introduced such as hosepipe bans, setting limits/rations or reducing supply of water, e.g. lower water pressure. • Water companies would **raise awareness** through educating consumers on reducing water consumption and issuing public warnings expressing the gravity of the situation.

Drought is also seen as 'all or nothing', meaning there is little awareness of lower level mitigations or a sense the situation can be managed

Initial associations align with emergency drought only – there is no sense of variation:

This 'all or nothing' perception means that droughts don't feel likely in the UK and are instead associated with **hotter, drier countries:**

> *I think droughts impact people in parts of the world where there is little clean water/rainfall.*
>
> (Future Customer)

> *It mainly impacts people in hotter countries, given that they have more droughts and droughts that last longer and are more intense.*
>
> (First Time Customer)

However, young people show a willingness to play their part in a crisis, once they're on board with the idea that a drought could occur in the SE

These were some spontaneous suggestions before being shown the Drought Plans.

General water-saving behaviours
Including shorter showers and being mindful of water use

Frugality
Including re-using cooking or dish water and collecting rainwater

Curtailing recreational uses of water
Including not filling swimming pools, washing cars or using sprinklers

> *Be more cautious with their water use, not spending a ridiculous amount of time in shower and collect rainwater for plants. But there are many things individuals can do to preserve water.*
>
> (Future Customer)

Experiences of Covid-19 act as reference points for young people's responses to crises and is the lens through which the Drought Plans are understood

A preference for acting early	Cynicism around others' behaviour	Awareness of government resources
The government's perceived slow response to the pandemic: ⇩ Young people questioned whether enough was being done sufficiently early in the Drought Plan to potentially prevent the worst-case scenario (emergency drought).	*Hoarding behaviours at the start of lockdown, e.g. toilet paper:* ⇩ Young people anticipated water hoarding behaviour if people were led to thinking that water resources could run out.	*The furlough scheme:* ⇩ Young people are aware of the government's resources to impose restrictions and support water-reliant businesses to allow restrictions to come in earlier.
Preventative measures earlier on would help to mitigate the effects of drought. We have learnt from the pandemic. (Future Customer)	*Last March, we saw people fighting over toilet roll and stuff.* (Future Customer)	*With the small businesses using hosepipes… [We] could ask the government – like the furlough system – so that they can be compensated.* (First Time Customer)

The Youth Committee flagged the importance of building awareness of drought and necessary actions amongst young people

The Youth Committee agreed that:

- They hadn't been aware of varying levels of drought severity.
- The low threshold for water shortage to be labelled a drought was surprising.
- Customers would be more concerned about the personal impact on them compared with the greater risk to the region.

The Youth Committee suggested that:

- Droughts should be communicated as being caused by both external factors, such as the weather, and inadequate water management, such as over-consumption, to demonstrate consumers' roles in preventing them.
- The future generation should be educated on and engaged in droughts early on, as they will inherit water insecurity.

> *As young people who are kind of tasked with this more than the previous generations have been, I think it's very important we are aware from a young age that there is a water insecurity.*
>
> (Future Customer)

How did young people respond to the Drought Plan overall?

During focus groups, participants were taken through elements of the plan including restrictions on businesses and households, the four stages, exemptions and emergency measures. The following section outlines key insights that have emerged from this testing.

Overall, both Drought Plans were positively received by young people and succeed on many levels

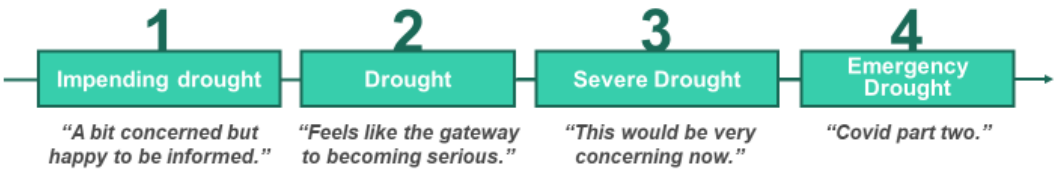
- The drought plans were easily understood due to their concise language and clear visualisation of the drought stages.
- It was accepted as important and necessary for Southern Water and Portsmouth Water to create these plans, given that drought is a situation that requires advance planning, is increasingly likely to occur and could have a severe impact without proper preparation.
- Overall, Southern Water and Portsmouth Water's actions, including restrictions on customers and businesses and emergency measures, were seen as largely appropriate and fair, though there were some elements that needed further explaining and potential additional or earlier action, as outlined on the following slides.

> ***I think in situations like this, time is of the essence, and therefore, it is important to work quickly to try and establish a clear plan**, ensuring they can make the best out of a bad situation in plenty of time to ensure there is not any more severe water shortages.*
>
> (Future Customer)

> *I think it's important to **prioritise long-term plans first to ensure that these things can be avoided** and pre-emptive damage control.*
>
> (First Time Customer)

Learning there are four stages of drought / mitigations moves young people away from the 'all or nothing' perception of drought they started with

Through learning about the drought stages, young people developed a more nuanced understanding of how droughts happen in reality and their potential impact.



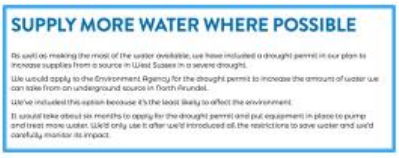
Making salient the different stages of drought and required actions helps frame the plan as necessary and important

Showing escalation through stages provided necessary context to help young people make sense of droughts.	Extreme drought results in a crisis mindset, where any actions by SW and PW are seen as appropriate and fair, but preventative action is preferred.	Careful planning demonstrated by active monitoring, safeguarding and reflection on learnings are reassuring.
• In pre-drought and drought conditions, young people were less concerned, but as they learned more and understood the impact of inaction, they sought earlier action from all parties, including water companies, households, businesses and government.	• It was accepted and expected that Southern Water and Portsmouth Water would intervene with extreme measures if necessary. • This acceptance was driven by a 'crisis' mindset, which means severe restrictions would feel justified. • However, to avoid extreme measures, young people were willing to change or restrict their own behaviour earlier.	• Continuous monitoring of water supply means that Southern Water and Portsmouth Water are more prepared and gave the sense that more preventative action could be taken. • The inclusion of an 'After a drought' stage in the plan demonstrated that the water company is prepared to learn from previous droughts and ensure the robustness of future plans.

The Portsmouth Water plan gives additional contextual information that aids with comprehension of the plan overall

- The timeline is a useful indication of how long it takes for a drought to develop.
- The timings for applying for a Drought Permit make it easier to understand why this happens fairly early on.
- The location of the new sites for extracting water was information that Southern Water participants felt was missing from their plan; however, North Arundel was not a meaningful location for this group.

> *I was surprised it would be that long. I thought it would get more extreme sooner.*
>
> (First Time Customer)



However, there were some areas across both plans where young people feel information was lacking and need further clarification

Some concerns around the inclusivity of the plans overall	Questions around timing of Drought Permits and Drought Orders	An unclear chain of decision making in managing droughts	Some terminology is viewed as being too technical
It was unclear how individuals with disabilities without blue cards would be accounted for. There was concern that individuals from lower SEG might have less access to stand pipes in extreme drought, living in more densely populated areas. Portsmouth Water's plan referenced their Priority Service Register specifically.	Although DPs and DOs were accepted as necessary, young people wanted reassurance that SW / PW would do all they could to avoid getting to this point to justify these extreme actions. There was some concern about long-term environmental damage and transparency around protective actions being taken.	Young people wanted to understand the relative burden and responsibility on water companies, consumers, the government and businesses in preventing droughts and reducing their impact.	Some of the terminology used was felt to be too technical and difficult to understand, e.g. many were unsure what an aquifer is. In the Portsmouth Water plan, it was unclear what sea tankers were and their role.

Some exemptions need further explanation or expansion across the plan, based on their perceived fairness

Although most exemptions were accepted as appropriate, there are some concerns to address:

Some exemptions felt inappropriate and unfair and should be explained or re-considered.

- Introducing restrictions to households before businesses felt unfair, as personal use of water was felt to be more important.
- Some exemptions seemed to allow unnecessary use of water such as cleaning graffiti (unless it was hateful) or watering newly-laid turf or plants.
- Household size didn't appear to be taken into account for stand pipes.
- Rota cuts didn't seem to account for individuals with irregular working hours.

However, there were some exemptions that were felt to be crucial and should be further dialed up.

- Allowing the use of water where it is purely functional as opposed to aesthetic, such as enabling a car to work but not to look nice.
- Maintaining public gardens and public swimming pools for wellbeing and mental health.
- Maintaining life, e.g. vegetables and pond life.

> *A lot of people benefit from businesses such as swimming pools and parks. These are places that everyone can use and get exercise/green space. This is beneficial for physical and mental health.*
>
> (Future Customer)

Young people identify key tensions that would have to be carefully balanced for plans to be accepted

Protecting people	vs.	Protecting the environment	It was expected that the environment would be protected almost to the same extent as people,and as much as possible for this trade-off to be avoided.
Ensuring water availability now		Preventing longer term damage	Whilst ensuring water levels in the moment is important, young people don't want SW or PW to reach a point where damage is irreversible and contributes to underlying water scarcity issues.
Equal rules		Fair outcomes	Young people embrace exemptions as a way to protect the vulnerable and ensure fair outcomes. On the whole, however, equal rules are needed for the general public to ensure adherence to the rules and fair usage of water.
Penalties		Incentives	There is an underlying sense that the plan relies on penalties / negative potential consequences, whereas customers could be incentivised to reduce water usage during the impending drought or drought phases.

A deep dive on young people's feedback for each stage of the Drought Plan

During focus groups, participants were taken through the 4 stages of drought, explaining the water company's actions, restrictions and exemptions. The following section outlines key insights that have emerged from this testing.

1 Impending drought

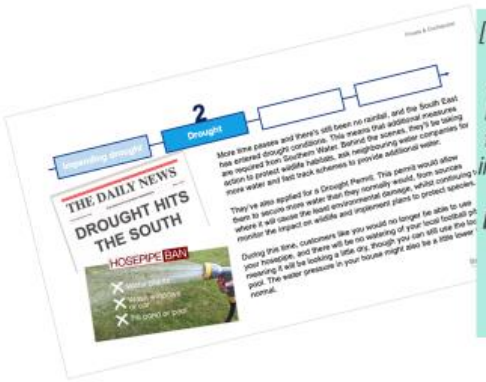
> *[I would feel] slightly worried because of the unknown, but not too worried, as I wouldn't feel it was dangerous, not that many major restrictions have come in. I don't think it would be that life-threatening. It's not great for farmers but not too bad for ordinary people.*
>
> (Super Future Customer)

While at this stage young people don't feel that their lives will be impacted directly, there is a desire for Southern Water to take preventative action

Emotional response to this stage	Response to the water company's actions	Response to what was being asked of them	Anything they felt was missing
• **Overall, there were low levels of concern at this stage,** with most feeling confident that the water company would manage the situation. • However, there were a small number who reported feeling concerned at this point.	• **SW and PW's responses were felt to be appropriate and proportionate.** • Actions taken by water companies such as sharing free water saving devices, fixing pipes and protecting the environment were appreciated.	• **At this stage, young people did not feel that they would be impacted personally.** • However, some were already expressing a willingness to do their bit and save water.	• Upon hearing about the other stages, young people **felt that it was more important that both water companies and their customers take action.**
		Reducing water pressure at this stage felt appropriate for Portsmouth Water as preventative action.	

Participants were pleased overall with the plan to inform customers early but felt it would be important to convey the potentially serious situation that may evolve.
They felt customers should be eased into the idea of a drought while being clear that they should start adjusting their behaviours to encourage early preventative action.

2 Drought



[In a drought (level 2), I would feel] ***concerned.*** *I think in this situation, it's healthy to have an amount of concern and worry. For me, if this was happening, I'd be like, 'Are they going to publicise their plans?', 'Are they taking steps to liaise with other customers to not impact customers on a baseline level?'. Families need to bathe and eat.* ***'How on a basic level are people being taken care of? Rather than [Southern Water saying], 'You guys are banned from hosepipes, but Starbucks can still operate.'***

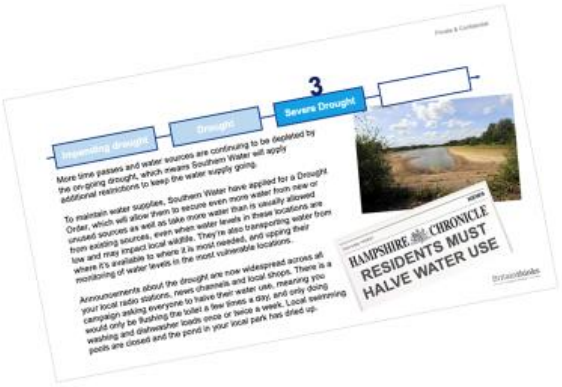
(First Time Customer)

At 'drought' stage, young people begin to feel concerned for further escalation and future risk to the environment

Emotional response	Response to the water company's actions	Response to what was being asked of them	Anything they felt was missing
• **Young people felt they would start to feel impacted and concerned.** • They felt relatively secure and reassured that the situation was being taken care of but had a sense that things could still get worse.	• **The restrictions felt appropriate for this level with the advanced application for Drought Permit seen as sensible.** • However, they wanted further information on the DP, including environmental impact and actions taken up to this point. • They wanted to see that businesses were also being restricted.	• **Young people felt that whilst lower water pressure might be a hassle, overall, the restrictions would have limited impact.** • As younger people, they have fewer responsibilities, e.g. cars or gardens to worry about, and so the hosepipe ban feels less relevant and impactful.	• **Some of the restrictions felt misaligned and therefore somewhat inappropriate**, e.g. some recreational uses of water could be allowed at this stage, but there would be restrictions on water uses that keep plants and animals alive (hosepipe ban).
		Young people appreciated knowing where additional water was being taken by Portsmouth Water.	

Comms would have to detail where the Drought Permit is taking water from and its impact.
Young people would also want to know what SW / PW is doing behind the scenes and that businesses are being restricted.

3 Severe Drought



I'm only 20. I've never been told to take these actions. I find this very serious. This could be normal in a couple of years. I think droughts will get worse. I take it seriously.

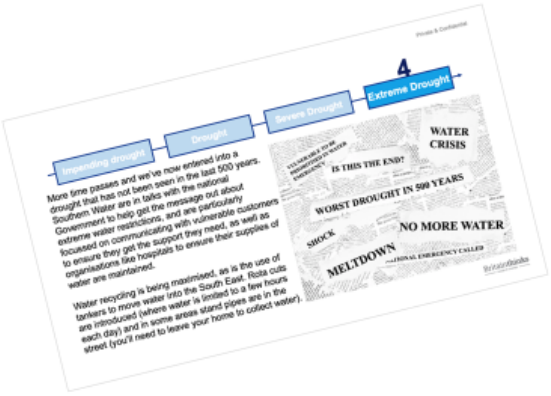
(Future Customer)

'Severe drought' feels like a serious tipping point where young people want tangible direction on what they should do and why

Emotional response	Response to the water company's actions	Response to what was being asked of them	Anything they felt was missing
• **This felt very serious, as a scenario they had never experienced before and that would impact them directly.** • They would feel concerned about when this would end and would be ready to drastically reduce their water consumption.	• **While the Drought Order raised debates around trade-offs, at this stage, it was felt to be necessary.** • The severity of this stage made some young people feel that Southern Water and Portsmouth Water should have introduced restrictions and measures sooner to avoid this.	• **Lockdown mentally prepared them to deal with restrictions.** • However, they would want to clearly know what their efforts were contributing to and what precisely they should be doing.	• **Young people became torn at this stage between protecting the environment vs people.** Making this trade off did not feel acceptable if everything possible had not been done to avoid it. The government would be expected to step in and prevent the worst from happening.

They would expect regular updates and would want reassurance that the impact of the Drought Order is being very carefully monitored. Comms around reducing water consumption would need clear guidance on how to do this.

4 Emergency Drought



> *[This is] Covid part two. You're in that situation that you never thought you'd be in. There's nothing you can do, even your government. It's frightening. Water is a basic everyday need. It's scarier [than Covid], if anything.*
>
> (Future Customer)

In an 'emergency drought', severe restrictions feel appropriate and expected as does compliance with what is being asked

Emotional response	Response to the water company's actions	Response to what was being asked of them	Anything they felt was missing
• **This situation provoked feelings of panic and fear.** • Young people would feel somewhat resigned to the situation. • It threatens access to a fundamental necessity that young people had taken for granted. • They were worried about those who would be more severely impacted than others.	• **Some felt that the Government should step in sooner to prevent this stage from occurring.** • Young people were concerned that rota cuts and standpipes may not ensure fair access to water, and that those with limited mobility or who are vulnerable would need to be taken care of.	• **At this stage, young people had no objections to following restrictions themselves.** • This was because they seemed entirely appropriate. However, they did become very conscious of spreading the social and economic impact across society and having inclusive measures in place.	• **The severity of these restrictions led them to ask to what extent they would be enforced.** • They were also keen to see that sanctions on businesses are equally strict, so that the burden does not mostly fall to residential customers.

Giving clear guidance to avoid panicked behaviours. It would be very important to highlight the collective effort and what the potential impact of certain sacrifices may be to encourage community-minded behaviours.

Preferences for communicating about the Drought Plan

Participants were asked in the focus groups how they think the Drought Plan should be communicated to themselves and other young people. The following section outlines key insights that have emerged from this testing.

Britainthinks

32

Private & Confidential

There are key principles for water companies to have in mind when communicating with young people about droughts

Clarity	Tangibility	Equal culpability	Balance	Timeliness
Clear explanations of the different measures and exemptions, so that the rationale would be understood.	Young people would like to know precisely what they should be doing and when and the impact this will have.	Demonstrating that SW/PW is working hard behind the scenes; businesses are also expected to reduce their water consumption; as well as encouraging collective action	Balancing the need for honesty and transparency to convey severity without scaremongering.	Young people would rather know early so they can begin to adjust their behaviour and potentially prevent the situation from worsening

> *"I'd be reassured that I'd be given information. With that info, the effects wouldn't be as extreme, better equipped to deal with it as effectively as possible."*
> (Future Customer)

> *"The importance of raising awareness early through things like social media and text messages."*
> (Future Customer)

Britainthinks

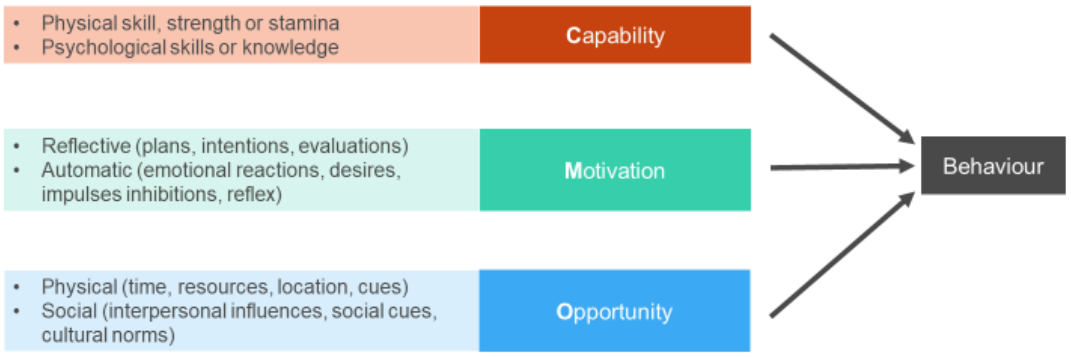
33

Young people will be most effectively reached on social media, but traditional media would be important in severe droughts

Young people suggested using all forms of social media, as well as local print/radio/TV news and advertising, to have the widest possible reach when communicating about drought and restrictions.

Social media to reach young people	Government and mass media in emergency	Community outreach	Engagement and inclusivity
For young people in particular, Instagram, TikTok, Snapchat and YouTube were all preferred. However, they were highly aware of the need to ensure that everyone in the area understood what was going on and what to do.	At emergency level, young people also expected the Government to have a role distributing official letters, running campaigns and giving daily updates reminiscent of the PM's Covid briefings. This would convey the severity and need for responsible behaviour.	Localised community outreach was also suggested, such as visiting schools to educate young people on what a drought is, how they can save water and what the water company's role is.	There were questions around whether people would have to actively go on to the website to find out what was required. There was some concern surrounding how people who are less tech literate would access this information.

To understand the potential impact of the drought plan and comms in prompting action in times of drought, we look to COM-B



The Drought Plans and communications need to strengthen young people's capability and motivation

Desired behaviour: for young people to act in line with the severity of a drought

	What do young people need to enact the behaviour?	Do they currently have this?	Could Southern Water or Portsmouth Water's drought plan and comms provide this?
C	Knowledge of what constitutes a drought and that these can happen in the UK	No – knowledge of droughts is limited amongst young people.	Yes, but young people should be educated in and engaged on droughts to normalise the concept of this happening in the UK.
	Knowledge of water saving behaviours	To a degree – there is some understanding of water saving behaviours.	Yes, although this information would need to be presented simply and disseminated widely, e.g. in schools.
M	An understanding of the different levels and how serious it can get	No – very little knowledge and no first-hand experience of a drought.	Yes, this would be simple to achieve through showing the escalating stages, but this would also be something young people should learn earlier to understand the planning involved and the possible preventions.
	Knowledge of the potential consequences if they don't play their part	No – they are unaware of the potential impact to the region, the environment and their personal lives.	Yes, the water company would demonstrate that its role in a drought includes imposing restrictions and would need to manage expectations that young people's behaviour and routines may have to change more than they anticipate.
	Reassurance that the water company is also doing their bit	No – this is not something they've thought much about.	Yes, the plan demonstrates advanced planning and provides reassurance. It would be important to communicate how water insecurity is being managed as a way of reducing the likelihood or impact of droughts.

Britainthinks

4 Summary and recommendations

Key findings: The Drought Plans

1. Contextually, it's important to understand that **current associations with 'drought' bring to mind an emergency drought only** – there is insufficient appreciation for the likelihood of droughts in the UK, so there is a need inform on this as a starting point to engagement with the drought plan.

2. Another lens through which young people understand droughts is their experiences of Covid-19. **The pandemic has made strict restrictions feel fairer and more acceptable**. They would therefore expect water companies to act quickly and decisively if required and would be willing to follow strict measures.

3. In this context, **both drought plans are accepted as important and necessary, given that advanced planning can minimise the impact** to themselves, people in vulnerable situations and the environment. It would reassure young people if these plans were made more salient by Southern and Portsmouth Water.

4. **Elements working particularly well in the plan are the demonstration of response escalation through stages** to help young people make sense of droughts, taking early and preventative action and demonstrating protection of the environment, so these should be clearly detailed and emphasised.

5. **An important element that requires additional clarity for greater acceptance is the provision for the vulnerable** as well as the rationale behind allowances of water usage that young people feel is unfair, such as prioritising businesses over households.

6. There are **different key messages** that young people expect to be communicated across the **different stages of drought**, and they expect a **multi-modal communication strategy** that can reach them and others regardless of digital engagement.

Recommendations for communicating with young people about drought and the Drought Plans:

- Droughts are not well understood, and Southern Water and Portsmouth Water need to **create new reference points** by showing all stages of drought and clearly linking these to **the impact they would have on the South East broadly and local areas specifically**.
  - **Contextualising all communications about drought** actions taken by water companies in young people's local area, including restrictions and exemptions, will be critical to making them feel more real and relevant.
- Water companies should prioritise taking early action to mitigate the risk of escalation as drought worsens and **dial this pre-emptive action up in your communications to build trust and social currency** amongst customers, which will in turn encourage compliance with stricter restrictions later down the line.
- **Any actions taken that impact the environment should have a clear rationale**. Southern Water and Portsmouth Water should demonstrate **what has been done** to ensure this is a last resort and **what will be done** to minimise the long term environmental impact.
- **Clarity is needed around the use of exemptions**, including under what circumstances and who would be included. Any exemptions for businesses need to be clearly justified to ensure they are not seen by individuals as unfair or short-sighted.
- When communicating about drought, ensure **clarity, equal culpability, timeliness, tangibility and a balanced tone of voice** that conveys severity without scaremongering.

Recommendations for communicating with young people about drought and the Drought Plans:

- **Social media** is the best channel through which to communicate with young people about drought – particularly TikTok, Instagram, Snapchat and Youtube. However, **young people value accessibility and inclusivity and also want to see Southern Water and Portsmouth Water using more traditional channels** to ensure that all in their local area receive important messages and updates, especially as drought conditions escalate.
- To encourage young people to act in line with the severity level of the drought, ensure that sufficient…
  - **Capability** to conduct these behaviours is built by providing information on the different stages of drought and the increased likelihood for this occurring in the UK as well as information around necessary actions to take at each stage.
  - **Motivation** to want to conduct the behaviours is built by ensuring that customers understand how serious droughts can get and the results of inaction as well as reassurance that Southern Water and Portsmouth Water are working hard in the background to manage and mitigate as much risk as possible.

Britainthinks
Insight & Strategy

G.2. Non-Household Customers

In partnership with Southern Water, Yonder Consulting conducted interviews with non-household customers to gain feedback on the draft Drought Plans of Southern Water and Portsmouth Water. Three podcasts were produced summarising the findings from interviews. These are attached as m4a audio files in the icons below.

Drought & DWMP Podcast 1.m4a

Drought & DWMP Podcast 2.m4a

Drought & DWMP Podcast 3.m4a

G.3. WRSE Retailer workshop

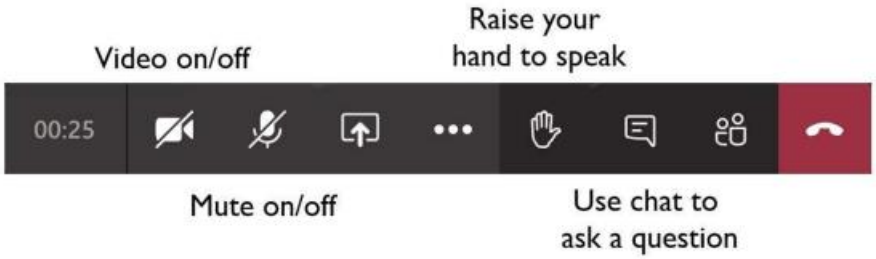
G.3.1. WRSE drought planning webinar for retailers (2nd July 2021)

Slide pack with 28 slides

WRSE drought planning webinar for retailers

2 July 2021

Using MS Teams



Agenda

- Welcome & Introductions
- Introduction to drought planning – Nick Price from Southern Water
- Drought planning policies and triggers in the South East – Meyrick Gough from WRSE
- Q&A
- Group discussion
- Next Steps – Lee Dance, South East Water
- Final Q&A / Meeting close.

Opening poll

How familiar are you already with water company drought planning in the South East?

What is drought?

- Droughts are naturally occurring and typically characterised by **a prolonged period of abnormally low rainfall – leading to a shortage of water** which may affect people, agriculture, industry and the environment.
- **Droughts range in duration, intensity and location:**
  - A short event caused by a hot, dry summer
  - Spanning several years with persistent low rainfall
  - Concentrated in parts of a county or a wider region.

What's the purpose of a Drought Plan?

- Sets out the **actions we'll take to keep the taps running** to protect public health and the economy and environment for as long as possible.
- It's **an operational, tactical manual,** to be used if we experience dry weather which threatens our water supplies.
- Aligned with water companies' long-term Water Resources Management Plans, which demonstrate the need for interventions, so **we're resilient to a range of droughts in line with our agreed levels of customer service**.
- Water **companies work together** in the South East and have **aligned restrictions on water use and exemptions.**
- We also have **agreements on sharing water supplies between water companies in droughts**.

The different stages of a drought

- Our plans are presented in **four drought 'levels',** which are based on drought indicators (triggers).

  - **Normal: No Drought**
  - **Level 1: Impending Drought**
  - **Level 2: Drought**
  - **Level 3: Severe Drought**
  - **Level 4: Emergency Drought**
  - **After a drought: Lessons learnt**

Knowing when a drought starts

We **continually monitor the environment for the signs a drought is developing**, looking at:

- Rainfall patterns and trends
- Evaporation and effective rainfall
- Groundwater levels, river flows and reservoir storage.

Our drought plans set out **trigger levels for these measures which link to the actions we'll take** to prepare for and manage a drought.

What we'll do at the different drought levels

Our drought plans set out what we'll do at each drought level to:

- **Raise awareness**
- Save water and promote water saving (including restrictions)
- **Maintain water supplies**
- Monitor and protect the environment
- **Work in partnership with water companies in the South East and the Government.**

9

Actions to raise awareness

One of the most important actions during a drought is **letting people and businesses know what's happening**:

1. The impact a drought is having
2. What we're doing about it
3. What everyone can do to help.

- Water companies will **use multiple channels to communicate with customers and interested groups**
- Water companies and partners will **join forces to share the same messages**.

Actions to raise awareness at each level

Normal

- Promote our **work to reduce leakage** and leak reporting
- Promote water saving through **water efficiency campaigns**

Impending drought

- **Awareness campaigns** – media, social media, partners and email
- **Co-ordination between water companies**
- Latest **water resources information** online
- Promotion of **water-saving advice and products**

Drought

- Launch of **full communications plan to all customers**, retailers representing businesses and interested organisations
- **Tailored support for vulnerable customers**
- Communication around **restrictions on water use (Temporary Use Bans – formerly known as hosepipe bans).**

Actions to raise awareness at each level

Severe drought

- **Ramp up communication** – radio, television, advertising, direct emails, text messages and letters
- Communicate **restrictions on Non Essential Use Bans** *(focused on businesses)*
- **Prioritise reaching vulnerable customers** to tailor support.

Emergency drought

- **Co-ordinate with Government** on extreme restrictions
- Focus on **vulnerable customers and accessibility for all.**

How do we know when a drought is over?

- Companies will **continue to monitor rain, river flows, evaporation, groundwater levels and reservoirs** throughout a drought.
- The **timing of rain is important** – summer rain can help rivers, but we wouldn't expect groundwater and reservoirs to recover fully until we have normal winter rainfall
- There **will often a be a lag, possibly of several months**, between when it starts to rain normally and when our resources recover
- Companies would **need to keep some drought measures in place** during this time
- **Companies will only start to step down drought actions once their systems have recovered**
- **Companies would continue to keep customers and retailers up-to-date during a drought**
- **Importance of Lessons learnt review.**

Developing a multi-sector, regional resilience plan

WRSE is an alliance of the six SE water companies, working to increase the resilience for water resources for all sectors, enhance the environment and look for opportunities to provide wider benefits

What are drought restrictions

- Water companies have a **selection of drought actions to implement as a drought gets worse** - to save water and maintain supplies
- This is through **specific actions that target reductions in water usage** or by **seeking temporary relaxation of abstraction licence conditions** to abstract more water from the environment.
- Water companies in the South East have worked together to make sure we have:
  - **A consistent application of Temporary Use Bans and Non-Essential Use Bans**
  - **A consistent understanding of how we'll continue with transfers of water between companies.**
- **Drought actions are introduced in stages** according to triggers and water companies now use the same terms to describe these stages.

What are TUBs and NEUBs

- **Temporary Use Bans, or TUBs,** are restrictions which can be put in place by companies which **do not prohibit the activity** but **prohibit the use of a hosepipe to undertake the activity**. These bans **can be implemented by companies without applying to the Secretary of State** for permission.
- **Non-essential Use Bans, or NEUBs,** use a different legislative framework than TUBs. **These restrictions can prohibit the activity.** For companies to implement these restrictions, **they must apply to the Secretary of State for permission** which will take several months.

How do TUBs affect customers?

Level 2:
Drought

Stop using hosepipes for:

- Watering a garden – which includes public gardens, parks, lawns, verges, allotments, open green spaces, sports areas
- Cleaning a motor vehicle
- Watering plants at domestic premises
- Cleaning a private leisure boat
- Any domestic recreational use
- Filling or maintaining a domestic pond
- Cleaning walls and windows of domestic premises
- Cleaning paths or patios
- Cleaning other artificial outdoor surfaces

Also, stop using water for:

- Filling or maintaining a domestic swimming or paddling pool
- Filling or maintaining an ornamental fountain

Temporary Use Bans – Exemptions

Level 2:
Exemptions

A Automatic exemptions
D Discretionary exemptions

Automatic exemptions:

- A Water-using activities which protect health and safety
- A Blue Badge holders
- A Customers using an approved drip or trickle irrigation system fitted with a pressure-reducing valve and timer
- A Companies using hosepipes as part of their cleaning business
- A Private boats where it is the customer's only home; the engine needs to be cleaned with a hosepipe or where not cleaning means the boat will use more fuel
- A Filling or maintaining a domestic pond which contains fish or other animals which live in water, or fountains adding air to these ponds
- A Goods vehicles and public service vehicles
- A Filling or maintaining a domestic swimming pool during construction or for health and safety reasons

Discretionary exemptions could include (check our website for latest):

- D Customers on our Priority Services Register with mobility issues
- D Watering newly-laid turf for 28 days
- D To prevent or control the spread of non-native and/or invasive species
- D Operating water features with religious significance

How does a NEUB affect customers?

Level 3:
Severe drought

Restrictions under Level 2 plus a ban on:

Stage 1:

- Watering outdoor plants on commercial premises
- Filling or maintaining a commercial swimming or paddling pool
- Filling or maintaining a pond
- Operating a mechanical vehicle washer
- Cleaning any vehicle, boat, aircraft or railway rolling stock
- Cleaning any exterior part of a non-domestic building or non-domestic wall
- Cleaning a window at commercial premises
- Using water to suppress dust
- Use of automatic cisterns

Stage 2:

- Watering national and international sports grounds between 7am – 7pm (and only for two hours between 7pm and 7am)
- Hand car washing businesses and all automatic car washes
- Window cleaning using water-fed poles
- Cleaning of paths and patios – including graffiti removal
- Cleaning of artificial outdoor surfaces – including graffiti removal
- Watering outdoor plants on commercial premises – even if newly planted or irrigation systems in place
- Cleaning any vehicle, boat, aircraft or rolling stock – including graffiti removal
- Cleaning any commercial premises – including graffiti removal
- Cleaning industrial plant

Non-Essential Use Bans – Exemptions

Level 3:
Exemptions

A Automatic exemptions
D Discretionary exemptions

Automatic exemptions:

- A Water-using activities which protect health and safety
- A Blue badge holders

Discretionary exemptions could include (check our website for latest):

- D Customers on our Priority Services Register with mobility issues
- D Small businesses whose sole operation is cleaning windows using hosepipes
- D Watering newly bought plants for the first 28 days after the ban is introduced
- D Using an approved drip or trickle irrigation system fitted with a pressure-reducing valve and timer set for evenings or during the night
- D On biosecurity grounds
- D Companies removing graffiti

Other actions taken to maintain water supplies

- **Supply-side options allow water companies to maintain or increase their supplies** during a drought
- **Prioritise supply-side actions with a lower impact on the environment** and options which don't require us to seek permission to relax our abstraction licence conditions
- **Drought permits and drought orders are legislative tools** which allow water companies to maintain or increase supplies during a drought.
- **We would always have taken action to reduce demand** before applying for a drought permit or drought order to maintain supplies.

Supply-side actions before permits and orders

- Companies will make sure **all our water sources are available and can be fully used** (minimise outage and network restrictions)
- We'll **operate our sources in 'drought mode'** to maintain their reliable output for as long as possible
- We'll **optimise the use of transfers** between the areas we supply and neighbouring water companies so we **collectively make the best use of available supplies**
- Some companies may **use tankers to move water by road** to where it is most needed, if pipeline transfers are not available.

Emergency droughts - Before an emergency drought

If dry weather **continued for many years**, we may reach an emergency.

We'd take **every step possible to avoid rationing water supplies or introducing standpipes** in this situation.

We call these steps '**More before four' –** they are the last line of defence and include:

- **Sea tankering of water from Norway and / or Scotland**
- **Emergency water recycling**
- **Further transfers from other water companies if water is available**
- **Promoting a limit of 50 to 80 litres water use (South Africa experience)**
- **Alternative supply tankers.**

Our customers say they would find it **very difficult to cope with emergency measures** and **vulnerable customers would need extra support**.

Emergency drought

Once the **Level 4 Emergency Drought triggers has been reached** and all other drought actions have been exhausted, we would seek to implement **emergency drought measures**.

- This would **limit water supplies to homes and businesses to certain times of the day**
- We may **ask customers to collect water for drinking, washing and cooking from standpipes in the street, or from mobile water tankers** at key community locations
- **These actions would be a last resort** and the possibility of them happening is **extremely rare** – once in every 500 years on average
- **We would take every step to avoid them.**

Group discussions

Topic 1

- Discussion on which customers may be affected by Temporary Use Bans (TUBs), Non-Essential Use Bans (NEUBs) and TUBs / NEUBs exemptions
- How can you support on voluntary restraint?
- More before (Drought Level) 4: Discussion on actions to take before / during an extreme drought

Topic 2

- When and how would you like to be contacted about drought? (e.g. How far in advance of restrictions being introduced would you want to be informed?)
- What type of information would you like? (e.g. Information on water resources, on restrictions etc)

Next steps

- Water company **drought plan consultations** running until end of July
- Need to **respond to each company** on their respective draft drought plan
- All **consultation feedback will be addressed in a Statement of response** by each company
- **Updated draft drought plans submitted to Defra** for review and approval
- **New drought plans published** following approval by Defra.

Drought plan consultations

- Affinity Water https://affinitywater.uk.engagementhq.com/drought-consultation
- Portsmouth Water http://www.portsmouthwater.co.uk/droughtplan
- SES Water http://www.seswater.co.uk/publications
- South East Water https://corporate.southeastwater.co.uk/about-us/our-plans/dry-weather-plans/
- Southern Water http://www.southernwater.co.uk/droughtplan
- Thames Water http://www.thameswater.co.uk/droughtplan

Closing poll

- How useful has this webinar been?
- Has the webinar given you a better understanding of drought planning for the South East?

G.3.2. Draft drought plan 2022 consultation webinar (8th July 2021)

Slide pack with 63 slides

Agenda

- Welcome and introductions
- Drought planning overview
- Normal times
- Actions to raise awareness of drought
- Actions to save water
- Actions to maintain water supplies
- Actions to protect the environment
- Emergency droughts
- When a drought ends
- Polls to get your views
- Lots of opportunities to ask questions.

3

Water company supply areas

4

Opening poll

- How familiar are you with Southern Water and Portsmouth Water's individual drought plans already?

5

Drought planning overview

What is a drought?

Droughts are naturally occurring and typically characterised by **a prolonged period of abnormally low rainfall –** leading to a shortage of water which may affect people, agriculture, industry and the environment.

- Droughts range in duration, intensity and location
  - A short event caused by a hot, dry summer
  - Spanning several years with persistent low rainfall
  - Concentrated in parts of a county or a wider region.

Portsmouth Water

7

WATER for LIFE from Southern Water

What's the purpose of a Drought Plan?

- Sets out the **actions we'll take to keep the taps running** to protect public health and the economy and environment for as long as possible.
- It's **an operational, tactical manual** to be used if we experience dry weather which threatens our water supplies.
- Aligned with our long-term Water Resources Management Plan which demonstrates the need for interventions, so **we're resilient to a range of droughts in line with our agreed levels of customer service**.
- We **work closely with neighbouring companies** in the South East and we have **aligned restrictions on water use and exemptions.**
- We also have **agreements on sharing water supplies in droughts** *(Portsmouth Water and Southern Water share supplies)*

wrse
WATER RESOURCES SOUTH EAST

8

The different stages of a drought

Both plans are presented in **four drought 'levels'** which are based on drought indicators (triggers).

Normal: No Drought

Level 1: Impending Drought

Level 2: Drought

Level 3: Severe Drought

Level 4: Emergency Drought

After a drought: Lessons learnt

Portsmouth Water

9

WATER for LIFE from Southern Water

What we'll do at the different drought levels

The plan sets out what we'll do at each drought level to:

- Raise awareness
- Save water and promote water saving (including restrictions)
- Maintain water supplies
- Monitor and protect the environment
- Work in partnership with water companies in South East and the Government.

Portsmouth Water

10

WATER for LIFE from Southern Water

What's changed since the last plans?

- These plans set out more simply the steps we'll take to be ready for droughts and what we'll do when it's dry and we need to take action.
- We've made changes to ensure the plans are more consistent with the plans of the other water companies in the South East.
- We've added actions ('more before 4') to help avoid the need for emergency measures in the most severe droughts.
- We've learnt lessons from recent heatwaves and Covid demand
- We've learnt lessons from recent drought permit applications for the River Test in Hampshire and the drought permit and order 'exercises' with stakeholders in Hampshire.

Plus, for Southern Water…

- We've removed or amended some of our drought permit and order options to reduce the environmental impact of our drought plan.

WATER for LIFE from Southern Water

11

Questions?

Portsmouth Water

12

WATER for LIFE from Southern Water

Normal times

Using water wisely

What we do **day in day out to save water** is very important to:

- Avoid droughts in the first place
- Minimise impact on the environment
- Reduce our collective carbon footprint.

Both companies working **to reduce leakage by 15% by 2025** and **50% by 2050.**

Southern Water

Target 100 water efficiency programme – water-saving home visits, efficient devices and education – to **reduce water use to 100 litres per person per day by 2040.**

Using water wisely

Portsmouth Water

- **Launched Get Water Fit programme,** with free virtual water audits and free water-saving devices
- **Smart meter trial**
- Seriously-stressed water status for potential **wider metering programme from 2025.**

Portsmouth Water

15

Knowing when a drought starts

We **continually monitor for signs a drought is developing**, including

- Rainfall patterns and trends
- Evaporation and effective rainfall
- Groundwater levels, river flows and reservoir levels.

Our drought plan sets out **trigger levels for these measures which link to the actions we'll take** to prepare for and manage a drought.

For the first time, Southern Water is **proposing new environmental triggers to show when rivers may start to become drought-stressed** so we can act early to reduce our impact.

Portsmouth Water

16

WATER for LIFE from Southern Water

Questions?

Portsmouth Water

17

WATER for LIFE from Southern Water

Portsmouth Water

Raising awareness

WATER for LIFE

from Southern Water

Actions to raise awareness

One of the most important actions during a drought is **letting people and business know what's happening**:

- The impact a drought is having
- What we're doing about it
- What everyone can do to help.

Both companies use multiple channels to communicate with customers and interested groups.

We join forces with other water companies and partners to share the same messages.

Portsmouth Water

WATER for LIFE from Southern Water

Actions to raise awareness

Our communication plans are flexible to adapt to different situations and could include:

- Emails and letters to customers and organisations
- Dedicated information area on website
- Social media with graphics, animations and films
- Media – including TV, radio and online
- Trusted third-party channels
- Advertising – radio, TV, digital, social media and newspapers
- Dedicated updates for retailers
- Webinars for public, stakeholders, customers and employees
- Local operational staff supporting customers *(e.g. those on the Priority Services Register)*

Portsmouth Water

WATER for LIFE from Southern Water

Actions to raise awareness at each level

Normal

- Promote our work to **reduce leakage** and leak reporting
- **Promote water saving** – Target 100 and Get Water Fit programmes.

Impending drought

- **Awareness campaigns** – media, social media, partners and email
- **Co-ordination** with other water companies
- Promotion of **water-saving advice and products**

Drought

- Launch of **full communications plan to all customers**, retailers representing businesses and interested organisations
- **Tailored support for vulnerable customers**
- Communication around **restrictions on water use (Temporary Use Bans – formerly known as hosepipe bans)**

Portsmouth Water

WATER for LIFE from Southern Water

Actions to raise awareness at each level

Severe drought

- **Ramp up communication** – radio, television, advertising, direct emails, text messages and letters
- Communicate **restrictions on Non Essential Use Bans** *(focused on businesses)*
- Promote **50-80 litres per day if heading towards an emergency drought**
- **Prioritise reaching vulnerable customers** to tailor support.

Emergency drought

- **Co-ordinate with Government** on extreme restrictions
- Focus on **vulnerable customers and accessibility for all.**

22

Poll 2

- What do you think is the best way for us to tell customers about a drought and restrictions?

Portsmouth Water

23

WATER for LIFE from Southern Water

Questions?

Portsmouth Water

24

WATER for LIFE from Southern Water

Actions to save water

Saving water in a drought

We have a selection of drought actions we'd undertake as a drought gets worse to **save water.**

Saving water is the priority at every stage of drought.

We've reviewed these with the other water companies in the Water Resources South East regional group to make sure we have a **consistent application** of the two key stages of restrictions:

1. **Temporary Use Bans**
2. **Non Essential Use Bans**

As well as **a consistent application of the two types of exemptions** from restrictions – automatic and discretionary.

26

Actions to save water

Normal

- **Reduce leakage** and promote leak reporting
- Promote water saving – **Target 100 and Get Water Fit programme**

Impending drought

- **Intensify efforts to find and fix leaks**
- Promote home audits, free water-saving devices, free repairs for leaky loos and water-saving advice

Drought

- **Introduce Temporary Use Bans to restrict water use at home**
- Reduce water pressure where possible
- Review water we share with neighbouring water companies
- Engage with businesses and retailers on water saving

Portsmouth Water

27

WATER for LIFE from Southern Water

Actions to save water

Portsmouth Water

Severe drought

- **Introduce Non-Essential Use Bans to restrict water use** *(focused on businesses)*
- Focus water-saving audits in **drought hit areas**
- Campaign to reduce personal water use **50-80 litres per person per day**

Emergency drought

- **Introduce rota cuts** (where water is limited to a few hours each day) or **standpipes in the street**
- **Ensure supplies are available for vulnerable customers** and organisations e.g. hospitals
- Co-ordinate with Government

After a drought

- Promote water-saving programmes and reduce leakage.

28

WATER for LIFE from Southern Water

How does this affect customers? Temporary Use Bans

Level 2: Drought

Stop using hosepipes for:

- Watering a garden – which includes public gardens, parks, lawns, verges, allotments, open green spaces, sports areas
- Cleaning a motor vehicle
- Watering plants at domestic premises
- Cleaning a private leisure boat
- Any domestic recreational use
- Filling or maintaining a domestic pond
- Cleaning walls and windows of domestic premises
- Cleaning paths or patios
- Cleaning other artificial outdoor surfaces

Also, stop using water for:

- Filling or maintaining a domestic swimming or paddling pool
- Filling or maintaining an ornamental fountain

Portsmouth Water

29

WATER for LIFE from Southern Water

What is a 'garden'?

Definition of 'garden'

As well as your garden at home, restrictions for gardens also include those shown in the illustration.

A 'garden' does not include:

- Agricultural land
- Land used commercially (that is, for growing plants and crops)
- A temporary garden or flower display
- Plants in an outdoor pot or in the ground but under cover

Portsmouth Water

30

WATER for LIFE from Southern Water

Temporary Use Bans – exemptions

Level 2: Exemptions

(A) Automatic exemptions
(D) Discretionary exemptions

Automatic exemptions:

- (A) Water-using activities which protect health and safety
- (A) Blue Badge holders
- (A) Customers using an approved drip or trickle irrigation system fitted with a pressure-reducing valve and timer
- (A) Companies using hosepipes as part of their cleaning business
- (A) Private boats where it is the customer's only home; the engine needs to be cleaned with a hosepipe or where not cleaning means the boat will use more fuel
- (A) Filling or maintaining a domestic pond which contains fish or other animals which live in water, or fountains adding air to these ponds
- (A) Goods vehicles and public service vehicles
- (A) Filling or maintaining a domestic swimming pool during construction or for health and safety reasons

Discretionary exemptions could include (check our website for latest):

- (D) Customers on our Priority Services Register with mobility issues
- (D) Watering newly-laid turf for 28 days
- (D) To prevent or control the spread of non-native and/or invasive species
- (D) Operating water features with religious significance

Portsmouth Water

31

WATER for LIFE from Southern Water

How does this affect customers? Non-Essential Use Bans

Level 3: Severe drought

Restrictions under **Level 2** plus a ban on:

Stage 1:

- Watering outdoor plants on commercial premises
- Filling or maintaining a commercial swimming or paddling pool
- Filling or maintaining a pond
- Operating a mechanical vehicle washer
- Cleaning any vehicle, boat, aircraft or railway rolling stock
- Cleaning any exterior part of a non-domestic building or non-domestic wall
- Cleaning a window at commercial premises
- Using water to suppress dust
- Use of automatic cisterns

Stage 2:

- Watering national and international sports grounds between 7am – 7pm (and only for two hours between 7pm and 7am)
- Hand car washing businesses and all automatic car washes
- Window cleaning using water-fed poles
- Cleaning of paths and patios – including graffiti removal
- Cleaning of artificial outdoor surfaces – including graffiti removal
- Watering outdoor plants on commercial premises – even if newly planted or irrigation systems in place
- Cleaning any vehicle, boat, aircraft or rolling stock – including graffiti removal
- Cleaning any commercial premises – including graffiti removal
- Cleaning industrial plant

32

Non-Essential Use Bans – exemptions

Level 3: Exemptions

(A) Automatic exemptions
(D) Discretionary exemptions

Automatic exemptions:

(A) Water-using activities which protect health and safety
(A) Blue badge holders

Discretionary exemptions could include (check our website for latest):

(D) Customers on our Priority Services Register with mobility issues
(D) Small businesses whose sole operation is cleaning windows using hosepipes
(D) Watering newly bought plants for the first 28 days after the ban is introduced
(D) Using an approved drip or trickle irrigation system fitted with a pressure-reducing valve and timer set for evenings or during the night
(D) On biosecurity grounds
(D) Companies removing graffiti

Portsmouth Water

33

WATER for LIFE from Southern Water

Poll 3

- Are the restrictions on using water for households and businesses easy to understand?
- Do you agree with introducing restrictions on using water for households first and businesses afterwards? *(The aim is to protect jobs and businesses for as long as possible)*
- Do you agree with the automatic exemptions from restrictions on using water which apply to everyone? *(These are agreed by all water companies)*
- Do you agree with all the discretionary exemptions from restrictions on using water? *(We agree these for our customers)*

Portsmouth Water

34

WATER for LIFE from Southern Water

Questions?

Portsmouth Water

35

WATER for LIFE from Southern Water

Portsmouth Water

Actions to maintain supplies

WATER for LIFE

from Southern Water

Actions we would take to maintain water supplies

- Supply-side options **allow water companies to maintain or increase their supplies** during a drought.
- We'll prioritise supply-side actions with **a lower impact on the environment.**
- **Drought permits and drought orders** are legislative tools which allow water companies to maintain or increase supplies during a drought.
- We would **always take action to reduce demand** before applying for a drought permit or drought order to maintain supplies.

Portsmouth Water

37

WATER for LIFE from Southern Water

Supply-side actions before permits and orders

- We'll make sure **all our water sources are available** and can be fully used (minimise outage and network restrictions)
- We'll operate our sources in **'drought mode'** to maintain their reliable output for as long as possible
- We'll **optimise the use of transfers** between the areas we supply and neighbouring water companies so we **collectively make the best use of available supplies**
- If necessary, we'll **use tankers to move water by road** to where it is most needed, if pipeline transfers are not available.

Portsmouth Water

38

WATER for LIFE from Southern Water

Map of drought permit and order locations

39

Examples of Southern Water's permits and orders

Our drought permits and orders have **a range of variations**, such as:

- Relaxing Minimum Residual Flow (MRF) or Hands Off Flow (HOF) limits which **stop abstraction after river flows fall below certain levels at groundwater** sources *(Lukely Brook and Caul Bourne on the Isle of Wight)*
- **Relaxing MRF or HOF constraints on surface water abstractions** used either for **direct supply or to fill reservoirs** *(Eastern Yar, River Test, and Lower Itchen in Hampshire and the Isle of Wight, Pulborough in West Sussex).*
- **Using groundwater to increase river flows** *(Candover, Hampshire)*
- **Increasing daily abstraction volumes** *(North Arundel in West Sussex)*

40

Portsmouth Water's drought permit

Portsmouth Water has one drought permit option – **to increase supplies from an underground source in North Arundel in West Sussex** in a severe drought.

We've included this option because it's the **least likely to affect the environment**.

It would take about six months to apply for the drought permit and put equipment in place to pump and treat more water.

We'd only use it after we'd introduced all the restrictions to save water and we'd carefully monitor its impact.

We also work closely with Southern Water on its drought permit and order applications for the River Itchen in Hampshire.

Portsmouth Water

41

Poll 4

- Do you support the need for **Southern Water** to use drought permits and drought orders, so we can continue to take water from the environment to maintain supplies during droughts?
- Do you support the need for **Portsmouth Water** to use the North Arundel Drought Permit in severe droughts to abstract more water to maintain supplies?
- Do you think we've got the right balance between restricting water use and using drought permits and orders to produce more water and protect the environment?

Portsmouth Water

42

WATER for LIFE from Southern Water

Questions?

Portsmouth Water

43

WATER for LIFE from Southern Water

Portsmouth Water

Actions to protect the environment

WATER for LIFE

from Southern Water

Monitoring our environment

An action from the last drought plan (2019) was **to improve our understanding of the environment**.

This includes monitoring:

- **Fish populations** and the availability of habitats
- The **presence of water insects**, how abundant they are and the availability of habitats
- **Vegetation which relies on water**
- **Vegetation and wildlife which are dependant on water in designated sites – for example,** vegetation in the Arun Valley, or water voles and otter

PLUS…

- **Monitoring the effects of water use** – e.g. water quality, hydrology and geomorphology.

WATER for LIFE from Southern Water

45

Map of drought permit and order locations

46

Our long-term commitment to protect chalk streams

- We're developing **our environmental ambition to further safeguard chalk streams** across our region in the future.
- Following a public inquiry in 2018 into our abstraction licence on the River Test, we agreed **a mitigation and compensation commitment to the internationally-rare chalk streams the River Test and River Itchen**.
- This was **in addition to an agreement to reduce our abstraction from these sensitive environments after 2027.**
- We're **working in partnership** with Wessex Rivers Trust, Environment Agency, the Hampshire and Isle of Wight Wildlife Trust and Natural England to develop **a comprehensive environmental programme.**
- In the short-term, **we're reliant on more frequent drought actions in Hampshire** until new sources of water are available.

47

Embedding mitigation in our drought permits and orders

- The **National Environment Programme** supports us to reduce water quality issues and address habitat pressures
- Our **catchment work** helps to **educate and support landowners**
- **Our permit and order applications** look directly at baseline data **to make sure we can protect sensitive features during droughts** – this includes targeted habitat improvements.

48

Portsmouth Water – environmental improvements

- Our **National Environment Programme** supports us to understand what impact, if any, our abstraction regime is having on the Rivers Meon and Itchen.
- Our **catchment work** is working with landowners and farmer to protect groundwater quality. This includes our participation in a European-wide study into ways of reducing nitrate leaching.
- We are working with local groups on the **River Ems** to understand how we can best support the river through periods of dry weather with augmentation flows from our local groundwater source.

49

Portsmouth Water

Questions?

Portsmouth Water

50

WATER for LIFE from Southern Water

Emergency droughts

Before an emergency drought

If dry weather **continues for many years**, we may reach an emergency.

We'd take every step possible to **avoid the need to ration water supplies or introduce standpipes.**

We call these steps '**more before four' –** they include:

- Sea tankering of water from Norway and / or Scotland
- Emergency water recycling (Southern Water)
- Emergency desalination on the coast (Portsmouth Water)
- Further transfers from other water companies if water is available
- **A limit of 50 to 80 litres water use** (South Africa experience)
- Tanker in supplies from other areas.

Our customers say they would find it **very difficult to cope with emergency measures.**

Vulnerable customers would need extra support.

52

The South African experience – 50 to 80 litres per day

During **the worst drought in recorded history**, Cape Town was on the verge of becoming the **first major urban centre to run out of water**.

To avert the crisis (Day Zero), restrictions of just **50 litres per person** per day were imposed.

- To reduce from 127 - 154 litres per person per day to 50 litres would need **a significant change in water use e.g. only using dishwashers and washing machines once a week**
- This **water-saving action has been explored by the WRSE group to see how feasible it would be** if we found ourselves in a similar situation
- There would be **lower wastewater flows** with higher concentrations of wastewater into waterbodies which would already be low
- **Extra monitoring** would be needed.

53

Emergency drought

Once we reached our **Level 4 Emergency Drought triggers** and we'd exhausted all other drought actions, we would seek to implement **emergency drought measures**.

- This would **limit water supplies to homes and businesses to certain times of the day**
- Or we would ask customers to **collect water for drinking, washing and cooking from standpipes in the street, or from mobile water tankers** at key community locations
- These actions are **a last resort** and the possibility of them happening is **extremely rare**
- **We would take every step to avoid them.**

54

Poll 5

- Is it ever acceptable to introduce emergency restrictions such as standpipes *(water pipes in streets)* or rota cuts *(where water is only available for a few hours each day)?*

- Would you be willing to significantly reduce your water use to 80 or even 50 litres of water each day in a very severe drought in order to avoid standpipes or rota cuts?

Portsmouth Water

55

WATER for LIFE from Southern Water

Questions?

Portsmouth Water

56

WATER for LIFE from Southern Water

When a drought ends

How do we know when a drought is over?

- We'll **continue to monitor rain, river flows, evaporation, groundwater levels and reservoirs** throughout a drought.
- The **timing of rain is important** – summer rain can help rivers but we wouldn't expect groundwater and reservoirs to recover fully until we have normal winter rainfall
- There **will often a be a lag, possibly of several months**, between when it starts to rain normally and when our resources recover
- We'll **need to keep some drought measures in place** during this time.

58

Stepping down drought activities

- We'll need to wait for groundwater and reservoirs to recover so we **may not start to ease restrictions until late spring the year after a summer drought**
- We would continue to **communicate regularly with the Environment Agency and all our customers and interested groups** as a drought situation improves
- Even after a drought we'll **continue to monitor the environmental impacts of the drought and the drought measures** we took, such as drought permits or orders
- **We'll continue to keep customers up-to-date.**

Portsmouth Water

59

WATER for LIFE from Southern Water

Learning for the next drought

Portsmouth Water

After a drought we'll **review what happened and learn lessons** for next time. We'll investigate:

- How did the drought and water resource position start and develop?
- Did our drought triggers work well?
- What was the impact on customers?
- How effective was our drought plan?
- Did we meet our performance targets?
- What were the environmental impacts, do we need to update our environmental assessments?
- What improvements do we need to make for our next Drought Plans and Water Resource Management Plans?

We'll gather feedback and publish a drought review.

60

WATER for LIFE from Southern Water

Poll 6

- Are the different levels of drought, and the actions we need to take at each one, easy to understand?
- How useful has this webinar been and why?

Portsmouth Water

61

WATER for LIFE from Southern Water

Questions?

Portsmouth Water

62

WATER for LIFE from Southern Water

Thank you and please share your feedback

Summary and detailed versions of draft drought plans available online at

www.southernwater.co.uk/droughtplan

www.portsmouthwater.co.uk/droughtplan

- Complete our online surveys
- All feedback will be shared with Defra
- Contact Defra directly – email water.resources@defra.gov.uk
- **Consultations close on 2 August 2021.**

Portsmouth Water

63

WATER for LIFE from Southern Water

G.3.3. Post Consultation Note

Hello,

Many thanks to everyone who able to attend today's consultation webinar on Portsmouth Water and Southern Water's draft drought plans.

A reminder that you can view the plans and give your feedback on them via the below drought plan consultation web-pages. The consultations close on 2 August 2021.

- www.southernwater.co.uk/droughtplan
- www.portsmouthwater.co.uk/droughtplan

Also, please click **here** if you would like to access the video recording of the webinar that's been posted online. The presentation slides from the session are also available by clicking **here**.

Plus, if you were not able to access the links for the polls we ran as part of the webinar, please see the full list of links below, so you can still provide your feedback post-meeting.

Opening poll: https://forms.office.com/Pages/ResponsePage.aspx?id=RyCs8DjDLEuATnWckn-g5WFd53QeVdRApRob02fz2MZUMzlXSDUxUFBaWEJIWk45WFpaNkVMSU4wRiQlQCN0PWcu
Poll 2: https://forms.office.com/Pages/ResponsePage.aspx?id=RyCs8DjDLEuATnWckn-g5WFd53QeVdRApRob02fz2MZUOE5WMUVMT0Y4MUlVUUJQV0RQUVo4VVFOSiQlQCN0PWcu
Poll 3: https://forms.office.com/Pages/ResponsePage.aspx?id=RyCs8DjDLEuATnWckn-g5WFd53QeVdRApRob02fz2MZUQlpSRlZWTlA3RFlSRFk3SUlRSjRLMFU2WCQlQCN0PWcu
Poll 4: https://forms.office.com/Pages/ResponsePage.aspx?id=RyCs8DjDLEuATnWckn-g5WFd53QeVdRApRob02fz2MZUOVdZT0w1QUNRVkU5MVlDTFZWRDNYRVZCQSQlQCN0PWcu
Poll 5: https://forms.office.com/Pages/ResponsePage.aspx?id=RyCs8DjDLEuATnWckn-g5WFd53QeVdRApRob02fz2MZUQ0UyU0NOU01POU04MDRJTjFEQzFMSkZITiQlQCN0PWcu
Poll 6: https://forms.office.com/Pages/ResponsePage.aspx?id=RyCs8DjDLEuATnWckn-g5WFd53QeVdRApRob02fz2MZURUpPVVpRR0VRTVNXTzZMSVVESTBTSzlQRiQlQCN0PWcu.

As ever, please do let us know if you have any queries, or if you have any issues in accessing the above materials.

We look forward to hearing your views on our drought plans proposals.

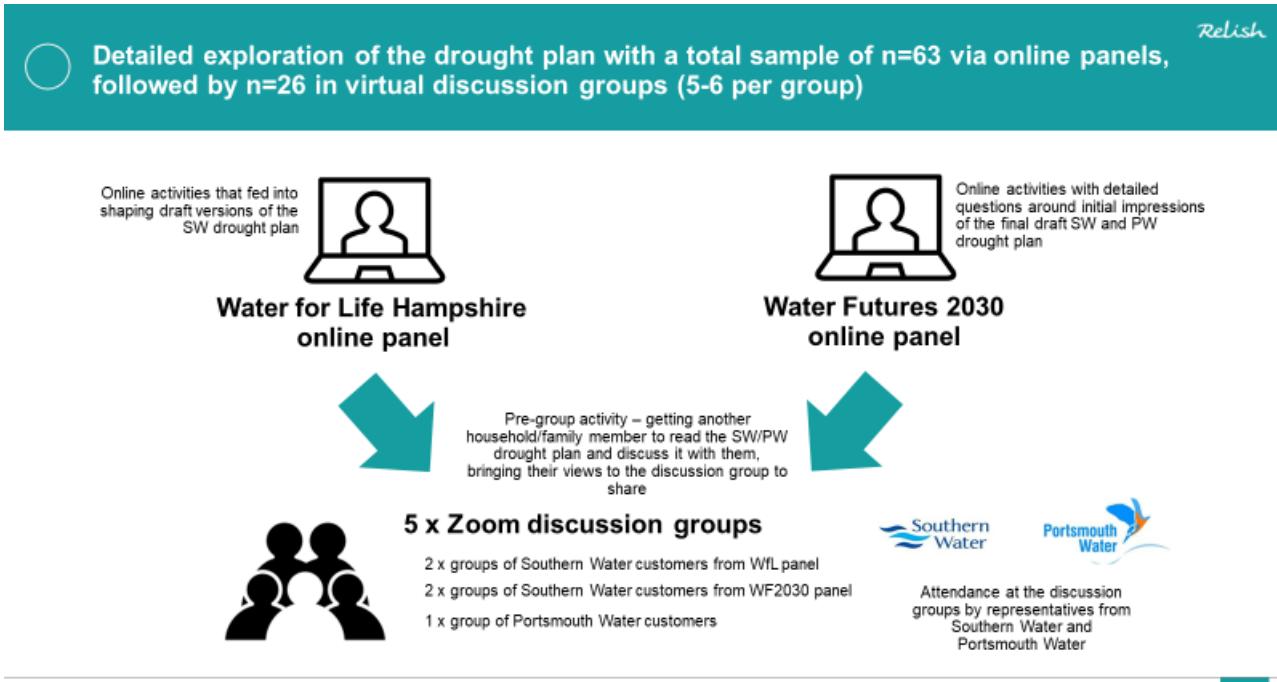
All the best,

Joel
For and on behalf of Portsmouth Water & Southern Water.

Joel Hufford
joel@create51.com
www.create51.com

G.3.4. Customer Views on Drought Plans (Relish)

Slide pack with 35 slides



Findings from Portsmouth Water customers

Relish

Please note that this report collates findings from both Southern Water and Portsmouth Water customers, given that the two Drought Plans are so similar.

However, we have added a section at the end to give a Portsmouth specific customer perspective and to pull out any differences/nuances we have picked up on throughout the research.

Recapping what WfL Hampshire panellists fed into the initial draft of the SW drought plan in April

Relish

Relish

From April 2021 customer engagement on drought in the WfL Hampshire panel

1

Whilst there is recognition that climate change is increasing the likelihood of droughts, it is felt that there is a lower chance that there will be severe droughts within the next few years.

As such, most are accepting of some level of risk in order for their preferred long-term solution to be implemented. 5 years also offers reassurance that the option implemented will be put in place without any corners being cut, and with environmental concerns in mind.

3

The information in the draft drought plan doesn't necessarily feel new nor change opinions on the solutions customers feel Southern Water should employ. However, the levels and restrictions have heightened the sense of urgency and need for proactive planning.

2

Whilst some prefer the shorter duration of risk of two or one years of restrictions, there is a feeling that this may not allow sufficient time for any solution to be implemented robustly – more of a quick fix. Preference is less associated with inconvenience of restrictions and more for over-delivery on time-scales.

We must however, be aware of those customers who would prefer to sacrifice their chosen solution in favour of no restrictions at all.

4

The Covid pandemic initially heightened trust in experts, though only if those in charge follow this advice.

The pandemic has increased the desire to be better prepared for the unknown and appreciation of water as a precious resource. Given how suddenly life can be drastically changed, the pandemic has increased the need to prepare for unforeseen events and the future.

Relish

Learnings from the April 2021 WfL Hampshire customer engagement reveal the need for further education around droughts

Risk of droughts feel acceptable for the preferred long-term solutions in Hampshire

- Customers understand that long-term solutions require large scale projects that take time to be completed. Customers can live with the restrictions that are inevitable to get these solutions in place **if** it will safe-guard them from restrictions in the future
- Shorter restriction times whilst favourable as a gut reaction would be seen as a 'rushed' job that could be problematic in the future and require more disruption to fix
- **We need to be aware of this gut reaction when communicating with our broader customer base, depending on which solutions are progressed**
- **It is essential that we bring customers with us on the journey, to understand the situation in Hampshire and the need for a bigger picture plan**

Education around the severity and frequency of droughts is needed

- Even our more informed customers have little understanding around when a drought may occur and so why and when severe restrictions may be needed
- Although level 4 restrictions can be shocking, seeing that a plan is in place for these eventualities is positive, especially in the context of the current pandemic
- **Educating customers to understand when and why a drought may occur and the impact this can have helps create buy in for these more severe restrictions**
- **There is also an opportunity to build on the support and appreciation for our emergency / essential services seen in the pandemic when communicating the need for these restrictions**

Leveraging customer feeling around the pandemic

- The pandemic, whilst initially implying a sense of trust in authorities, has lead some to mistrust those in charge when expert advice is seen to not be followed
- However, the pandemic has also created a need for a bigger picture plan - customers want to know what is in the future and plan for all eventualities
- **There is an opportunity here to build on this feeling by communicating our plans in the context of preparing for the future, referencing expert agencies where possible but ensuring we demonstrate how their advice has been used and acted upon**

Overview of customer views on the draft drought plan (June 2021)

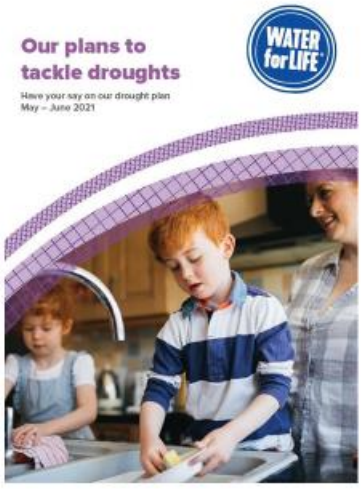
Relish

7

No fundamental changes to the drought plan are required, but it would benefit from some superficial 'tweaks' recommended throughout this report

Relish

- The drought plan has researched well with customers
- Provides **reassurance** that there is a **credible** plan for all eventualities
- **Comprehensive** and detailed, yet still **accessibly written** for customers
- Pandemic has meant that detail around levels, rules and exemptions now feels more **familiar**
- **Collaborative** in tone, though there is felt to be a lot of onus on the customer throughout and may benefit from more detail on SW **preventative** work (e.g. on leakage, water efficiency etc.)



8

Customers who engage with the plan are left in no doubt as to what will occur during drought conditions

Relish

What customers like about the drought plan

- ✓ Logical flow and structure to the document
- ✓ Document is sufficiently simplified without 'dumbing down'
- ✓ Feels comprehensive and considered, covering all eventualities
- ✓ Reassuring, particularly for the worst case scenarios of severe/emergency drought
- ✓ Levels and restrictions are broken down in an easy to understand way via tick lists and colour coding
- ✓ Written in a friendly, collaborative tone, with a lot of focus on the customer
- ✓ No use of industry jargon
- ✓ The environment is taken into serious consideration

9

Even this informed audience feel that there should be more contextual information early in the drought plan to explain objectively about droughts and their likelihood

Relish

Some potential areas for reworking/tweaking

- × Further context required early in the document to explain with facts and figures industry-wide definitions of drought
- × No mention of population growth as additional factor (from WfL panellists) to mitigate minority perceptions that climate change can seem like an excuse
- × Whilst collaborative approach is welcomed, balance can feel too much on customer restrictions/actions rather than SW – could we dial up preventative work undertaken e.g. T100, leakage etc.?
- × Some extraneous info e.g. referencing **additional** work to prevent leakage during drought feels like too little too late; also referencing monitoring of rainfall during extreme drought feels too obvious and not action-focused
- × Some comments that imagery is fairly weak, in particular people focused imagery that is insufficiently inclusive
- × More use of infographics and summaries to help maintain engagement for those who are less likely to read copy
- × Unclear how restrictions will be policed/monitored

10

What SW customers have said overall about the drought plan

Relish

"I do like that you are directly addressing the issue of water shortages with a consumer-pointing info pack."

"It is well laid out and informative. I liked the easy to understand descriptions of each level of drought and what actions are required and from which groups. The colour coding and bullet point format were illustrative and simple to take in."

"I like that it outlines what SW will do and what it expects you to do as well as laying out what are legal requirements and what things will be discretionary requirements."

"I think the plan is very good as what I read informs me that the plan includes what the water companies do in the event of a drought, what we as customers need to do and how this will affect the environment."

"I was a bit concerned that SW only seem to take more action with repairing leaks during a drought and not as a preventable action."

"What I don't like about it is that there is such a need for it – which undermines the thrust of it. It feels like closing the barn door after the horse has bolted, and water companies opened the door in the first place."

11

Principles underpinning the SW drought plan

Relish

12

Customers largely support restricting households before businesses – but there's a fine balance to be struck between transparency and drawing too much attention to it

Relish

Restrictions for households before businesses

What householders and businesses need to do to save water

Over the next pages we set out what we'll ask householders and businesses to do to save water at different stages of droughts.

The first stage of restrictions is Temporary Use Bans (formerly hosepipe bans) which are likely at Level 2 (Drought). We'd give at least seven days' notice before bringing these in and they are aimed at reducing water use in homes and gardens.

The second stage of restrictions is Non Essential Use Bans, which are likely at Level 3 (Severe drought). These are aimed at reducing water use by businesses and industry.

We introduce them in this order to protect jobs and the economy for as long as possible.

For each stage there are exemptions for certain customers or activities. Some of these are automatically allowed by all water companies in the UK and some are at the discretion of individual water companies.

Hampshire and Isle of Wight

For now, some of these levels of drought actions may happen more frequently for customers and businesses in Hampshire and the Isle of Wight due to the particular water supply and environmental challenges we face there.

This will be the case until around 2030 when we will have new water resource schemes in place that can reduce the risk of restrictions happening in the first place.

- Customers understand and mostly agree with the principle that this protects jobs and the economy first and foremost – the impact that lockdown has had on business during the pandemic furthers this case
- However, there are also some strongly voiced concerns that this can feel as if profit is being put before people and that customers always seem to bear the brunt of the impact during bad times
- And it can create apparent contradictions e.g. *'I can't wash my own windows as we are saving water but I can pay someone to come and do it?'*

13

Relish

What do customers say about restrictions to households before businesses?

"I think it's fair to introduce it to households first as there are more than there are businesses and they will have more of an initial impact than a business will. The idea to protect industry is also good as it is looking at the bigger picture and the impact it could have."

"I agree with restricting households first as if businesses were to struggle, households may not have access to other essential services in their home."

"It's imperative to keep businesses thriving especially after a pandemic and it makes perfect sense to apply the restrictions in this order."

"We all know business has too little focus on the environment as it is, and this can be seen as legitimising that approach. A country should operate for its people, not its businesses."

"I do not agree with restrictions of water for households before businesses as I feel residential customers use a lot less water than businesses. However, I think a hose pipe ban and customers not filling swimming pools or washing cars should be applied."

14

If exemptions are to be published in the drought plan (and not via links to a separate site) then there will inevitably be some that are deemed controversial

Relish

Automatic and discretionary exemptions

- Strong consensus that there need to be nation-wide agreed exemptions during times of fairly extreme restriction to be fair to those who most need water
- Leaving some exemptions to the discretion of individual water companies with different demographic and geographic areas also feels appropriate
- However, as with any exemptions to rules, customers can all too readily find examples that they personally disagree with, or that they don't fully understand e.g. filling or maintaining domestic swimming pools
- Also some questions around how the exemptions were agreed

15

What do customers say about the exemptions to the restrictions?

Relish

"I agree with the automatic exemptions, as the scenarios listed on the document are mostly important and help people or animals to continue living and their need for water is higher."

"I do agree with these exemptions, and if all water suppliers agree on them then it must be ok."

"You are asking those of us who can tolerate restrictions to make a small sacrifice for the good of all of us. I can't see what is wrong with that."

"I think any system does need flexibility built in or some are invariably left to fall through the cracks, or some are unduly hit harder…but it wasn't clear to me how these were determined?"

"Some of the exemptions aren't clear cut for me. Clearly some exemptions are required for Blue Badge holders and vulnerable customers, but I can't see here how vulnerability could require urgent cleaning of a boat during a drought."

16

Language around the environment in the drought plan should be about 'minimising impact' rather than 'protecting' so as not to be felt to mislead

Relish

Applying for drought permits and drought orders

- Customers are concerned about environmental impact and therefore fully support the idea that SW has to apply to the EA or DEFRA for permits/orders to abstract more than usual during times of drought; but they do feel this should only be used as a last resort
- By and large, they also feel that there is an appropriate balance between restrictions on customers and applying for further abstraction
- However, some have highlighted a perceived contradiction between the plan stating that it is 'protecting the environment' and then authorising environment damage by over-abstraction
- Some also misunderstand that the orders/permits would be applied in level 2 drought rather than requested

17

What do customers say about drought orders and drought permits?

Relish

"This is a tough one as by causing additional environmental damage by use of drought permits and orders we are inevitably causing ourselves further problems down the line. These should be used as a last resort when all other measures have not provided sufficient water."

"The environment is obviously a big concern for some people, but water is a very important resource that humans use daily and this is also very important."

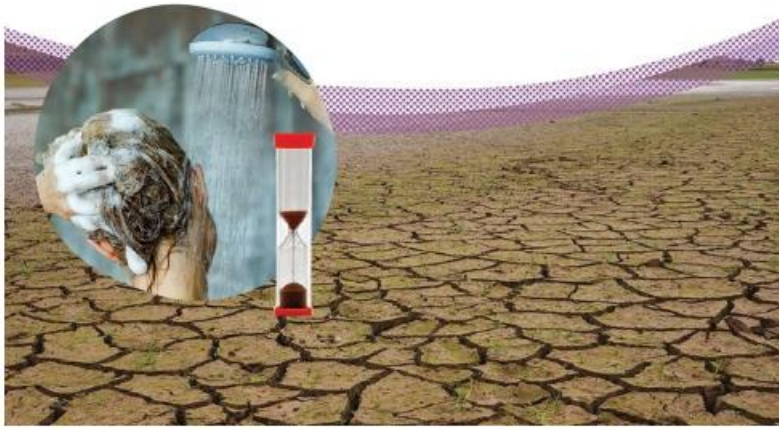
"SW needs to be accountable in the drought situation and they need to be able to use permits and orders to maintain supply of water, so it is essential."

"Since river extraction is so important in our area, especially world renown chalk stream, excess abstraction should be justified and considered with ameliorating activities where possible."

"I think this is necessary unfortunately, but it reflects very badly on SW as they have got themselves into this position through poor planning and lack of future views."

18

Willingness to adopt emergency restrictions



Relish

19

Customers are very accepting of levels 3 and 4 restrictions and there are very few indications of potential resistance

Relish

Surprisingly high claimed acceptance of restrictions for severe or emergency drought (levels 3 or 4)

- Customers understand the need from reading a well constructed document
- COVID has increased acceptance of rules and some degree of civic responsibility
- Some recall using standpipes in the 70s
- Rota cuts feel more acceptable than standpipes for some (feels less of an imposition and easier to work around)
- Awareness of water rationing being required elsewhere in the world

However, they do accept that some life stages will struggle more than others

- Esp. vulnerable customers, older customers and parents with young children

20

Customers don't fully grasp the severity of the measures on their lives from the drought plan document – though it is not necessarily the role of the drought plan to achieve this

Relish

Lack of equivalencies means that severity of water rationing is not fully understood

- 50-80 litres sounds like quite a lot when not measured in terms of baths/toilet flush/washing loads etc.

Drought plan has presented the information in a necessarily factual manner

- Gradual increase of levels with wide array of measures that go right across society

Seems fairly unlikely to customers that levels 3 or 4 will be necessary

- Reference to once in 500 years downplays likelihood
- Document is seen as exercise in worst case scenario planning

In the event of serious drought conditions, SW would need to lean on behavioural change messaging (as per COVID) to ensure that customers do adopt the restrictions in full when the reality of the situation becomes clearer to them; raising awareness of this in advance risks being seen as scaremongering

21

What do customers say about adopting levels 3 or 4 restrictions?

Relish

"I'm a very low user so for me this isn't an issue or something that I would ever need to think about, but for others it would be a severe hardship."

"I would need a proper understanding of how much 80/50 litres of water would be to make a judgement on this."

"I would be very willing to reduce my intake of water. I would also use standpipes. Although some households may experience difficulties if they had young children for example, it could be inconvenient for them."

"I will try to do as much as I can. I am a responsible citizen. I understand the emergency and will do my best to even limit less than 50 litres if possible."

"Look at what's happened with COVID restricting all of our movements, and we are all fine."

22

Communicating drought and restrictions

Relish

23

Relish

For now, all customers want to know is that there is a drought plan; but COVID has increased expectations for smart and targeted drought messaging at a time of drought

When forward planning for drought conditions

- Customers don't generally feel they need forward sight of the details of the drought plan
- It is sufficient to reference to customers that there is a drought plan
- Make it accessible via the SW website

When drought conditions are impending

- ATL messaging essential to achieve sufficient breadth of coverage; suggested linking to weather broadcasts
- SMS messaging to give sense of immediacy and urgency, and to make it relevant/personal to individual customers
- Details/specifics of restrictions/rules etc. via leaflets
- Future potential for location based app similar to COVID apps

24

How do customers want us to tell them about drought and restrictions?

"While we do like to see info that has the balance of how the decision/policy was decided on front and centre, it is too much for us to realistically take in."

"The plan should be located on the SW website so we can find it easily if we ever want to or need to."

"SMS messaging can be sent not just to individual households but specific geographical areas so that could help spread the word when a drought happens."

"Can't we have some kind of drought warning system like the flood warning system via regional weather forecasts?"

25

A Portsmouth Water perspective

26

Although much more concise by comparison with the SW drought plan, the PW plan has no less impact or understanding and researches well

Relish

- The Portsmouth Water drought plan has researched well with customers and received a **similar level of acceptance** to the SW plan
- Seen as providing **reassurance** that all drought eventualities have been planned for
- Still feels **detailed** (although only 7 pages compared to SW 16 pages) and no sense that there are any omissions
- **Accessibly written** and presented for customers (particularly the 'at a glance' traffic light system which has strong standout when shown stand alone – though unclear why red is not used for emergency level 4)
- Communications preferences at a time of impending drought align with SW customers – SMS, leaflets, and potential for an app, along with ATL comms

27

Customers agree with the principles behind how the restrictions are applied, especially for the North Arundel area, though again we see how very specific exemptions will often provoke a reaction

Relish

Restrictions for households before businesses

General consensus that this is fair and that it is right to protect jobs and livelihoods first and foremost. Some even feel that businesses are more cost-conscious and therefore less likely to waste water vs households.

Automatic and discretionary exemptions

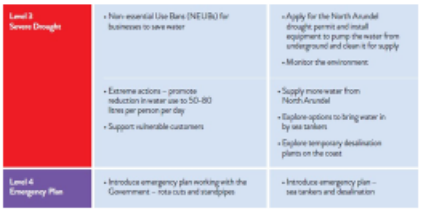
As with SW customers, whilst it feels appropriate to have exemptions to ensure fairness (and that these are agreed by all water providers), specific examples lead to confusion and potentially some resentment. Where there is total agreement is on exemptions for health purposes.

Applying for drought permits

Seen as important that these permits have to be sought to avoid over abstraction in North Arundel and environmental damage. Also reflects well on PW as taking a responsible approach. There is some desire for more info in the document on the potential environmental impact this would have on the local area.

28

Similar to SW customers, PW customers seem very accepting of levels 3 and 4 restrictions, though this is hard to ascertain accurately outside of a time of drought



- Rota cuts seen as fairer than standpipes, but they accept all such measures in times of severe/emergency drought
- Whilst pandemic has meant that levels, rules and exemptions now feel more familiar, some also concede that it may have bred complacency and potential for non-adherence to restrictions
- There is also a risk that customers are making a false comparison between COVID restrictions and drought restrictions, underplaying the severity and impact of the drought restrictions on their daily lives
- Essential to ensure the timing of drought restrictions is right and not to impose them too early, or will risk drop-off

29

Evidence from this research strongly indicates that customers need relatable equivalencies when referencing volume of water – so they understand potential impact

Part of the reason for customers being very accepting of levels 3 and 4 restrictions is that they struggle to conceptualise volumes of water

- Expressing water in terms of 50-80 litres does not have any meaning for daily activities, and some think it sounds like quite a lot and would therefore not be too restrictive

Infographics/comms such as those used in Cape Town in 2018 were discussed in the PW session and would potentially help to land these messages more clearly

- These may be as part of the messaging campaign at the time of drought, rather than necessarily in the drought plan document itself

30

What Portsmouth Water customers say about the Portsmouth Water drought plan

"I like that an agreement was put in place for universal plans for the South East, so each stage of the restrictions are the same no matter where you are."

"I think the restrictions and plans are easy to understand and make sense, however I am concerned about the use of natural water reserves."

"I love the traffic light idea, but why is the colour red not used for the most severe situation?"

"We need some clarity as to what 80 litres of water equates to ie. 2 showers per person for 5 minutes etc."

"I agree that non essential use of water (e.g. car washing) should be banned for households in any drought, and that restrictions on households rather than businesses would be ok as it ensures the economy won't suffer as a result of a drought."

"I agree with the idea of drought permits in principle, but I would need more information first. There is no mention of how this would affect the local area of Arundel."

31

In conclusion

32

Customers have comprehensively reviewed the SW and PW drought plans and find them to be clear, understandable, fair and appropriately balanced

Relish

Both drought plans (SW and PW), as tested, have achieved customer approval on:

- ☑ Clarity around levels of drought and water company and customer actions needed
- ☑ Clarity on restrictions for households and businesses, including exemptions, with sufficient supporting rationale
- ☑ Use of drought permits and drought orders only when absolutely necessary (ie. levels 3 and 4)
- ☑ Acceptance* of emergency restrictions in more severe drought conditions

* However, as with any large scale emergency situation, true impact will not be felt by customers until restrictions kick in. Whilst it is not the role of the drought plan to drive behaviour change, it is imperative that SW/PW puts in place necessary steps such that messaging at the time of serious drought will be sufficiently effective (and potentially hard hitting).

33

There are however some tweaks that can still be made to both drought plans to further align with customer views

Relish

Potential tweaks for SW consideration

1. Include **more context** in opening section of the drought plan to explain with facts and figures more about how droughts are defined, and not just from a Southern Water perspective
2. Include **more info on SW preventative measures** to help mitigate against drought so customers understand the ongoing commitment and investment to ensuring water resilience in the region – this will help rebalance the plan slightly so it does not feel the onus is all on customers to endure restrictions
3. **Review imagery** throughout to enhance engagement and inclusivity
4. Change **language around environment** so that it is about minimising impact rather than 'protecting'
5. Use of **every day equivalencies** to help convey water volumes

Potential tweaks for PW consideration

Overall, there are less potential tweaks to be made, as the more concise nature of the document vs the SW plan has raised fewer questions (e.g. around context and other preventative measures)

1. **More info on the potential environmental impact** that further abstraction could have on the North Arundel area
2. Use of **every day equivalencies** to help convey water volumes - use of infographics to succinctly contextualise information would improve comprehension
3. Rework colour palette of traffic lights so that **red is level 4 rather than purple**

34


Relish
oliver@wearerelish.com
Oliver Farr, Insight Director
gemma@wearerelish.com
Gemma Langley, Insight Director
bradley@wearerelish.com
Bradley Bain, Senior Insight Manager
LONDON
3 Angel Walk
Hammersmith
London
W6 9HX
T: 0208 994 2333
www.wearerelish.com
@wearerelish
We Are Relish

Drought Plan Research – Zoom Groups

120 mins
June 2021
Version 1

PRE-TASK ACTIVITY

- All customers have been sent the drought plan to read thoroughly prior to attending the sessions. They have also been asked to spend 10 mins with another household member collating their overall views on the drought plan and what it means for them – to bring along to the sessions.

INTRODUCTIONS (10 mins)

- Thank participants for joining and remind them session will last 120 mins
- Explain topic for discussion is the Southern Water / Portsmouth Water drought plan – and for those of you who have already undertaken online activities on this drought plan with us, this session is more discursive so we get the chance to discuss and debate it with other customers and with the people who have written the plan
- Explain we work for an independent research agency
- No judgements or right / wrong answers
- Everything confidential and shared only with those present and end-client
- Explain recording and viewing
- Any questions?
- Round the room – first name, where abouts you live, others that live at home with you?

[ensure all participants have copy of drought plan in front of them]

WHY WE ARE HERE (5 mins)

- One attendee from Southern Water / Portsmouth Water to introduce themselves and their job role, and explain:
    a) Importance of having a drought plan
    b) Why Southern Water / Portsmouth Water values customer input into the drought plan
    c) The other ways in which Southern Water / Portsmouth Water is collating customer feedback on the drought plan

OPEN HOUSE ON DROUGHT PLAN (20 mins)

In this section we want to allow for broad discussion around initial impressions of the drought plan, before then going into specific areas in the following sections

- Thinking about the drought plan as a whole, how did you feel in general when reading this? *Probe specifically around the content/information included and level of detail*
    - What were your first impressions?
- Who do you feel this document is aimed at? Why?
- What if anything included in this document was new news to you/surprising?
    - How did this differ to what you previously thought?
    - How does change impact how you feel towards water:
        - As a resource?
        - Your water usage?
    - And what you feel this will mean for you and your household?
    - How fair or unfair does this feel?
- How credible is the drought plan?
    - To what extent do you believe that these measures outlined in the plan will actually make the required difference, why/not?
- What impression does this document give you of Southern Water / Portsmouth Water? What does it say / infer about their approach to the supply of water?
- As the pre-task activity, we asked you also to show the plan to another household member/friend/family member to collate their views. Can you please tell us what you heard from them, and how consistent/different this is from your views?

Moderator: Probe around if not mentioned:

- Drought frequency (including winter vs. summer)
- Drought severity
- Levels of restrictions (1-4)
- Drought permits

CLARITY AND COMPREHENSION (10-15 mins)

In this section, we want to establish the extent to which customers feel they understand the drought plan and their thoughts on how the information is presented.

- How confident are you that you fully understand the Southern Water / Portsmouth Water drought plan, having gone through it in some detail?
    - Any elements that feel unclear or need further clarification?
- How well would you say you understand (explore fully for each of the below):
    - What a drought is?
    - Preventative measures water companies are taking to help limit the impact of droughts?
    - The different levels of drought?

    - What restrictions need to be applied at each level for households and businesses?
    - Why restrictions are necessary?
    - How you can help?
- How easy to understand are the different levels of drought and the actions Southern Water / Portsmouth Water need to take at each level? (explore fully)
- How easy to understand are the restrictions on using water for households and businesses? (explore fully)
- What do you think about the way in which the drought plan is structured (refer to flow of info on contents page)?
    - How logical and easy to follow does this make it?
    - Which bits did you find yourself skipping ahead to / skipping past, and why?
- What are your thoughts on the format of the drought plan (amount of text vs images, lists and other ways in which information is presented)?
    - How helpful do you find the format when going through the drought plan, why/not?
- Looking at the length of the document, what impact does this have on your likelihood to engage with it and read it fully vs skim read vs not read at all?
    - How long did it take you to read?
- How do you feel about the language used in the drought plan?
    - How easy to understand is it?
    - Any examples of unclear language or jargon/industry terms that you don't understand?
- How would you describe the tone of the drought plan – ie. how Southern Water / Portsmouth Water come across in what they are saying and how they are saying it?
- Overall, how accessible do you think the drought plan feels for customers – in terms of format, language, content?
    - Where do you think you would find the drought plan?
    - Would you ever seek it out for yourself – if so, under what circumstances?
    - Would you ever expect it to be signposted to you by Southern Water / Portsmouth Water – when/where, using which channel?

SUPPORT FOR THE PRINCIPLES (30 mins)

In this section, we will be exploring, discussing and debating in detail the key principles within the drought plan.

Let's now think about some of the main elements of the drought plan and some of the key principles included within it. We will deal with these one at a time so we don't get them all mixed up.

- **Show card on screen:** *Introducing restrictions on water for households first and businesses after*
    - What are your initial reactions to this approach?
    - To what extent do you support/agree with it? Why/not?

    - What are the benefits and drawbacks to this approach?
    - Why do you think Southern Water / Portsmouth Water do this? (spontaneous, then explain that the aim is to protect jobs and businesses for as long as possible) – how do you feel about this being the rationale behind it?
    - How fair does this principle seem, why/not?
    - How does this approach make you feel about Southern Water / Portsmouth Water?
    - What issues do you think taking this approach might throw up? And how do you think Southern Water / Portsmouth Water should deal with these issues?

- **Show card on screen:** *Automatic exemptions from restrictions on using water which apply to everyone (and are agreed by all water companies)*
    - What are your initial reactions to these automatic exemptions and the fact they are agreed by all water providers (moderator to flag them on screen)?
    - To what extent do you support/agree with them? Why/not?
    - Why do you think Southern Water / Portsmouth Water have these automatic exemptions?
    - How fair does having these automatic exemptions seem, why/not?
    - How do the automatic exemptions make you feel about Southern Water / Portsmouth Water?
    - What issues do you think taking this approach to automatic exemptions might throw up? And how do you think Southern Water / Portsmouth Water should deal with these issues?

- **Show card on screen:** *The discretionary exemptions from restrictions on using water (moderator to refer to these exemptions in the drought plan)*
    - What are your initial reactions to these discretionary exemptions (moderator to flag them on screen)?
    - To what extent do you support/agree with them? Why/not?
    - Why do you think Southern Water / Portsmouth Water have these discretionary exemptions?
    - How fair does having these discretionary exemptions seem, why/not?
    - How do the discretionary exemptions make you feel about Southern Water / Portsmouth Water?
    - What issues do you think taking this approach to discretionary exemptions might throw up? And how do you think Southern Water / Portsmouth Water should deal with these issues?

- **Show card on screen:** *The need to use Drought Permits and Drought Orders [for Portsmouth Water customers moderator to show version that references the North Arundel Drought Permit]*
    - What are your initial reactions to this approach?
    - To what extent do you support/agree with it? Why/not?

    - What are the benefits and drawbacks to using Drought Permits and Drought Orders in this way?
    - Why do you think Southern Water / Portsmouth Water do this? (spontaneous, then explain that the reason is so we can continue to take water from the environment to maintain supplies during droughts) – how do you feel about this being the rationale behind it?
    - How fair does this principle seem, why/not?
    - How does this approach make you feel about Southern Water / Portsmouth Water?
    - What issues do you think taking this approach might throw up? And how do you think Southern Water / Portsmouth Water should deal with these issues?

- **Show card on screen:** *Balance between restricting water use and using Drought Permits and Drought Orders*
    - To what extent do feel Southern Water / Portsmouth Water have got the balance right between restricting water use and using Drought Permits and Drought Orders? Why/not?
    - Why do you think Southern Water / Portsmouth Water have struck the balance they have? (spontaneous, then explain that the reason is to produce more water and to protect the environment) – how do you feel about this being the rationale behind it?
    - How fair does this seem, why/not?
    - How does this approach make you feel about Southern Water / Portsmouth Water?
    - What issues do you think taking this approach might throw up? And how do you think Southern Water / Portsmouth Water should deal with these issues?

- Overall, how fair do the principles behind this drought plan seem to you as customers?
    - How would you want to see them changed in future to be fairer, if at all?

For WfL Hampshire panellists only:

- Thinking about your preferred solution/s for tackling potential future water shortages in Hampshire, how are you feeling about the principles behind the drought plan?
    - Do any elements of the drought plan affect or change how you feel about your preferred solution/s for Hampshire from the package of potential measures we have been exploring in the online panel? If so, please tell us how and why?

WORST CASE SCENARIO EXPLORATION (15 mins)

In this section, we want to explore extent of acceptance of the potential measures needed in a severe drought situation.

- Looking at the level 3 and level 4 actions (moderator to show relevant pages on screen), how do you feel about these? How surprising are the level of restrictions here?
- How would these levels of restrictions affect your household and lifestyle?
    - What would this mean on a day-to-day basis for you and your household?
    - What would it prevent you from doing?
    - How do you feel about this?
- How acceptable do you think it is to introduce emergency restrictions such as standpipes (water pipes in streets) or rota cuts (where water is only available for a few hours each day)?
    - How do you think your household would cope in this situation?
    - What would the impact be on your household and lifestyle?
    - How accepting are you of this kind of impact?
- To what extent would you be willing to significantly reduce your water use to 80 or even 50 litres of water each day in a very severe drought in order to avoid standpipes or rota cuts?
    - How do you think your household would cope in this situation?
    - What would the impact be on your household and lifestyle?
    - How accepting are you of this kind of impact?
- To what extent do you think living through the pandemic has affected your views on the kinds of situations we are discussing here, if at all?

COMMUNICATING DROUGHT AND RESTRICTIONS (10 mins)

In this section, we are exploring customer preferences for water providers communicating about a drought and any associated restrictions.

- In the past how have you found out droughts and any associated restrictions?
    - Directly from water provider or indirectly via other sources – if so, which?
    - How did you find the experience of finding out this way?
    - Anything you'd suggest providers should do differently in terms of communicating about a drought and associated restrictions?
- Thinking about all the ways in which a water provider could communicate this information to you, which would be your preferred channels and why – spontaneous, then prompt with list below:
    - Mail
    - Leaflet
    - Email
    - SMS
    - Social media
    - Local press
    - Via community groups
    - Any other…
- How do your preferences differ depending on whether it is a level 1, 2, 3 or 4 drought that is occurring? (explore fully)

- **[Around the Zoom]** In summary, what do you think is the best way for us to tell customers about a drought and restrictions?

ANY QUESTIONS FROM SOUTHERN WATER OBSERVERS (15 mins)

Opportunity for those observing the sessions to introduce themselves to the group and ask any follow up questions, or probe more deeply on any answers that have been given.

Thank and close

Southern Water – Water Futures 2030

Fieldwork w/c 7th June

Online activities – total agreed participant time over the week is 90 minutes

Task 1 – The Southern Water Drought Plan (same task for Portsmouth Water customers but with Portsmouth Water Drought Plan)

Task Instructions: This activity should take no more than 30 minutes. In the first 15 minutes we would like you to read and review the 15-page Southern Water Drought Plan, and in the second 15 minutes we would like you to tell us your thoughts on it.

Questions:

Show final version of drought plan

1) Please can you download the attached document and read it. Feel free to skim read it if you are able to. Once you have read it, please can you tell us your overall thoughts on this plan (what interests you, what you like / don't like about it, any concerns you have etc.)

2) How easy to understand are the different levels of drought and the actions we need to take at each one?

3) How easy to understand are the restrictions on using water for households and businesses?

4) To what extent do you agree with introducing restrictions on using water for households first and businesses afterwards? (The aim is to protect jobs and businesses for as long as possible)

5) To what extent do you agree with the automatic exemptions from restrictions on using water which apply to everyone? (These are agreed by all water companies)

6) To what extent do you agree with all the discretionary exemptions from restrictions on using water? (We agree these for our customers)

7**) [SW customers]** To what extent do you support the need to use Drought Permits and Drought Orders so we can continue to take water from the environment to maintain supplies during droughts?

8) Is it ever acceptable to introduce emergency restrictions such as standpipes (water pipes in streets) or rota cuts (where water is only available for a few hours each day)?

9) How willing would you be to significantly reduce your water use to 80 or even 50 litres of water each day in a very severe drought in order to avoid standpipes or rota cuts?

10) Do you think we have got the right balance between restricting water use and using Drought Permits and Drought Orders, to produce more water and to protect the environment?

11) What do you think is the best way for us to tell customers about a drought and restrictions?

APPENDIX H. REPRESENTATION LETTERS RECEIVED

This appendix includes letters of representation from the following organisations:

- H1: Environment Agency
- H2: Natural England
- H3: Horticultural Trades Association
- H4: CCW
- H5: Buriton Parish Council
- H6: Hampshire County Council
- H7: West Sussex County Council
- H8: National Farmers Union

H1: Environment Agency

Representation on Portsmouth Water's draft drought plan

Final, 29 June 2021

We are the Environment Agency. We protect and improve the environment.

Acting to reduce the impacts of a changing climate on people and wildlife is at the heart of everything we do.

We reduce the risks to people, properties and businesses from flooding and coastal erosion.

We protect and improve the quality of water, making sure there is enough for people, businesses, agriculture and the environment. Our work helps to ensure people can enjoy the water environment through angling and navigation.

We look after land quality, promote sustainable land management and help protect and enhance wildlife habitats. And we work closely with businesses to help them comply with environmental regulations.

We can't do this alone. We work with government, local councils, businesses, civil society groups and communities to make our environment a better place for people and wildlife.

Published by:

Environment Agency
Horizon House, Deanery Road,
Bristol BS1 5AH
Email: enquiries@environment-agency.gov.uk
www.gov.uk/environment-agency

Further copies of this report are available from our publications catalogue:
www.gov.uk/government/publications

or our National Customer Contact Centre:
T: 03708 506506

Email: enquiries@environment-agency.gov.uk.

Contents

1. Our summary of Portsmouth Water's draft drought plan

1.1 Introduction

This is the Environment Agency's review of Portsmouth Water's draft drought plan. We have a statutory duty to manage water resources in England. We aim to make sure that there is sufficient water for people, the economy and the environment in a drought. We are a statutory consultee in the water company drought plan (WCDP) process and provide advice to government on the plans. We have assessed Portsmouth Water's plan against the relevant legislation[1], the WCDP guideline and our other guidance.

A water company's drought plan shows how it will provide a secure supply of water and protect the environment during dry weather and droughts. It is an operational plan that sets out what actions the company will take before, during and after a drought. It also sets out how it will assess the effects, including the environmental impacts of its actions and what it will do to monitor and prevent or mitigate these effects.

The government has set out its expectations of water companies' new operational tactical drought plans. This is to show that they:

- are environmentally responsible, will implement demand saving measures before asking to take more water from the environment and prioritise their least environmentally damaging supply measures
- will work collaboratively with stakeholders across the water sector
- will take actions in a clear, consistent and timely manner, will work collaboratively with neighbouring water companies and at regional level especially in relation to applying restrictions
- are application ready for any authorisations, drought permits and drought orders they are most likely to request
- will be proactive with their customers to reduce demand and in time for implementing their chosen drought management actions
- have identified actions they could implement in an extreme drought to delay the need for "level 4" severe drought restrictions

[1] Drought Plan (England) Direction 2020

1.2 Summary

After reviewing Portsmouth Water's draft drought plan, we consider that it mostly demonstrates that it will provide a secure supply of water and sufficiently protects the environment during a drought.

We recommend that Portsmouth Water revises some parts of its draft drought plan.

Portsmouth Water published its draft drought plan on 7 June 2021 and the consultation will run until 2 August 2021. The plan is clear and easy to follow, it sets out most of the steps that the company would take as a drought progresses. There are a number of areas where the plan should be improved. These include its understanding of the level of resilience to droughts and the sequence of actions it would take in a severe and extreme drought. Portsmouth Water should also ensure it is permit application ready for its proposed drought permit. The environmental assessment report (EAR) for its proposed drought permit should be completed. There is a lack of clarity about how bulk transfers will operate with Southern Water during a drought.

We recommend that the company:

- confirms its resilience to a severe drought
- completes its EAR
- must be permit application ready for the North Arundel drought permit (linked to Directions 3 (f) and 3 (g) and 3 (h))
- clarifies how its bulk supplies will operate

We will continue to work with Portsmouth Water on these elements of its plan.

2. Compliance with legislation

We have assessed whether Portsmouth Water has complied with the Drought Plan (England) Direction 2020.

2.1 The Drought Plan (England) Direction 2020

Section 3 of the Drought Plan (England) Direction 2020 specifies what should be addressed in water company drought plans.

Portsmouth Water has not presented enough evidence in its draft plan to demonstrate compliance with all Directions. The company should provide more evidence to show how it complies with the following.

Direction not complied with	Recommended changes to ensure compliance with Direction
(f) any pre-application steps agreed to ensure that the water undertaker is able to make any necessary applications in a timely manner to those bodies responsible for granting permits, orders and any other authorisations during the onset, duration and abatement of all droughts covered by its drought plan	See recommendation 2
(g) the measures that will be used to monitor, prevent and mitigate any adverse effect on the environment resulting from the implementation of drought management measures	See recommendation 2
(h) the compensation payments that a water undertaker expects to make as a result of the implementation of a drought management measure	See recommendation 2

3. Recommendations

We consider that the issues described in this section are significant to maintaining the security of supply and/or present a major risk to the environment during a drought.

Incorporating the recommendations into its plan will ensure that Portsmouth Water can demonstrates that it is planning a secure supply of water and will protect the environment during a drought.

We have set out the evidence to support these recommendations in table 1 of Appendix 1.

Recommendation 1 – clearly set out the sequence of drought actions and confirm the company's resilience to a severe drought

The draft plan is not clear how resilient the company is to droughts and whether there is sufficient water available to meet demand. Portsmouth Water plans to use extreme drought actions as often as in events with a frequency of 1 in125 years to 1 in 200 years which is more often than we would expect. The sequence of actions the company would use to manage severe and extreme droughts is not clear.

The company states that it is working with Water Resources South East (WRSE) to develop its extreme drought actions but there is insufficient detail on these regional actions or company specific options. We recommend that Portsmouth Water clearly sets out its sequence of drought actions including those for severe and extreme droughts. This should include the specific actions that it will take and when they will be needed.

Portsmouth Water has assessed its vulnerability to drought but the results are not clear. The company says it will update the assessment in its next drought plan, however we believe this is too late. This assessment should be updated now and the results can be used in developing its next water resources management plan (WRMP). This may affect its understanding of water availability and resilience which could have an impact on the drought plan.

We recommend that Portsmouth Water:

- clearly sets out the sequence of severe and extreme drought actions and show that the North Arundel drought permit would be used ahead of extreme actions
- includes a full list of company specific extreme drought actions, including an indicative sequence
- develops its drought actions up to 1 in 200 drought if they are needed so they are fully assessed and ready to be implemented
- assesses other extreme drought options and show whether they will require drought permits or drought orders
- explores its vulnerability to severe droughts through its current WRMP and tests its drought plan against this scenario
- confirms its resilience through its current and future WRMPs and re-sequences its options if required
- assesses the impact of any changes to its WRMP on its drought plan. If this results in changes to the drought plan, the company must determine if these are material and re-consult if necessary

Portsmouth Water should include the information in its statement of response and final plan as set out in Appendix 1.

Recommendation 2 – be permit application ready for the North Arundel drought permit (linked to Directions 3 (f) and 3 (g) and 3 (h))

Portsmouth Water's proposed North Arundel drought permit is not application ready. The stated increase to the output of that source from 2.5 megalitres per day (Ml/d) to 11 Ml/d may not be possible in drought conditions. Portsmouth Water states that it would only be able to test the output of this source during low groundwater conditions. There could be a risk to security of supply or extreme actions could be required earlier than planned if the yield is not obtainable.

Portsmouth Water has not set out how it will demonstrate exceptional shortage of rain (ESOR) for the North Arundel drought permit.

The environmental assessment report and monitoring needed for the drought permit are not complete. The company has not provided sufficient baseline monitoring for a range of environmental parameters including water voles and chalk streams. The mitigation plan is also incomplete. This is required for Direction 3 (g).

The company's draft drought plan includes a timeline for implementation of the drought permit but this does not list pre-application steps and communication with the Environment Agency, as required under Direction 3 (f). The company refers to the requirement for both a drought permit and a drought order for this site in the plan.

Portsmouth Water has not included any information on compensation payments as a result of implementing its North Arundel drought permit as required by Direction 3 (h).

We recommend that the company includes the following information in its statement of response:

- its commitment to, and plans for completing a pump test if suitable conditions occur and the proposed authorisation it will require to do so
- an example or draft ESOR case in its statement of response and its timetable for completing the assessment
- its work programme for completing the environmental assessment report
- the monitoring and mitigation plan to include the period before and after a drought permit is applied for and used
- an updated timetable for the drought permit application that includes the required communications with the Environment Agency
- the compensation arrangements for drought permit implementation
- clarification of whether a drought order or drought permit is required

Recommendation 3 – show that there are secure and reliable bulk supply arrangements with Southern Water and the information on them is accurate

Portsmouth Water's draft plan states that it is working with Southern Water to review the requirements of the drought order which relates to Portsmouth Water's Lower Itchen source. This is used by Southern Water to maintain its bulk supply from Portsmouth Water. It is not clear how the drought order will operate. The transfers to Southern Water are not aligned in both companies' plans.

These issues mean that there is a risk to the security of supply because of the uncertainty over operation of the drought order and the quantities and locations of water to be transferred to Southern Water.

We recommend that Portsmouth Water clearly sets out in its statement of response:

- the impacts Southern Water's River Itchen drought order will have on its plan, including whether the timing of Portsmouth Water's actions are affected by the application or implementation of the drought order
- the expected frequency of use of the drought order and whether this affects the company's levels of service
- consistent information with Southern Water on the volumes of water available in a drought and extreme events
- details of any changes to the volumes of its bulk transfers in drought conditions and describe how both companies will operate this part of their network in a drought

4. Improvements

This section sets out our suggested further improvements to Portsmouth Water's draft drought plan. These improvements are in addition to our key recommendations set out in section 3.

The evidence to support these improvements is set out in table 2 of Appendix 1.

Improvement 1 – identify and improve drought triggers

Portsmouth Water's drought triggers depend on a single rain gauge at Havant. The company states that it is considering alternative measures to improve its triggers. This would improve the plan. We advise that Portsmouth Water should continue to explore the use of parameters such as Standard Precipitation Index, catchment scale rainfall, and ground water levels based on a stochastic data to set its drought triggers. The company should set out its work programme for this in its final plan.

Improvement 2 – use worked examples to show the results of testing the plan

Portsmouth Water's plan includes worked examples. These should be improved to show:

- how long drought restrictions will be in place as a drought abates following a 1 in 200 event or 3 dry winters as shown in the plan
- how the company would maintain supplies during a heatwave, peak demand or outage event
- it has considered any actions to mitigate impacts of environmental droughts or support other sectors in a drought
- it has tested its drought triggers for the River Itchen drought order
- how it has taken account of the impact of peak or extreme demand on the supply network

We advise that these items are included in the company's worked examples in the final plan.

Improvement 3 – include justification for the decision not to carry out a Strategic Environmental Assessment (SEA)

Portsmouth Water has not completed an SEA for its plan and has not included any details on whether it has considered the need for one. There is a possible risk to the environment if an SEA is required and not completed. We advise that company should include justification for its decision to not complete an SEA in its final plan.

Improvement 4 – improve the communications plan and monitor its effect

Portsmouth Water's communications plan should be improved by setting out how:

- it will monitor and evaluate the impact of its agile communications, including the demand for water and share this information with the Environment Agency
- much time it will allow its customers to make representations ahead of implementation of temporary use bans (TUBs)
- it will provide advice to customers who are eligible for exceptions to a TUB but cannot access its website

- it will use the research by Water Resources South East (WRSE) to inform its tailored communications plan

We advise that the company should include this information in its statement of response.

Improvement 5 – clarify the effectiveness of drought actions including demand management

Portsmouth Water's plan contains an indication of when drought and demand management measures would be effective which includes

- 'appeals for restraint and enhanced [sic]' –spring
- TUBs – spring
- Non-essential use bans (NEUBs) – summer
- North Arundel drought permit - summer

We believe that some of these actions could be effective at other times of year. We advise that Portsmouth water should set out how it plans to monitor the effectiveness of these measures. We also advise the company to reconsider when the actions will be effective and update its plan.

Appendix 1: Evidence report

Table 1 contains the evidence, details and reasons to support the recommendations we have made in section 3 of this representation.

Table 2 contains the evidence, details and reasons to support the improvements we have suggested in section 4 of this representation.

Note: If applicable, we will also have sent further minor comments directly to Portsmouth Water. These comments identify areas which would further improve the clarify of the draft drought plan, but we do not consider to be significant issues to maintaining public water supplies or are a risk to the environment during a drought. If applicable, these are available from the water company contact at the Environment Agency.

Table 1: Evidence report for recommendations

Major issues identified

Major issues are those that we consider highly significant to the draft plan that may result in an unnecessary risk to public water supplies and/or major risk to the environment. They also include issues with compliance with relevant legislation, such as Directions. These are reported as recommendations in our representation submission.

Recommendation 1- clearly set out the sequence of drought actions and confirm the company's resilience to a severe drought			
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**
Issue 1.1 Consistency with WRMP	Portsmouth Water states in its draft drought plan (section 1.4.4) that it's "WRMP19 highlights that there may be occasions where demand may outweigh supply. Such occasions will occur during periods of drought, and the	There is a risk to security of supply if the company needs to rely on drought actions more frequently. If this occurs, there is a risk to the environment. The company's supply side drought action (North Arundel drought permit)	The impact to the company's drought plan of any changes to the company's WRMP19 must be assessed. If this results in changes to the drought plan, the company must determine if these changes are material and require it to re-consult on its draft drought plan.

	expected frequency is linked to our Level of Service". We understand that these occasions are being investigated though the WRMP, but there is a risk that the company may need to rely on drought actions more frequently than currently presented.	does have environment impact and other supply options have not been assessed. The company is not permit application ready for this drought action (see issue recommendation 2).	
Issue 1.2 Resilience of supplies	The draft drought plan as presented is not clear how resilient the company is to droughts and what actions it will need to take to manage more severe droughts. Table 3 (page 24) in section 2.2 shows "Drought stages and levels of interventions as defined in our drought plan". It lists actions for a severe drought as non-essential use ban drought order (NEUB) to manage from a 1 in 80 year up to a 1 in 125 year drought. Then from a 1 in 125 year to a maximum of 1 in 200 year drought, it lists extreme actions and North Arundel drought permit. The company should not be relying on using extreme	There is a risk to security of supply if either the company is relying on extreme drought actions as frequently as 1 in 125 year drought due to its resource position (linked to issue 1.1) or because it has sequenced its actions wrongly (see issue 1.3). There is a risk to the environment if the company is relying on extreme drought actions to manage a lower frequency of drought. These drought actions have not been presented in the drought plan nor the environmental impact of them assessed (see issue 1.4).	The company should confirm its resilience through its WRMP. If it finds that it is able to manage a drought of >1 in 125 without the need for extreme drought actions, then these should be sequenced in the options for > 1 in 200 severe drought, along with EDOs. The sequence of using extreme drought actions before emergency drought orders must be explicit. If the company ascertains that it needs to use extreme drought actions for a 1 in 125 year drought then it must develop drought actions that are fully assessed and ready to be implemented (see issue 1.4).

	drought actions to manage a drought that could a frequent as 1 in 125 years.		
Issue 1.3 Sequencing of actions to manage a severe drought	Table 3 (page 24) in section 2.2 shows "Drought stages and levels of interventions as defined in our drought plan". It lists extreme actions and North Arundel drought permit for managing a severe drought of a frequency of between 1 in 125 year to 1 in 200 year drought. It is not clear the sequence of actions the company would use to manage a severe drought. The worked example Scenario D (1 in 200 year drought) in appendix C shows the use of drought permit after NEUBs and no use of more before 4 options. The water company drought plan guideline (WCDPG) section 4.3 is clear that extreme drought actions should be used "just after your level 3 restrictions", not as part of it.		The drought plan should be explicit in the sequence of actions the company will implement to manage a severe drought and show clearly that the North Arundel drought permit would be used ahead of extreme actions, as presented in your worked examples.
Issue 1.4 Inclusion of extreme drought actions	The draft drought plan presents extreme drought actions in section 3.4 (page 46). It states that Portsmouth Water are working "as part of the WRSE	The company's lack of useable extreme drought actions causes a risk to	The company should include company specific extreme drought actions, which would complement the regional options

	drought group, to develop a set of actions, known as 'More Before 4' that would be implemented during extreme drought". The plan lists 3 general extreme drought options currently being considered by the WRSE project, with little detail.	security of supply in a severe drought.	and include more detail on the actions. The company should consider the supply side options it details in Appendix F of the draft plan as potential extreme drought actions. It should include in its statement of response a full list of company specific extreme drought actions, including further detail on these options and a view of prioritisation of use, as specified in section 4.3 and appendix G of the WCDPG.
Issue 1.5 Assessment of vulnerability to severe drought	Section 2.4 (page 27) describes the drought vulnerability assessment the company has carried out, with the detail presented in appendix G. These conclude that is an exception to resilience to at least a 1 in 200 year drought. Appendix G states "The exception is for a conservative DO scenario (combined groundwater and surface water drought) where there is potential for vulnerability to a 6 month drought event with 70-80% rainfall deficit (return period greater than around a 1 in 50 year event). " This is a	The company is required by government and regulators to understand and demonstrate the resilience of its systems to a range of droughts. There is a small risk to security of supply if an event of this nature was to occur.	The company should explore this vulnerability for its WRMP work and test its drought plan against this scenario. It should present a worked example to show how it would manage a drought of this sort.

	scenario using drought management activities and assumes that extreme surface water and groundwater droughts occur simultaneously. The company has not undertaken a drought vulnerability assessment using the UKWIR drought vulnerability framework as part of its WRMP. However, in Section 2.4 (page 27) the company has stated that it will be updating this assessment for our next drought plan to maintain consistency with its next WRMP.		

Recommendation 2 – be permit application ready for North Arundel drought permit			
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**
Issue 2.1 Yield of site under drought permit	The permit for the North Arundel source would increase the output from its current 2.5 Ml/d license up to 11 Ml/d. This yield has not been verified since its original pump test in 1991. We are concerned that this yield may not be obtainable in drought conditions.	The plan relies on the additional water from this source in severe drought. There could be risk to supply security under these circumstances if the yield is not obtainable. The company plans on using extreme drought actions as its' next action. These	In its statement of response, the company should commit to carrying out a pump test if suitable conditions occur and assess the proposed authorisation it will require to do so. The company should consider carrying out geophysical logging to determine at what depth the

	The draft plan states in section 3.2.1.1 (page 41) that "It would only be possible to investigate this [yield] by carrying out a pump test, which would need to be carried out under reasonably low groundwater conditions at a rate of at least 7.5Ml/d to 10Ml/d (i.e. 3-4 times the licenced allowance) before this risk could be evaluated. We would need a drought worse than the 1996/97 or 2003 events to undertake a meaningful test which makes it difficult to plan."	extreme actions could be required earlier than planned if the yield is not obtainable and these are not well developed.	majority of the yield is coming from at any time to add confidence to its yield assessment in a drought worse than 1992. The company should specify the magnitude, duration and return period of the 1992 drought. We have experience relatively dry weather in recent years (2018/19). Pump testing under these dry conditions may have been beneficial.
Issue 2.2 Exceptional shortage of rain case	We request in our pre-consultation letter that "In order to ensure that you are application ready you will also need to prepare as much as possible your exceptional shortage of rainfall case". Appendix C of the draft drought plan states that in response to this request that it will do this for its final plan. The report in Appendix D states "It is recommended that for the next Drought Plan, the use of the EA aerial rainfall data is explored further."	The company is not permit application ready as no preparation for its ESOR case is presented. We are concerned that by leaving it till its final plan, we may not have been able to comment or review the companies draft ESOR case.	The company should present an example or draft ESOR case in its statement of response, referring to the Environment Agency's ESOR guidance. This could be an appendix, showing what data would be used, how it would be analysed and presented, with the graphs/figures shown. The company could use its Scenario D drought data. This could then be updated with the current data when needed for a permit application. The company should continue to explore areal rainfall for presenting

	Section 2.3 (page 27) of the draft plan listed some types of analysis the company expects to use. This includes "Calculation and presentation of ranking of rainfall deficits as compared to other droughts in the historic record." The calculations or presentation of the results is not demonstrated.		its ESOR case and for use as a trigger (see issue 2.1).
Issue 2.3 Environmental assessment report (EAR) is not application ready	There is a considerable amount of work needed for Portsmouth Water's North Arundel EAR to become application ready, although we acknowledge the company has improved its EARs significantly. See issues 2.4 and 2.5 in addition. There remains a lot of uncertainty in the North Arundel EAR on ecological features. For example, geomorphological process is omitted: concretion of gravels caused by calcium carbonate precipitation in Chalk streams; fish information is limited; impacts on water voles; sedimentation impacts on water bodies. The EAR has detailed where temporary WFD deterioration is likely in the Chichester Chalk	Including sufficient information in the drought plan in advance of a drought will allow timely determination of drought permits. Without adequate monitoring and assessment information, applications for drought permits may be delayed or rejected. This could put public supplies at risk of failure or the environment at risk of unnecessary damage.	The company should provide its programme of work and timetable for completing its EAR in its statement of response. Portsmouth Water should ensure that it continues to engage appropriately with the Environment Agency and Natural England as it develops and refreshes the North Arundel EAR, particularly in regard to the monitoring and mitigation options. The company needs to consider those features not yet assessed adequately, such as giving a greater consideration to assessing potential geomorphological issues impacting sites/reaches. The company should use its additional baseline data (see issue

	groundwater body. The assessment suggests that no other WFD waterbodies are within the zone of influence of the drought permit. Further baseline data (see issue 2.4) may highlight additional risks to WFD compliance. The North Arundel EAR does not reference to the Review of Consents. Appendix F of the draft drought plan suggests that Portsmouth Water has taken into account information from the Review of Consents for other supply side options which were subsequently screened out due to environmental risks. The EAR report does acknowledge that trigger levels would need to be agreed with the Environment Agency for the augmentation/compensation flows.		2.4) to assess any further risks to WFD compliance. The company should include further information to demonstrate how it has taken into account the Review of Consents for its North Arundel drought permit EAR.
Issue 2.4 Incomplete monitoring	The monitoring plan presented for the North Arundel drought permit is not complete. There is insufficient baseline monitoring of a range of environmental parameters including water voles, chalk streams and hydromorphology and does not		Further baseline monitoring data collection should start as soon as possible, as it can take 5 years to develop a good baseline dataset. Details and timelines of the baseline monitoring/data collection for pre-drought, during and post-drought and how data will be

	appear to consider the period before and after the drought permit is applied for and used. Portsmouth Water have assessed the impact of their drought permit option on the relevant features, as shown in Appendix B and D of the EAR. However, sufficient baseline monitoring or further data collection is required to assess the uncertainties as identified in the assessments. No geomorphological monitoring appears to be included in the proposed monitoring plan in table 6.2 of the EAR. In appendix A, section 9, the hydromorphology assessment is based on secondary information (aerial imagery) and a generic walkover survey. The monitoring plan relies on a few Environment Agency monitoring sites. We are pleased to see a joint monitoring plan with Southern Water. This is not finalised and there are a few site details in the plan where it is not clear whether this monitoring is being		analysed should be shared and discussed with the Environment Agency in its statement of response. The company needs to address uncertainties through doing more baseline monitoring. Discussions should take place with the Environment Agency in order to ensure that all relevant Environment Agency secondary data forms part of the drought permit environmental assessments. For example, macroinvertebrate data is available from 2001 and 2004, which can be supplied by the Environment Agency. The company should assess the reliance on a number of Environment Agency monitoring sites, as there is no guarantee they will exist into the future or the metrics collected are what is needed. There is also a need to confirm monitoring that third parties are carrying out such as the Sussex Wildlife Trust and Wildfowl and Wetlands Trust in the joint monitoring plan. The company should continue to develop and finalise its joint monitoring plan with Southern

	carried out by the water companies, Environment Agency ore other third parties.		Water. It must clarify responsibility for all monitoring sites within the joint plan.
Issue 2.5 Insufficient mitigation [Direction 3(g)]	The company has included some mitigation measures in its EAR this time, which is welcome, although the mitigation measures outlined have not yet been discussed with the Environment Agency and other relevant stakeholders. However, the company acknowledges that these measures will need to be discussed. For example, the company mentions compensation and augmentation actions. The company does not make it clear if it has liaised with relevant licence holders, such as the Wildfowl and Wetlands Trust, and assessed feasibility of these actions. Geomorphological mitigation measures have not been considered. The mitigation measures proposed in table 6-1 of the main EAR are primarily in-drought mitigation measures.		The company need to provide more detail to assess whether these mitigation measures are feasible, appropriate, effective and adequate. This should be discussed with the Environment Agency and other relevant stakeholders. They may also be able to recommend additional measures which should be considered. As per issue 2.4, baseline monitoring is needed to assess the risk to environment and therefore inform the decision on appropriate mitigation measures. The mitigation measures outlined in table 6-1 are primarily 'in-drought' mitigation measures, with some 'post-drought' mitigation measures included. Greater consideration of 'pre-drought' mitigation measures would need to be considered and discussed with the Environment Agency and other relevant stakeholders. It should assess what additional permits or

	Sufficient Pre- and Post-drought mitigation measures are not adequately considered. Section 5.20 of the North Arundel EAR acknowledges that there is a risk of temporary deterioration under WFD in the Chichester Chalk Groundwater body, including as a result of cumulative impacts with Southern Water's drought permit option. No mitigation measures have been proposed to specifically address this but the report acknowledges the need to discuss this with the Environment Agency. It is not clear if Portsmouth Water needs any additional permits/approvals to carry out its proposed mitigation measures.		approvals are needed for its planned mitigation measures. We will continue to work with the company as it develops its mitigation plan. It should also consider mitigation measures to reduce the risk of deterioration, and involve Southern Water in these discussions to discuss any options that can reduce the risk of deterioration as a result of cumulative impacts.
Issue 2.6 Application process for drought permit [Direction 3(f)]	The plan provides a useful timeline of implementation of the North Arundel drought permit in section 3.2.1.2 (page 41). The first stage is a 1 in 20 year trigger for starting the permit application process. The timetable does not list pre-application steps with the	The company is not permit application ready and there is a risk it would not start taking action early enough.	The company should include details of the pre-application steps, triggers and timelines it will take as part of its drought permit application process. The company's communications plan should be updated to include when it will liaise with the

	Environment Agency, as required under Direction 3(f). Table 7 details communications the company will carry out and includes liaising with other water companies and environmental groups on the drought permit. Communications with the Environment Agency, that issues the permit, are not included.		Environment Agency at all stages of its drought permit application. For clarity, the triggers listed as return periods in the section should be linked to trigger levels (1 to 4) used in the rest of the plan.
Issue 2.7 Compensation arrangements for drought permit implementation [Direction 3(h)]	Companies must include details of any compensation payments that it expects to make as a result of the implementation of a drought management measure (Direction 3(h)). Portsmouth Water do not include any information on any compensation payments as a result of implementing its North Arundel drought permit.	This information is required under the Drought Direction.	The company should include information as to whether it will provide any compensation payments as a result of implementing its drought permit.
Issue 2.8 Clarify need for a permit or order	Table 4 on page 45 of the draft plan lists “permissions required and constraints” for the North Arundel Drought permit as “drought order”, although it is described as a drought permit.	This could cause confusion for the Environment Agency as to what permit is required and could delay the authorisation being given.	The company should confirm if a drought permit or drought order is required.

Recommendation 3 - show that there are secure and reliable bulk supply arrangements with Southern Water and the information on them is accurate			
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**
Issue 3.1 Southern Water's Itchen Drought order	The draft drought plan explains how Southern Water's Itchen Drought order would work in section 1.4.6.3. The Drought Order is applied for by Southern Water to reduce the hands off flow condition on Portsmouth Water's Lower Itchen source abstraction licence, in order that it can continue its bulk supply to Southern Water. The company states it is working with Southern Water to review the requirements of the Itchen Drought Order, and will be holding a number of joint workshops with our regulators and some stakeholders in May 2021. The plan states "The feedback from the workshops will be included in the Statement of Response following the consultation and incorporated into our final drought plan."	There is a risk to the environment and security of supply until these investigations are concluded and reflected in both companies drought plans, as it is not clear how the drought order will operate	The company should clearly state any impact the implementation and use of Southern Water's Itchen drought order will have on its plan, including whether the timing of actions is affected by the application or implementation of the drought order. The company should confirm the expected frequency of use of the drought order and whether this affects the company's levels of service. This should be presented in its statement of response to allow us to review any changes ahead of its final plan publication. We will continue to work with Portsmouth and Southern Water in this work.
Issue 3.2	Section 1.4.6 (page 17) of the draft drought plan details two bulk supply agreements with	There is a security of supply risk if the assumptions around	Portsmouth Water should work with Southern Water to ensure the assumptions around volumes of

Transfers to Southern Water not aligned	Southern Water. Southern Water assume that in more extreme drought events these imports would reduce by 50%. Portsmouth's plan states in extreme droughts (>1 in 200 year event) "the bulk supplies will be delivered on a best endeavours basis." Appendix G, section 3.5 of Portsmouth Water's plan states "The WRZ model does not take account of Portsmouth Water's bulk transfer arrangement with Southern Water. The bulk supply has been excluded from this testing as it may not be possible to export water during a severe drought." The assumptions around these transfers between Portsmouth Water and Southern Water do not align. Southern Water list a third transfer in its draft drought plan for 4Ml/d to North Arundel rather than Pulborough in extreme drought conditions such as outage events. This is not listed in Portsmouth's draft plan.	volumes of water available in a drought and extreme events between Portsmouth Water and Southern Water do not align.	water available in a drought and extreme events align. It should detail any changes to the volumes of this bulk transfer in drought conditions and describe how both companies will operate this part of their network in a drought.

Table 2: Evidence report for improvements

Moderate issues identified

Moderate issues are those that we consider significant to the draft plan and may reduce the effectiveness of the plan, stakeholder/customer understanding and/or present a moderate risk to the environment. These are reported as improvements in our representation submission.

Improvement 1- identify and improve drought triggers			
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**
Issue 1.1 Continue to develop rainfall triggers	Portsmouth Water has usefully explored the use of rainfall data as a trigger. It has investigated using Standardised Precipitation Index. Section 2.2. (page 27) states "For this plan we have not added these levels as formal drought triggers, and therefore we will not be enacting our drought actions solely on when they are crossed. Instead, they are intended to provide additional early warning, prior to crossing our formal groundwater triggers." Appendix B gives the response to this issue being raised in pre-consultation and states "This will be investigated further for the next round of plans."	The company may not act in a timely manner, relying on one indicator to trigger its actions.	The company should continue to work on developing a rainfall trigger, as this looks like it can be a useful trigger, along with its current groundwater trigger as a tool to help in decision making in a drought. This work should be continued and included in its final drought plan. If not possible, a programme of work should be included and the outputs integrated into its drought plan ahead of its' new drought plan. Portsmouth Water need to consider using catchment rainfall rather than depending on Havant raingauge (as noted as a recommendation by Atkins in Appendix D).

	Appendix G presents the data analysis by AECOM. This uses climate data from the Environment Agency's *Reliability of Public Water Supplies Project* and not the more widely used HadUK rainfall and Environment Agency's PET data. Section 2.1.2 (page 22) and Appendices A and D refer to the 1975-76 drought which is shown to have a 1in 80 year return period for a 12 month duration. The full impact for this event is only shown for durations of less than 12months. For example, the 9 month duration appear to be around a 1 in 200 year return period.		The company should review its 1975-76 rainfall data and the period it uses. This could affect the analysis presented in the plan.
Issue 1.2 Develop more rigorous groundwater triggers	The plan states in section 2.2.1 (page 26) that "Through the process of planning for WRMP24, we are going to be updating our groundwater triggers, basing them in future on a full stochastic sequence of groundwater levels. These triggers and the testing information around these, will be included in our next drought plan update." We support this work to move the triggers to a more rigorous development.		Portsmouth Water will need to update its drought plan to integrate its updated groundwater triggers and what impact these have on the timing and sequencing of actions. It should assess if this impact is a material change to its drought plan. If so, it will need to update its plan ahead of the normal 5 year cycle. The company should action the recommendation in Appendix D.

	The Atkins report presented in Appendix D recommends "Portsmouth Water are updating their groundwater level triggers for WRMP24. It is recommended that a study is carried out, to understand if SPIs could also be used as triggers, linking to Portsmouth Water's Levels of service and estimated return periods. River flow triggers for the River Itchen could also be looked at as potential additional triggers to the existing ones."		

Improvement 2 - use worked example to show the results of testing the plan			
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**
Issue 2.1 Show abatement of drought in worked examples	The plan has been tested to a 1 in 200 event, which equates to 3 dry winters. This is presented in scenario D, in appendix C. This worked example doesn't illustrate the system showing any recovery by the end of year 3. The report states "It would not be prudent to remove demand restrictions until groundwater levels rose above the 'Upper Trigger' at the beginning of year four." Groundwater levels are shown to be very low at the end of year	It is not clear to regulators and customers how long drought restrictions will be in place as a drought abates.	The company should extend its worked example to show the recovery of its system into year 4 and how long restrictions will be in place as the drought abates. The company should ensure the trigger for preparing its drought permit application in scenario D is presented consistently.

	3, so a recovery of about 5m is needed by the beginning of year 4 if restrictions are removed. Scenario D shows that the action for "prepare for drought permit application" is triggered at level 3. In all other scenarios it is triggered at level 1.		
Issue 2.2 Heatwave and high demand and outage example	Portsmouth Water has not presented a heatwave or high demand or outage worked example. In appendix C the company state that "With no surface water storage, the necessity for Drought Management Actions is principally to ensure that during the peak demand period of May to August sufficient supplies will be available to balance demand", acknowledging its sensitivity to peak demands. The company report an increase of over 12% in household demand during the 2020 COVID lockdown and hot weather, although it didn't report any system issues.	Without this information in the plan, customers cannot be assured the company could cope with a heatwave and/or high demand event.	The company should include a worked example within its final plan to demonstrate and provide assurance to its customers that a heatwave and/or high demand scenario would not cause any supply problems. Its plan should provide assurance that during these types of event the company would still seek to minimise outage and control demands.

Issue 2.3 Use of environmental drought triggers/pressures on other users	The water company's draft plan does not include consideration of any actions to mitigate impacts of environmental droughts or support other sectors in a drought (droughts not affecting public water supply). The WCDPG (section 3.2) suggests this, along with triggers for any actions.	The company doesn't demonstrate it has considered if it could take action to help in a non-water supply drought. This reduces the confidence regulators and customers have in the company that it is environmentally and socially responsible.	The company should update its draft plan to show how/ whether it has considered these and what actions it plans to take/could be taken as a result. For example, the company already has an augmentation scheme on the River Ems and could explore if it could do more in a drought.
Issue 2.4 Include Southern Water's Itchen drought order trigger	The trigger for application or implementation of Southern Water's Itchen drought order is not shown on the worked examples in appendix C. See issue 1.2.	It is not clear how and when this drought order will be operated.	The company should include the trigger for this action in its worked examples to show when it would be used.
Issue 2.5 Inclusion of summary information on worked examples	It is good to see that supporting technical information has been removed to appendices to make the draft plan more tactical. However, section 2.5 (page 28) on testing triggers, doesn't include any information on the results of the testing.	It is not clear in the main plan what the outcome of the testing is.	The drought plan would benefit from including high level findings from appendix C. For example, a graph and table for an illustrative scenario will show the reader how a drought is managed.

Improvement 3 - include justification for the decision to not carry out a Strategic Environmental Assessment (SEA)			
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**
Issue 3.1	The company does not include information on whether it has considered the need for an SEA.	There is a possible risk to the environment if an SEA is considered to be required and not completed.	The company should include justification for its decision to not complete an SEA.

Improvement 4 - improve the communications plan and monitor its effect			
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**
Issue 4.1 Monitoring and evaluating the effectiveness of communications	The company describes its communication plan as agile in section 4.1 (page 6). The drought plan does not say how the company will monitor and evaluate the effectiveness of your communications activities during a drought.	This information can then be used to help develop more effective communication plans for future drought events or even during a drought.	The company should explain in its plan how it will monitor, measure and evaluate the demand savings resulting from customer communications prior to the need to implement TUBs.
Issue 4.2 TUB representation period	The draft plan does not specify how long customers would have for making representations ahead of a TUB being implemented. The company state's in s3.1.5.1 (page 36) that for a NEUB it would conduct as a minimum a	There is a risk that customers will not have the opportunity to make representations on TUBs.	The plan should state how long will be given for representations to be made on a planned TUB implementation. The worked examples in appendix C could also usefully reflect this time period, showing

	two-week public consultation with customers and stakeholders.		"representation period" before the action of "TUBs".
Issue 4.3 Elderly	Table 1 in appendix E lists "Discretionary concessions to the Temporary use ban". It lists Elderly and disabled customers and states the company will "put information on how to apply for an exemption on our website".	Customers may not be informed.	The company should consider the applicability of its communications methods to the audiences its targeting and whether additional forms or communication channels could be used to ensure all customers are reached.
Issue 4.4 Regional communication plan	Section 4.3 details research being carried out by the regional group WRSE on customer engagement. The plan states that when findings of this work are available, the company will create a specifically tailored communication plan to be use with its drought plan		The company should include its tailored communication plan in its statement of response, if the research findings are available.

Improvement 5 - clarify effectiveness of drought actions including demand management			
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**
Issue 5.1	Table 4 on page 45 lists an "implementation timetable" for drought management actions. 'Time of year effective' is listed as:		The company should evaluate when its actions will be effective and amend table 4. Appeals for restraint, TUBs and NEUBs could be considered effective throughout the spring, summer and possibly

	• 'appeals for restraint and enhanced' –spring • TUBs – spring • NEUBs – summer • North Arundel drought permit - summer The drought permit is listed as "renewable" but the NEUB is not.		autumn and in case of NEUBs potentially all year. Table 4 should include that NEUBs can be extended for 6 months too. Portsmouth water should also set out how it plans to monitor the effectiveness of these measures.

H2: Natural England

Date: 07 July 2021
Our ref: 359099
Your ref: Portsmouth Water Drought Plan 2021

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

Secretary of State (Defra)
Drought Plan Consultation (Portsmouth Water)
Department for Environment, Food and Rural Affairs
Water Resources
Seacole 3rd Floor, 2 Marsham Street
London
SW1P 4DF

BY EMAIL ONLY water.resources@defra.gov.uk

Dear Secretary of State

Portsmouth Water Draft Drought Plan 2021 dDP)

Water Industry Act 1991 as amended by the Water Act 2003 and Flood and Water Management Act 2010[1]. Wildlife and Countryside Act 1981 as amended. Conservation of Habitats and Species Regulations 2017 as amended. Natural Environment and Rural Communities Act 2006. Marine and Coastal Access Act 2009.

Thank you for your consultation on the above dated 07 June 2021 which was received by Natural England on 07 June 2021.

We have considered the draft plan against the full range of Natural England's interests in the natural environment. Our response is attached in Annex 1 and a summary is given below for ease of reference. Policy and legislative context relevant to the advice is set out in Annex 2 to this letter.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development. More information on our role in advice to the water sector can be found in Annex 3 to this letter.

SUMMARY OF NATURAL ENGLAND'S ADVICE

- The dDP has been partially considered under the Conservation of Habitats and Species 2017 Regulations as amended, known as a Habitats Regulations Assessment (HRA).
- The dDP has only carried out a partial HRA screening and only a summary table has been provided.
- Due to a HRA summary table only being provided Natural England cannot currently concur with the conclusion that there are no likely significant effects on Habitats sites[2], as this detail is not present within the dDP documents.
- These deficiencies in the HRA must be rectified before the final plan.
- The dDP has not been correctly considered under The Environmental Assessment of Plans and Programmes Regulations 2004 SI No.1633 (Strategic Environmental Assessment (SEA) process). The deficiencies in the SEA process are set out in Annex 1.
- An SEA should be undertaken before the final plan is published.
- The dDP appears to have selected options with the least/ lesser environmental impacts in

[1] Other pieces of legislation are relevant to the requirement to prepare a dDP but only a selection are referred to here.

[2] The Government guidance now refers to sites covered by the provisions of the Conservation of Species and Habitat Regulations 2017 as amended (Habitats Regulations) as 'habitats sites' in line with the wording in the National Planning Policy Framework.

preference to those with greater impacts, but the conclusion for this assessment have not been presented

- The dDP has not been assessed for the potential for net gain in biodiversity. The dDP is not likely to result in a net gain in biodiversity.
- The Natural and social capital of the dDP options has not been assessed. The dDP is not likely to result in enhanced natural capital.

If you have any queries relating to the advice in this letter please contact Aldous Rees on aldous.rees@naturalengland.org.uk

Yours sincerely

Dr Louise Bardsley
Senior Water Adviser South East England

cc:
Liz Coulson Water Resource Manager, Portsmouth Water
Margaret Moran, Operational Water Resources, Portsmouth Water Lead, Environment Agency

Annex 1
Natural England's Advice on Portsmouth Water Draft Drought Plan 2021

The legislative and policy context for Natural England's advice is set out in Annex 2 to this letter.

Draft Environmental Assessment Reports (EARs) are part of the pre-application consultation on the drought options (orders and permits). As pre-application consultations they are within remit of Natural England chargeable services. Detailed comments on the EARs are therefore not included within this statutory response except in so far as they directly pertain to the conclusions of the HRA and SEA of the dDP.

1.1 Habitats Regulations Assessment (HRA)

The HRA is not in a clearly identifiable document and the correct procedures for undertaking an HRA have not been undertaken. It is unclear if the relevant habitats sites and their interest features have been identified as this information has not been presented, only a summary table has been provided. At this stage it cannot be determined if all likely significant effects to the suite of designated sites have been identified. Natural England advises that an HRA assessment following HRA guidance is undertaken. This must be undertaken before the plan is published.

An appropriate assessment should be undertaken for all options where likely significant effects cannot be excluded on objective evidence. The appropriate assessments should have regards to the relevant sites' conservation objectives and supplementary advice to the conservation objectives (SACOs) where these exist. For Ramsar sites the overlapping SACOs and/or favourable condition tables should be used as a proxy. At this stage with the data presented it is unclear if mitigation will be needed, if it is this should be included in any appropriate assessment to remove any adverse effects with sufficient certainty.

The HRA summary table provided does not make reference to the Southern Waters Lower Itchen Drought Order which also influences Portsmouth Waters Gater's Mill abstraction on the lower Itchen, but section 1.4.6.3 Itchen drought order of the drought plan, does mention how the companies are working together, but all environmental commitments and costs lay with Southern Water. As a minimum this section should be updated to include details of the Itchen IROPI case and compensatory habitat, along with the associated monitoring, mitigation and compensation packages. The plan should also acknowledge the ongoing issues with implementation of these packages. It should also state how these options are time limited, with a review at the next plan round and how the expectation is these will not be needed after 2030.

1.2 Strategic Environmental Assessment (SEA)

An SEA has not been undertaken for this drought plan, as outlined in Annex 2 due to the groundwater nature of Portsmouth Waters drought plan option an SEA is required. An SEA must be undertaken before this plan is published. The conclusions of the SEA and HRA must be consistent with each other and all relevant SSSI, habitats and species of principal importance and protected habitat sites must be identified. The SEA should also assess the in-combination effects of other water companies drought orders and permits in particular Southern Waters North Arundel drought order.

A monitoring plan must also be written with additional monitoring that has been identified in this process outlined. It is unclear why this drought plan does not have an associated environmental monitoring plan as an appendix as was the case with the 2019 drought plan. This should be a clearly identifiable document and be included as an appendix. Natural England notes a monitoring plan is associated with the North Arundel drought permit EAR.

The in-combination assessment of this option with Southern Waters North Arundel drought permit also needs further investigation, as uncertainty remains over the in-combination impact on some site features. Portsmouth Water's North Arundel EAR states that the likely cumulative impacts of these two options are assessed the same as Portsmouth Water North Arundel alone, but assessments could change with further data and information. NE suggests further data and information is

collected so these scenarios can be updated and any in-combination impacts identified. For this reason and the other reasons stated in this letter it is NE view that the drought option is not application ready.

1.2.1 Protected landscapes in the SEA

The SEA should look at landscape impacts generally and those to protected landscapes. This should also include where important recreational sites are impacted in protected landscapes. Any necessary mitigation should be clearly identified. North Arundel is within the South Downs National Park and is likely to effect in combination, an important recreational and landscape feature.

The drought option with the least identified environmental impact (North Arundel) appears to have been selected as the drought permit option taken forward, but further details on the conclusions drawn on this option should be presented.

1.2.2 SSSIs in the SEA

The SEA assessment should consider impacts on all SSSIs in the plan area affected by the drought options. The SSSI assessment should be a clearly identifiable section of the SEA and not just included within the biodiversity section. All notified features of the designated sites should be identified, for options where impacts cannot be excluded the relevant SSSI favourable condition tables should be referred too. Any mitigation proposed should protect the SSSI. It is unclear if the North Arundel option impacts any of the nearby water dependant features of designated sites in combination as insufficient information was presented on this option.

1.2.3 Biodiversity in the SEA

The SEA assessment should consider biodiversity impacts including the impacts to priority habitat and species. This should include duties to restore priority habitat and species and any necessary monitoring.

1.2.4. Climate change in the SEA

The SEA assessment should take account the impact of climate change on the drought plan options and whether the drought options have made it harder for wildlife to adapt to climate change. Any necessary monitoring should also be proposed.

1.2.5 Protected and priority species and habitats

The North Arundel drought permit EAR does not currently have a section covering protected species, reference has however been made to data being identified for protected species including otter and water vole and bats are also mentioned in relation to Swanbourne Lake and Fountain Pond and Eels within the fish section. NE notes the EAR does have a section titled, other species of importance, but this section does not cover all relevant protected species currently. Monitoring of protected species are not currently specifically mentioned in the EAR monitoring plan, but it is noted in the main report as potential for monitoring. NE suggests further monitoring for protected and priority species and habitats is added to the monitoring plan. It is NE view that the EAR is not currently application ready.

Please refer to Annex 2 for further details on legislative context for this.

To be 'application ready' the drought plan Environmental Assessment Reports (EARs) should include a clear, timetabled approach to monitoring and mitigating any impacts on priority habitats and protected species potentially affected by options. For protected species impacts the company should assess whether a licence would be required in the EAR.

1.3 Water Framework Directive Assessment

Comments on WFD are a matter for the Environment Agency however Natural England notes the WFD assessment is also summarised in the HRA screening summary table. This should form part of a separate assessment on the impact on WFD compliance.

1.4 Draft Drought Plan 2021

1.4.1 Order of options and levels of service

The drought option with the least environmental impact appears to have been taken forward as the drought option in this plan; however, without the HRA and SEA assessments it is hard to determine the impact of this option or whether the sequence is correct. The relevant sections of the EAR for the North Arundel drought permit have been read as part of this review, but detailed advice has not been provided in this letter.

1.4.2 Natural capital and resilient landscapes and seas

A natural capital assessment has not been undertaken as part of this drought plan.

1.4.3 Connecting people with nature – demand management

Assessment of compliance with the policy and legislation set out in Annex 2 on demand management is a matter for the Environment Agency and Secretary of State. The plan includes details of the companies leakage reduction and the voluntary measures proposed in the pre-drought period and therefore appears to be taking steps to reduce demand that could increase environmental impacts in drought.

Annex 2
Policy and Legislative Context to Natural England's Advice on Portsmouth Water Draft Drought Plan 2021

The Environment Agency's Drought Plan Guideline[3] (Section 6) states:

> "You ***must*** *demonstrate in your drought plan that you have met your responsibility to monitor, assess and where possible mitigate for the environmental impact of all your supply side drought management actions*."
> "*You* ***must*** *carry out an environmental assessment and produce an environmental monitoring plan for each of your supply side actions in your drought plan*."
> "*You* ***must*** *ensure that your environmental assessments meet all the expectations set out in the relevant environmental legislation*."

The most relevant legal duties with respect to biodiversity and landscape with some of the relevant polices from the Government's 25 Year Environment Plan (25YEP) are set out below:

2.1 Habitats Regulations Assessment and Duties to Habitats Sites

Regulation 9 of the Conservation of Habitats and Species Regulations 2017 (S.I. 2017/1012) as amended (referred to as the Habitats Regulations) requires every competent authority, in the exercise of any of its functions, to have regard to the requirements of the Habitats Directive. This requirement includes restoring favourable conservation status. Regulation 10 places a duty on a competent authority, in exercising any function, to use all reasonable endeavours to avoid any pollution or deterioration of habitats of wild birds. In addition, regulation 63 places obligations on competent authorities in respect of plans or projects likely to have a significant effect on a protected site. The Government guidance now refers to sites covered by the provisions of the Habitats Regulations as 'Habitats sites' in line with the wording in the National Planning Policy Framework and we have followed that nomenclature throughout this letter. Note that for Marine Protected Areas that are also Habitats sites and Ramsar sites the legal tests are the same as terrestrial/freshwater Habitats sites. In England, as a matter of policy, sites listed or proposed under the "*Ramsar Convention on Wetlands of International Importance*" receive the same level of protection as Habitats sites.

Water Companies have a statutory duty to prepare Drought Plans and so they are the Competent Authority for Habitats Regulations Assessment (HRA) of the dDP. The HRA should be clearly distinguishable document or section of the Drought Plan. The HRA should include:

- A list and/or map of all relevant Habitats sites.
- An appropriate assessment of the plan options unless, on the basis of objective information, a likely significant effect can be excluded by the screening of relevant Habitats sites.
- The appropriate assessment must identify all relevant adverse effects on integrity and uncertainties.
- All mitigation aimed at addressing likely significant effects or/and removing adverse effects must be covered within the appropriate assessment.
- Any options with residual adverse effects identified or where adverse effects are uncertain must have assessments under Regulation 64 (to determine that there are no alternatives with less or no adverse effects and demonstrate Imperative Reasons of Overriding Public Interest).
- All options with adverse effects must have secured compensatory habitat such that the coherence of the Habitats sites series is maintained.
- The HRA of the plan should include an assessment of the in combination and cumulative impacts of the plan with other plans and projects. The HRA should have regards to relevant caselaw and should take account of whether the site is meeting its conservation objectives for relevant features and attributes to the dDP options.

[3] Environment Agency how water companies plan for dry weather and drought hosted on the .GOV website.

2.2 Strategic Environmental Assessment (SEA)

The European Commission Directive 2001/42/EC "*on the assessment of the effects of certain plans and programmes on the environment*" is known as the 'SEA Directive'. It requires "*an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment*" (EC, 2001; Article 1). The provision is explicitly applied to plans made for "water management". The Directive is enacted into UK legislation by The Environmental Assessment of Plans and Programmes Regulations 2004 SI No.1633.

It is Natural England's position that environmental assessment is likely to be automatically required for drought plans in England, under reg.5(1) of the 2004 Regulations in most circumstances.

Under reg. 5(1) water undertakers must carry out (or secure the carrying out of) an environmental assessment (in accordance with Part 3), during the preparation of a plan or programme and before its adoption, if it meets the following tests:

> *"(1) Subject to paragraphs (5) and (6) and regulation 7, where—*
> *(a) the first formal preparatory act of a plan or programme is on or after 21st July 2004; and*
> *(b) the plan or programme is of the description set out in either paragraph (2) or paragraph (3)."*

The description set out in reg. 5 paragraph (2) is of a plan or programme which:

> *"(a) is prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use, and*
>
> *(b) sets the framework for future development consent of projects listed in Annex I or II to Directive 2011/92/EU of the European Parliament and of the Council on the assessment of the effects of certain public and private projects on the environment."*

Drought plans are prepared for water management purposes (reg. 5(2)(a)).

Drought plans also set the framework for future development consents (reg. 5(2)(b)). In this instance the future development consent in question is a drought permit or drought order. Drought permits and orders can grant consent for groundwater abstraction.

Groundwater abstraction is one of the projects listed in Annex II of Directive 2011/92/EU ("the EIA Directive") under '10. Infrastructure Projects':

> *"(l) Groundwater abstraction and artificial groundwater recharge schemes not included in Annex I;"*

In summary, drought plans (prepared for water management) set the framework for future development consents of a project listed in Annex II of the EIA Directive (water abstraction). As such, drought plans meet the description set out in reg. 5(2) of the SEA Regulations.

In these situations an environmental assessment (pursuant to Part 3 of the 2004 Regulations) is automatically require by reg.5(1). There is no need to consider whether the project will have any significant environmental effects by way of a screening opinion: the 2004 Regulations deem them to have such effects and an environment assessment must be undertaken.

However in the rare circumstances where a drought plan is not captured by the above an SEA may be required as the Regulations also states:

9*.—(1) The responsible authority shall determine whether or not a plan, programme or modification of a description referred to in* [the regulations….]*— is likely to have significant environmental effects.*
(2) Before making a determination [of not to undertake an SEA….] *the responsible authority shall—*

(a) take into account the criteria specified in Schedule 1 to these Regulations; and
(b) consult the consultation bodies [which includes Natural England].

(3) Where the responsible authority determines that the plan, programme or modification is unlikely to have significant environmental effects (and, accordingly, does not require an environmental assessment), it shall prepare a statement of its reasons for the determination.

These requirements are reinforced in the UK Water Industry Research Guidance on Environmental Assessment Guidance for Water Resources Management Plans and Drought Plans 2021 (UKWIR guidance) which reiterates the above, but also lists the following compliance risks in Para 3.4 to help water companies check they have complied with the legal requirements of SEA:

- *"Ensure that SEA Screening process has followed all the key screening stages if you have assessed that your plan does not require SEA*
- *Consultation requirements have been met in full (e.g. minimum 5-week consultation period for the Scoping Report, consulting all relevant consultation bodies where the plan affects more than one nation state)*
- *Demonstrating that alternatives have been considered and the reason for selecting the preferred plan is clearly set out*
- *Demonstrating that the SEA findings have been actively considered in the decision making processes for plan development*
- *Ensuring that cumulative effects of the plan with other plans and programmes are appropriately considered in the SEA*
- *Reporting requirements have been met for the Scoping Report and Environmental Report*."

2.2.1 Wildlife and Countryside Act 1981 as Amended

Section 28G of the Wildlife and Countryside Act 1981, as inserted by section 75 of and Schedule 9 to the Countryside and Rights of Way Act 2000, places a duty on public authorities, including water companies, to take reasonable steps consistent with the proper exercise of their functions to further the conservation and enhancement of SSSIs. These duties are mirrored in the general recreational and environmental duties placed on relevant undertakers in the Water Industry Act (1991) as amended. These duties not only apply to companies to remove their impacts but also to contribute to maintaining or achieving SSSI favourable condition. The Water Industry Strategic Environmental Requirements[4] (WISER, page 29) sets out the expectations for delivery of these obligations. Companies are expected *"to contribute to maintaining or achieving SSSI favourable condition both on [companies'] own land and in the catchments [companies] manage or impact on".*

The rate of improvement going forwards is set out in the Defra 25 Year Environment Plan which aims to restore *"75% of our one million hectares of terrestrial and freshwater protected sites to favourable condition, securing their wildlife value for the long term".*

2.2.2 Natural Environment and Rural Communities Act and Net Gain

Under Section 40 of the Natural Environment and Rural Communities Act 2006, every public authority, including water companies, must in the exercise of its functions have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Conserving biodiversity in this context includes restoring or enhancing a population or habitat. Section 41 of the same act requires a list of habitats and species that are of principal importance for the purpose of conserving biodiversity (to which Section 40 duty applies) to be published. This list is referred to as Section 41 or priority habitats and species list.

The Defra 25 Year Environment Plan states "*We will achieve a growing and resilient network of land, water and sea that is richer in plants and wildlife this includes[…] creating or restoring 500,000 hectares of wildlife-rich habitat outside the protected site network, focusing on priority habitats as*

[4] Water Industry Strategic Environmental Requirements (WISER) was published in 2018 which replaced the Defra statement of obligations. It sets out the statutory environmental delivery objectives for water companies in the 2019 price review and through their statutory plans including the drought plans. The equivalent document for PR24 is not available at time of writing.

part of a wider set of land management changes providing extensive benefits."

WISER (page 30) states water companies are expected *"to develop measures during the price review to contribute to biodiversity priorities and obligations on [companies'] own land or in the catchments [companies] influence and operate in*". WISER advises companies that they should "*consider whether [their] abstractions are truly sustainable, looking across a catchment as a whole and consider investment in integrated catchment schemes to improve drought resilience and water quality*".

In addition there are requirements for net gain in biodiversity in national planning policies.

2.2.3 Protected landscapes

Relevant Authorities (including water companies as a Statutory Undertaker) are to have regard to the purposes of National Parks (Section 11A (2) of the 1949 Act) and the similar duties towards Areas of Outstanding Natural Beauty (AONBs) (Section 85 of the Countryside and Rights of Way Act 2000) and the Broads (Section 17A of the Norfolk and Suffolk Broads Act 1988). Duties to further the natural beauty and rural amenity are also included within the general recreational and environmental duties placed on relevant undertakers in the Water Industry Act (1991) (as amended).

Protected landscapes are central to the delivery of aspirations in the Defra 25 Year Environment Plan to enhance the beauty, heritage and engagement with the natural environment. In addition there are requirements to consider protected landscapes in national planning policies.

2.2.4 Climate change

The Climate Change Act 2008 sets the legal framework for adaptation policy in the UK, preparing for the likely impacts of climate change. The 2nd Climate Change Risk Assessment (2017) identifies risks to water supply and natural capital, including coastal communities, marine and freshwater ecosystems and biodiversity, as among the highest future risks for the UK relevant to the water industry. The Defra 25 Year Environment Plan aspires to "*take all possible action to mitigate climate change, while adapting to reduce its impact".* WISER (page 54) *states "a priority for all should be to work together to build an evidence-based understanding of the likely effects of climate change and identifying and implementing low carbon solutions that address any negative environmental impacts that may arise"*.

The National Planning Policy Framework paragraph 149 states that plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures.

Inherent in the Defra objective above is the need to make wildlife more resilient to climate change. There are two key opportunities linked to climate change for wildlife for drought plans:

i) Reduce the impacts of abstraction and water supply infrastructure from current levels in drought and leave more water to enable wildlife to be more resilience to climate change in its current location

ii) To reduce impacts of abstraction and water supply infrastructure from current levels and leave more water to enable wildlife to adapt to climate change and move, in particular for those freshwater species to avoid saline intrusion by migrating upstream.

2.2.5 Protected species

Natural England Standing Advice for Protected Species is available on our website to help local planning authorities and others including water companies better understand the impact of their operations and development on protected or priority species should they be identified as an issue at particular developments or plans. This also sets out when, following receipt of survey information, the authority (or the undertaker in regards of the exercise of permitted development rights) should undertake further consultation with Natural England.

2.3 Water Framework Directive

The Water Framework Directive[5] sets specific objectives for the protection of the water environment which include for surface water bodies the prevention of deterioration and achievement of good ecological status/potential. For groundwater bodies the objectives are to prevent deterioration and achieve good chemical and quantitative status.

The Defra 25 Year Environment Plan has ambitions to achieve a clean and plentiful water supply including "*improving at least three quarters of our waters to be close to their natural state as soon as is practicable by:*

- *Reducing the damaging abstraction of water from rivers and groundwater, ensuring that by 2021 the proportion of water bodies with enough water to support environmental standards increases from 82% to 90% for surface water bodies and from 72% to 77% for groundwater bodies.*
- *Reaching or exceeding objectives for rivers, lakes, coastal and ground waters that are specially protected, whether for biodiversity or drinking water as per our River Basin Management Plans.*

2.4 Drought Planning

2.4.1 Order of Drought Options and Levels of Service

The prioritisation of drought options use should take account of impact on the environment and should be ordered with the least potentially harmful options selected before those with potential environmental impacts. Where there is a choice, options with lesser environmental impacts are selected first in the plan but based on the identified impacts.

The Environment Agency's Water Resource Planning Guideline (WRPG)[6] describes levels of resilience that water company draft Drought Plans need to work to. The point of service failure is defined as "*implementing exceptional demand restrictions on customers, associated with emergency drought orders, such as standpipes*". The dDP should be planned so that the water company is resilient to a '1 in 500 year' level, and the water company should aim to achieve this by 2039 at the latest. There is some flexibility on this deadline if the local costs of achieving this are exceptionally high when compared to the benefits.

In relation to temporary use bans (TUBs), paragraph 4.7 of the WRPG states that water companies must set a "*planned level of service for other customer restrictions over the planning period*". The Drought Plan should illustrate the frequency that the water company plans to apply temporary use bans and non-essential use bans to household and non-household customers.

The dDP must illustrate how supply side drought actions will be prioritised to favour those with the least environmental impacts. The plan must also outline all the drought permits and orders that the water company might apply for under the range of droughts that they have assessed. However, the dDP must demonstrate that the water company will also reduce demand "*…voluntary savings through communications with customers, leakage reduction, operational changes to your distribution system and temporary use bans before you apply for a drought permit or order to take more water out of the environment*" as outlined in paragraph 4.2.1 of the Drought Plan Guideline. These voluntary savings should be carried out proactively and in sufficient time to have a material effect on water supplies and reduce reliance on drought permits and orders.

Paragraph 4.1.2 of the Drought Plan Guideline summarises how drought plans should ensure:

[5] Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy is referred to as the Water Framework Directive or WFD and is enacted into law by The Water Environment (Water Framework Directive)(England and Wales) Regulations 2003

[6] EA Ofwat and NRW Water Resources Planning guidelines March 2021 hosted on the .GOV website

"TUBs are in place before you apply for any drought permits or orders between the 1st April and the 1st October (although this indicative period may be expanded to be earlier or later if necessary, for example due to weather patterns or high demand)

- *TUBs are in place long enough to have a measurable impact on your demand*

2.4.2 Environmental Assessment Reports (EARs) of drought permits and orders

The Environment Agency's (EA's)[7] Water Company Drought Plan Guideline (paragraph 4.2.1) instructs a water company to "*carry out as much preparation work as possible in advance of a drought event" and* states that Drought Plans should show that the water company is "*application ready for [its] more frequent drought permit or order sites… This will include an environmental assessment for each permit and order*."

In addition, paragraph 1.2 of the EA's Environmental Assessment for Water Company Drought Planning – Supplementary Guidance[8] sets out an expectation for water companies to "*monitor, assess and where possible mitigate for the environmental impact*" of all its supply site drought management actions. The assessments should be used "*collectively to inform choices on when and how to use the different supply side drought management actions available",* for example "*to help… prioritise the use of options which free the most additional water supply with the least environmental impact"*.

It also states: "*You **must** demonstrate in your drought plan that you have met your responsibility to monitor, assess and where possible mitigate for the environmental impact of all your supply side drought management actions*."

2.4.3 Natural Capital and Resilient Landscapes and Seas

Defra's 25 Year Environment Plan encourages the growth in natural capital and measurement of ecosystem services. It states that "*over coming years the UK intends to use a 'natural capital' approach as a tool to help us make key choices and long-term decisions*."

WISER recommends that companies consider how natural capital accounting can inform water industry planning. WISER recommends that companies trial natural capital asset accounts (including quantity and condition) and ecosystem service assessments (including qualitative and quantitative assessments) to help companies better understand the flow of benefits.

2.4.4 Connecting people with nature – demand management

Natural England's Conservation 21 seeks to drive a fundamental change in mind-set, to make a healthy natural environment a central part of health, wealth and prosperity. This includes encouraging the public to value the water they use. Defra's 25 Year Environment Plan aspires to reduce the risks of drought to the public by:

- *Ensuring interruptions to water supplies are minimised during prolonged dry weather and drought.*
- *Boosting the long-term resilience of our homes, businesses and infrastructure*.

Section 82 of the Water Act 2003 places an environmental duty on the water undertakers '*to further water conservation*', in addition to duties in the Water Industry Act (section 3(2)(a) 1991) to promote efficient use of water by its customers. The dDP should demonstrate that this duty has been taken into account.

Section 4.1 of the EA's Water Company Drought Plan guideline states that a water company Drought Plan ***"must** set out what [the company] will do to reduce the demand for water during a drought. For example [it] could:*

- *…encourage customers (including through water retailers and businesses) to use less water*

[7] Environment Agency how water companies plan for dry weather and drought hosted on the .GOV website
[8] The Environmental assessment for water company Drought planning available on request by email to water-company-plan@environment-agency.gov.uk.

- *carry out additional initiatives to improve household water efficiency such as targeted communications about water use and behaviour or providing information to customers about how to reduce plumbing losses…*"

"[The company] should consider the most effective way to reduce water demand and whether it is best to carry out [its actions across the] regional water resources groups, company as a whole or over a smaller area. This may vary depending on the approach [the company is] taking on leakage control or temporary use bans."

Annex 3
Natural England's Role in Advice to the Water Sector

Natural England was established under the Natural Environment and Rural Communities Act 2006 ("2006 Act"). It is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Natural England has responsibility for ensuring that landowners and public bodies deliver objectives for European protected sites (Habitats sites) Ramsar sites (internationally important wetland sites) and the requirements for achieving and managing favourable or recovering condition for Sites of Special Scientific Interest (SSSI). Of particular note to water companies are the objectives introduced through the Water Framework Directive 2000/60/EC ("WFD") for Habitats sites protected areas, to achieve compliance with the standards and objectives (conservation objectives) of the water-dependent features of those sites by December 2015 (Article 4.2 WFD) unless derogated to a later date.

Natural England is also charged with helping to deliver objectives to biodiversity and landscape in Defra's 25 Year Environment Plan in addition to the statutory duties toward biodiversity under the 2006 Act. The 25 Year Environment Plan has themes relevant to water and biodiversity throughout the key objectives. Complementary to these objectives Natural England published '***Conservation 21****: Natural England's conservation strategy for the 21st century'*, setting out how to support the government's ambition for a healthy natural environment on land and at sea that benefits people and the economy. Underpinned by our focus on delivering better long term outcomes for the environment by working towards shared visions with partners, Conservation 21's three guiding principles are: 1) creating resilient landscapes and seas; 2) putting people at the heart of the environment; and 3) growing natural capital. In support of this, our response therefore provides advice, where appropriate, on how the plan can embrace an ecosystem approach, enhance natural capital and can support the conservation of biodiversity at a landscape scale.

Natural England continues to aim to work with the water sector to ensure that requirements for the protection and enhancement of the natural environment are met and that there is adequate opportunity for the development of more sustainable solutions. Protection and enhancement of the natural environment including biodiversity depend critically on delivering improved, integrated and sustainable land and water management.

H3: Horticultural Trades Association

30 July 2021

Dear Sir/Madam,

Re: Horticultural Trades Association submission to Portsmouth Water Drought Plan consultation

Thank you for the opportunity to contribute to this consultation. The Horticultural Trades Association (HTA) represents the UK garden industry, including garden centres, DIY stores, commercial plant growers, domestic landscapers and manufacturers. The total ornamental horticulture industry is worth £24bn industry, with 560,000 supported in the UK.

In our response we note that the pressures of population and economic growth, and climate change are set to put pressure on water supplies in the coming years. It's vitally important that we act now to ensure adequate access to water supplies for the country. Our industry is ready to play a part in this and has begun work towards reducing mains water use through the HTA's Sustainability Roadmap (hta.org.uk/sustainability). As part of our Roadmap, we set out our goals for the industry on water use. These are:

- an aggregate **40% increase** in the proportion of water that comes from non-mains and re-used water sources such as rainwater or runoff capture among growers and retailer.
- an aggregate **25% increase** in the proportion of HTA members using water efficiency measures such as reservoirs and automated irrigation systems.

With these points in mind, we would make three key points in response to the consultation:

1. That the devastating impact of a ban on 'watering outdoor plants on commercial premises' on our members be recognised in the plan, and that an exemption for horticultural businesses be introduced in non-essential use bans.
2. That the temporary provision for 'watering newly bought plants for the first 28 days after the ban is introduced' be nuanced so that irrigation of plants and trees being introduced to green infrastructure projects can continue, and that longer term environmental benefit is not lost.
3. That Portsmouth Water (and other water companies) work with us to accelerate the introduction of measures and best practice that will reduce our members' reliance on mains water. This includes support for water capture infrastructure projects, such as more self-sufficient water systems like reservoirs and efficient irrigation systems.

We and our members already take water efficiency measures, including selling drought resistant plans, but we stand ready to support greater domestic water efficiency through disseminating information to gardeners on responsible watering in their gardens.

Thank you once again for the opportunity to respond, and we hope to work with Portsmouth Water and other water companies as a responsible partner in ensuring water resilience for the UK in the coming years.

Yours faithfully,

James Clark
Director of Policy and Communications

HTA Response to Portsmouth Water's drought plan

Background
The Horticultural Trades Association (HTA) represents the UK garden industry, including garden centres, DIY stores, commercial plant growers, domestic landscapers and manufacturers. In our response we note that the pressures of population and economic growth, and climate change are set to put pressure on water supplies in the coming years.

In 2017, research from Oxford Economics demonstrated that the ornamental horticulture and landscaping industry supported contributions of £24.2 billion to the UK's GDP and 560,000 jobs – around 1% of the UK's workforce.

It's vitally important that we act now to ensure adequate access to water supplies for the country. Our industry is ready to play a part in this, and has begun work towards reducing mains water use through the HTA's Sustainability Roadmap (hta.org.uk/sustainability). As part of our Roadmap, we set out our goals for the industry on water use. These are:

- an aggregate 40% increase in the proportion of water that comes from non-mains and re-used water sources such as rainwater or runoff capture among growers and retailer.
- an aggregate 25% increase in the proportion of HTA members using water efficiency measures such as reservoirs and automated irrigation systems.

Many members already sell and promote drought-resistant plants and have communication plans in place to consumers to improve water efficiency. However, we want to work with water companies in improving these communications.

The industry underpins many of the goals of the Government's 25-Year Environment Plan, including heightened levels of biodiversity and carbon sequestration, and since the first covid lockdown easing there are now 3 million new gardeners, making 30 million gardeners in the UK in total, relying on horticultural businesses.

The horticulture industry also supplies the green infrastructure that will increasingly present nature-based solutions to the effects of climate change, for instance in urban tree planting and greening projects and sustainable urban drainage systems. This is just one way that horticulture underpins the Government's 25-year Environment Plan.

The ornamental horticulture industry and water use
Water Resources South East, of which Portsmouth Water is part, has high concentrations of horticulture businesses in its catchment, particularly over 40 commercial plant and tree

growers and 245 garden centres; this means that significant employment in the area is provided by horticulture.

Specifically within Portsmouth Water's supply, there are 14 grower businesses who have a collective annual turnover of £190 million. In addition, there are 12 garden retail centres in the same catchment, some part of larger chains, with an approximate combined annual turnover of these businesses being over £1.8 billion.

These grower businesses supply plants to garden retailers and domestic and amenity landscapers, both locally and across the country. If plants grown in the southeast were to fail due to a lack of water, the consequences would be felt nationwide and the whole ornamental horticulture industry would be at risk.

In research presented at the 2021 Waterwise conference, HTA showed that UK garden centres and ornamentals growers accounted for around 20 million cubic metres of water per year compared with a total 5.3 billion cubic metres abstracted for public water supply. The business survey which informed the research found that the impact were mains and/or abstracted water were not available during peak operating periods would affect the survival of the business for 50% of commercial growers and 45% of garden centres; for almost all the others the scenario would have a 'serious negative impact'.

Our industry also plays a vital role in the design, planting and maintenance of green infrastructure. Examples of projects include the Government's Tree Action Plan commitment to planting 30,000 ha of trees per year, and the Queen's Green Canopy, a project to encourage people to plant trees for the Queen's Platinum Jubilee. UK production nurseries are key to meeting these targets. These projects are often years in the planning; however, these timeframes are small compared with the years and decades of environmental benefit they provide in terms of reducing urban heat island effects, shading benefits, and reducing the impact of heavy rains and flash flooding on urban drainage systems. However, in order for these planting schemes to succeed it is vital that plants be irrigated as they root in to their situations.

Our response to points in the proposed drought plan

In broad terms we welcome and support the principles of the plan. As noted, continuity of water supply plays a vital role to the employment and economic contribution our industry makes in the Portsmouth Water area, and nationwide. Our industry has innovated solutions for domestic gardeners to reduce their reliance on mains water and hosepipes for watering in the form of water butts and drip irrigation systems, and stands ready to help educate consumers around responsible water use in gardening.

We note that under non-essential use bans a there is a provision to ban 'watering outdoor plants on commercial premises'. The wording of this is ambiguous in the context of our industry and could be interpreted as a ban on irrigating commercial crops which would lead to huge commercial losses; essentially horticultural businesses would be treated in the same way as pubs looking to water a hanging basket. Such a ban would risk inflicting huge and lasting damage on our industry. The loss of what amounts to a cash crop would push a

huge proportion of our member businesses into insolvency and would reduce the UK's capacity to produce plants and trees needed for tree the planting and urban greening goals envisaged in Defra's 25 Year Environment Plan. We would ask that an exemption be built into the plan for horticultural businesses, recognising the disproportionately serious impact water restrictions would have on our sector, especially in peak production periods.

We also note that under non-essential use bans the plan provides for 'watering in newly bought plants for the first 28 days after the ban is introduced'. In the coming green infrastructure projects such as tree planting and urban greening work have huge potential to provide nature-based solutions to the effects of climate change. The benefits on human health are also significant; according to the Office for National Statistics air pollution by UK vegetation averted 1,900 deaths per year in 2015 alone, and in 2018, saved over £1.2 billion in avoided healthcare costs

These ecosystem services pay back over many years and decades. However, a critical point in their implementation is in the period after planting when these trees and plants need to take root and establish themselves. Without adequate irrigation (which can be managed in a responsible way), these plants and trees will die, and the projects fail. We note that you propose an exemption to non-essential use bans for 'water-using activities which protect human health and safety'. We suggest that this be extended to activities which protect or benefit the environment and the UK's natural capital, and that exemptions based on a case-by-case review of the irrigation needs of green infrastructure projects be provided for in the plan.

Future opportunities for collaboration

As noted in our covering letter, our industry is already working towards greater water resilience and on reducing its reliance on mains water; we recognise the vital national interest in conserving the nation's water supplies. Our Sustainability Roadmap includes a target for an aggregate 40% increase in the proportion of water that comes from non-mains and re-used water sources such as rainwater or runoff capture among growers and retailers. In the research presented at Waterwise's 2021 conference, we reported that 32% of commercial growers and 50% of garden centres do not currently use rainwater harvesting systems but would like to; almost all the others are already using such systems. We believe there are solutions for businesses to rely less on mains water in this way, and feel it is a mutual interest of water companies. We therefore welcome engagement with water companies to achieve this goal.

We are working to raise awareness and share best practice and guidance between our member businesses and would like a dialogue with water companies on how this can be accelerated. Similarly, we would like to ensure that our members are able to promptly identify, and access regional or national funds or incentives designed to accelerate investment in water resilience measures and in infrastructure which utilises water in the most efficient way – such as reservoirs on site for growers and retailers and the latest water saving technology. In many cases this will not be a case of new funds or incentives specifically for horticulture businesses, but merely of ensuring that horticulture businesses are aware of and are included in eligibility criteria for such support. This would ensure that

the horticulture industry can continue to provide so many environmental, and health and well-being benefits in the most sustainable way. We would welcome collaboration with Portsmouth Water and other bodies to this end.

Lastly, better data and information on our industry's water use and needs are vitally important to achieving greater water resilience in horticulture. We would like to collaborate with the water industry in developing better data in the industry's national and regional water needs and the related economic dependencies on water supplies. This will enable us to identify and prioritise areas in which there are particular areas of commercial or environmental impact relating to water use in horticulture, and for us to work together to play a part in preventing future difficulties rather than reacting when problems occur.

In summary, we feel that it is in both the horticulture industry's and water sector's interest to ensure that essential products such as plants and trees, and the many benefits they provide to society and the economy, and most importantly to the environment, are not threatened by a lack of water.

We welcome future engagement with the water sector and look forward to collaborating together.

H4: CCW

The voice for water consumers
Llais defnyddwyr dŵr

CCW's comments on Portsmouth Water's Draft Drought Plan 2021

30 July 2021

Introduction

1. CCW is the independent voice for water consumers in England and Wales. Since 2005, we have helped thousands of consumers resolve complaints against their water company, while providing free advice and support. All of our work is informed by extensive research, which we use to champion the interests of consumers and influence water companies, governments and regulators. We welcome the opportunity to comment on Portsmouth Water's draft Drought Plan (the Plan).

2. We have looked at both the full-length Plan and the shorter consultation document, 'How we plan to meet the challenges of the drought'. In our view, the final Plan must be accompanied by a clear and accessible non-technical summary, for customers who are less aware of the technical issues and terminology used in the Plan. We have reviewed the consultation document on the assumption that this is the basis of such a summary.

3. Both the full-length plan and the shorter consultation/non-technical summary are clearly written and it is clear that the company has considered the wide range of customers who need to be involved and the different methods of communicating with them.

Response to questions

Question 1: Do you think the different levels of drought and the associated actions are easy to understand?

4. Both the main plan and the consultation/non-technical summary are set out clearly and easy to understand.

Question 2: Are the proposed restrictions on using water for households and businesses easy to understand?

5. Yes, the restrictions are easy to understand. We welcome the fact that companies in the South East have worked together to align their approaches and are using a common 'traffic light' based approach to presenting the different stages of drought and related activity.

Question 3: Do you agree with introducing restrictions on using water for households first and businesses afterwards? (To protect jobs and businesses for as long as possible)

6. Yes, we agree with the order that restrictions are imposed. Initially, restrictions for households only apply to using hosepipes for non-essential activities but this can help to suppress demand if supported by effective communications. Protecting local businesses and the local economy is an important consideration, particularly during a long duration dry weather event or drought.

Question 4: Do you agree with the automatic exemptions from restrictions on using water which apply to everyone? (These are agreed by all water companies in the UK)

7. Yes.

Question 5: Do you agree with all the discretionary exemptions from restrictions on using water? (We agree these for our customers)

8. Yes. While exemptions for certain circumstances are helpful and essential in some cases, it is also important that customers, both household and non-household, are given early notice of a developing situation, and the possible introduction of restrictions. This will give them an opportunity to plan ahead and possibly mitigate any direct impacts – for example by deferring plans to undertake major landscaping projects or seeking to utilise alternative water supplies or technologies. We feel that there should be more information about what the notice period might be in the consultation/non-technical summary.

Question 6: Do you support the need to use the North Arundel Drought Permit in severe droughts to abstract more water to maintain supplies?

9. We would hope that this permit would only be used when absolutely necessary and would look to the Environment Agency to determine this.

Question 7: Would you support the introduction of emergency restrictions such as standpipes (water pipes in streets) or rota cuts (where water is only available for a few hours each day) in an emergency to safeguard essential supplies?

10. It is not acceptable to rely on emergency measures to manage a drought situation. Companies should plan to avoid the need to resort to these measures. That said, it is important that companies consider worst possible case scenarios and therefore have plans to deal with these situations if they were to occur.

Question 8: Would you be willing to significantly reduce your water use to 50-80 litres of water each day in order to avoid standpipes or rota cuts?

11. We are responding as a consumer organisation rather than an individual. We recognise the reasons why it may be necessary to ask customers to reduce their water use to this level. The company will need to ensure that it has a good communications strategy, and offers practical support to customers, if it wants customers to respond effectively to the request. For example, most people don't know how much water they currently use so would find it difficult to answer this question with any certainty. Customers would probably find it helpful to be told what 50 litres equates to, in relation to normal levels of usage, in order for them to answer this question.

12. It will be important for companies to start communicating with consumers as soon as the water resource situation reaches a stage where such a request is likely to be made, if not sooner. We address this further in response to question 10.

Question 9: Do you think we have got the right balance between reducing demand for water, using the drought permit to produce more water and protecting the environment?

Broadly speaking, yes.

Question 10: What do you think is the best way to tell customers about a drought and restrictions?

13. As mentioned, we feel that both the Plan and the consultation/non-technical summary are clearly written. However, there are some areas where we feel the Plan and/or the consultation/non-technical summary need further explanation and we have answered this question from the perspective of making suggestions for improving the information that the company provides to customers about drought and restrictions.

14. We felt that the main plan does not cover the following in sufficient detail:
    - How the company will respond if there are any problems in communication during a drought. For example, what action will the company take if the conditions increase the number of customer contacts.
    - How the company will engage with non-household customers about water efficiency, both before and during a drought. The plan should cover how companies will help water dependant non-household customers improve their resilience during a drought situation. It should also cover what action Portsmouth Water plans to take to ensure that NAVs and retailers engage with their own customers.
    - How the company plans to tackle leakage on customers' supply pipes.

15. We feel that the non-technical summary needs to cover the points mentioned in paragraph 13. above as well as the following issues:
    - Information on the impacts of low rainfall and drought on the environment. This will help readers to engage with the need to save water in the longer term, even when there is no drought situation.
    - A summary of what the company will do to reduce leakage and wastage from its own supply network. Again, this will help customers to engage with water efficiency messaging.
    - Detail of how Portsmouth plans to communicate with NAVs and retailers during a drought, and information about any other arrangements that may be in place for those customers.

Enquiries

If you have any queries regarding the above comments please contact:

Sarah Thomas
Policy Manager
CCW
Date: 30 July 2021

H5: Buriton Parish Council

Dear Sirs

Buriton Parish Council has considered the new draft Drought Plans produced by Southern Water and Portsmouth Water and has the following comments:
Buriton Parish covers a sensitive part of the South Downs National Park and feels that, in order to address any potential water shortages, the following priorities should apply:

- Firstly, Water Companies should reduce leaks
- Secondly, Water Companies should look to bring extra storage capacity on-line (such as the proposed Havant Thicket Reservoir)
- Water Savings (by reducing supplies to customers) could then be considered - but usage by farms producing food for the nation should not be hampered
- Additional extraction should only ever be considered from rivers - not from aquifers which are relatively finite sources

In addition, Water Companies should consider providing financial support to Community Buildings (such as village halls) to increase the efficiency of their water usage (introducing grey water recycling etc) so that they can be showcased as exemplars for local businesses and residents to follow.
We hope that these comments are helpful to you in considering the Drought Plans.
Yours faithfully

Petra Norris
Clerk to Buriton Parish Council

H6: Hampshire County Council

Portsmouth Water Drought Strategy

Hampshire County Council Response – July 2021

1. Do you think the different levels of drought and the associated actions are easy to understand?

The County Council considers that the different levels of drought and the associated actions are an appropriate traffic light system for citizens and businesses of Hampshire to understand water shortages and the actions that might need to be taken by water companies. The County Council is pleased to note that 'Contact vulnerable customers' is highlighted as an associated action at Level 2. The County Council consider that to be an essential part of the process. Protecting vulnerable people and treating them as a key stakeholder in this process is an important part of safeguarding and protecting Hampshire's vulnerable residents.

The County Council has some specific comments on Level 1 and Level 2 actions which are set out in responses to Q5 as it relates to discretionary exemptions on using water.

2. Are the proposed restrictions on using water for households and businesses easy to understand?

The County Council does consider that the proposed restrictions on using water for households and businesses are clear and easy to understand.

3. Do you agree with introducing restrictions on using water for households first and businesses afterwards? (To protect jobs and businesses for as long as possible)

The County Council is satisfied that introducing restrictions (with certain exemptions) on water for households is a logical approach to a drought strategy.

4. Do you agree with the automatic exemptions from restrictions on using water which apply to everyone? (These are agreed by all water companies in the UK)

The County Council would support a consistent approach to automatic exemptions by all the water companies in the South East which would mean that they are all using the same restrictions and exemptions, so it's clear what everyone should do to save water and help tackle the drought.

The current list of automatic exemptions include water-using activities which protect health and safety and Blue Badge holders so the County Council is satisfied that vulnerable residents will be safeguarded through this proposed drought strategy.

5. Do you agree with all the discretionary exemptions from restrictions on using water? (We agree these for our customers)

The County Council has some specific comments on Level 1 and Level 2 actions as they relate to discretionary exemptions:

Level 1:

Promoting water savings

The list of water saving measures is considered to be an appropriate set of measures that could be applied across Hampshire. The County Council is pleased to note that the agreed exemptions to these

restrictions are in place to help protect vulnerable customers and support businesses and jobs for as long as possible. It is an important element of the recovery from the pandemic that businesses and jobs are provided with the support they require to continue trading.

The impacts of droughts on some businesses across rural Hampshire in certain sectors (agricultural, agri-business, leisure, etc.) could have negative impacts on these businesses so the County Council is supportive of the provision of some exemptions at the Level 1 stage as part of the Drought strategy.

The County Council also considers that the measures listed which will be allowed in any drought are also appropriate to ensure that vulnerable residents and the health and safety of Hampshire residents alongside the interests of essential business uses are protected and effectively managed.

Non-essential use bans

Although the list of non-essential use bans is more restrictive than Level 1, the County Council does consider it to be an appropriate set of measures that could be applied across Hampshire subject to the exemptions listed remaining in place to protect Hampshire's vulnerable residents.

However, the use of water for dust suppression is an important criterion that may need to be considered on a case-by-case basis in respect of residential amenity in locations where specific industrial activities require dust suppression to be conducted as part of a planning condition or legal agreement.

Hampshire County Council as the local minerals and waste planning authority is concerned that if the dust suppression measures are not conducted in a Level 2 drought scenario, the enforcement issues for the site will increase as, at some sites, nearby residents may be impacted by dust increasing from the operations of a site nearby.

Some more consideration may need to be given to specific industrial activities that require dust suppression via planning conditions or legal agreements as part of their operations on a case-by-case basis in the list of exemptions as discretionary, otherwise some mineral extraction or waste sites may potentially have to shut down for extended periods during droughts or operate without the required dust suppression measures in place to protect the environment and local residential amenity.

6. Do you support the need to use the North Arundel Drought Permit in severe droughts to abstract more water to maintain supplies? (Please get in touch if you'd like to read an environment assessment of using this permit)

Hampshire County Council does not oppose the use of the North Arundel Drought Permit in severe droughts to abstract more water to maintain supplies for the residents of Hampshire.

7. Would you support the introduction of emergency restrictions such as standpipes (water pipes in streets) or rota cuts (where water is only available for a few hours each day) in an emergency to safeguard essential supplies?

The County Council does not oppose the introduction of emergency measures such as standpipes or rota cuts in an emergency, as long as the impacts of those actions do not negatively impact the County Council's ability to continue to provide key services to vulnerable residents of Hampshire during a period of severe drought when emergency measures are considered to be essential as per the drought strategy.

Hampshire County Council as the local highway authority will also need to be satisfied that any emergency restrictions such as standpipes do not restrict the safe operation of the public highway and so consultation and coordination will be required by the water companies with the local highway authority should emergency restrictions be required.

8. Would you be willing to significantly reduce your water use to 50-80 litres of water each day in order to avoid standpipes or rota cuts?

Whilst the County Council is supportive of the principle of reducing water usage to avoid emergency restrictions it is difficult to assess whether this would be achievable from an operational or practical perspective as the County Council is not an individual household.

The County Council is a large estate owner with buildings across the county being operated for all manner of different uses. This includes offices, schools, care homes, and country park visitor centers and visitor attractions. It is therefore difficult to answer this question from an operational stand point as each building and location will have a different water use requirement and each building or site manager would need to consider if it could be achieved from a practical and operational perspective.

9. Do you think we have got the right balance between reducing demand for water, using the drought permit to produce more water and protecting the environment?

The County Council does consider that Portsmouth Water has got the right balance between reducing demand for water, using the drought permit to produce more water and protecting the environment, however there are still significant challenges to reducing water demand in society at large and achieving that water use reduction (avoiding Level 2 and beyond) will require a great deal of engagement and behavior management to reduce water use per household and indeed by businesses.

10. What do you think is the best way to tell customers about a drought and restrictions?

The County Council would encourage publicity and awareness campaigns across all channels regarding droughts and potential restrictions. This should include public information campaigns across social media platforms and traditional media (TV and radio advertising; poster campaigns in public spaces and on buses alongside postal drops, public events, and roadshows) so that all sections of society are captured including Hampshire's most vulnerable residents.

From:	Massie, Neil
Sent:	02 August 2021 16:51
To:	SM-Defra-Water resources (WSR)
Subject:	Hampshire County Council Responses to Portsmouth Water & Southern Water Drought Strategies
Attachments:	Portsmouth Water Drought Strategy - HCC Response 2021-07-27.docx; Southern Water Drought Strategy - HCC Response 2021-07-30.docx

Dear Sir / Madam,

Hampshire County Council provided a response to these consultations on 30th July 2021 (attached for reference).

The County Council has the following additional comment in respect of 'vulnerable' customers on both drought strategies:

The County Council does not consider that either drought strategy has provided a clear definition of 'vulnerable' customers.

Whilst it is recognised that the Blue Badge as it relates to vulnerable residents is referenced in the documents, the County Council request that Southern Water and Portsmouth Water provide clarification on the definition of vulnerable customers so that the County Council can be reassured that all vulnerable residents of Hampshire will be included within the definition of vulnerable customers within the context of the respective drought strategies.

Thank you

Regards

Neil

Neil Massie BSc (Hons) MSc
Principal Planning Policy Officer

Strategic Planning
First Floor, EII Court West,
The Castle, Winchester SO23 8UD

H7: West Sussex County Council

From: Catherine Cannon
Sent: 03 August 2021 11:31
To: SM-Defra-Water resources (WSR)
Subject: Drought Plan Consultation (Portsmouth Water)

Dear Defra
Apologies for the day-late submission of this (Summer holidays) – I do hope our response from West Sussex County Council can be taken into account.
With best wishes, Catherine

Catherine Cannon, Team Leader Sustainability
Location: Room 237, East Wing, County Hall, Chichester PO19 1RH
I am working Monday – Wednesday 9am – 2.30pm with flexibility

West Sussex County Council is very aware that our residents and businesses live and work in a water stressed area. The importance of the protection of natural resources is identified in our Climate Change Strategy 2020 – 2030, with an emphasis on increasing our climate resilience. We are taking action ourselves to reduce the water use on our own corporate estate, specifically through more accurate monitoring to be able to understand water use and potential savings (trend tbc) We are pleased to be collaborating with our District and Borough colleagues and the three water supply companies across the county on a behaviour change campaign on water use reductions. As part of this we're working with our planning colleagues to share guidance on specifying water saving measures to be designed into developments, for example to be specified in Local Plans. WSCC as the Lead Local Flood Authority 2nd Cycle Flood Risk Management Strategy will cover the period 2021 -2026 and outlines our approach through the following objectives:

1. *Adaptation: work with communities to implement adaptive approaches to enhance the natural and built environment*
2. *Resilience: support communities to help them to become more resilient to future flood risk*
3. *Collaboration: work with all Risk Management Authorities and stakeholders to achieve a consistent, co-ordinated and risk-based approach to flood risk management*
4. *Opportunities: Seek opportunities (including funding and research and development) from existing and new sources to invest in making communities resilient to flooding*
5. *Evidence: develop a strategic understanding of flood risk from all sources*
6. *Sustainability: contribute positively to sustainable growth and support environmental net gain by influencing wider development, redevelopment and regeneration plans to deliver flood risk benefits*

In undertaking our actions associated to the above, this strategy will support a Drought Plan through implementing actions through planning, such as the promotion of Sustainable Urban Drainage Systems (SuDs) i.e Water efficiency measures such as Rainwater Harvesting, rain gardens and wider use of swales and ponds as attenuation or storage areas where necessary. This can be achieved via the planning process and implementing these within our own development and schemes. The Flood Risk Management Team always view its function within the wider context of water resources therefore considering water quality and quantity. FCERM features may act to conserve/protect water supply as well as deal with excess in terms of storage and flows.

In terms of the specific issues raised during the consultation, we have the following responses:

1. Do you think the different levels of drought and the associated actions are easy to understand? Yes, clearly colour coded and laid out. However we'd like to see some of the actions around emerging drought occur before an emerging drought – the importance of saving water should be promoted all year round, not simply as a drought is anticipated. For example, supporting vulnerable customers and through social media. As water is a resource, it should be viewed and managed in the context of the hydrological cycle. Water levels particularly Groundwater are monitored via Monitoring boreholes and presented on websites such as GaugeMap therefore our staff can pass this data to relevant teams that can predict potential for drought.

2. Are the proposed restrictions on using water for households and businesses easy to understand? Yes, and we like that these messages have been agreed with the other water companies in the south east to ensure consistency of messaging for customers. In the past this has been confusing.

3. Do you agree with introducing restrictions on using water for households first and businesses afterwards? Yes. Our Economy Plan for the County focusses on supporting businesses to flourish and we're keen they have the water security they need.

4. Do you agree with the automatic exemptions from restrictions on using water which apply to everyone? Yes.

5. Do you agree with all the discretionary exemptions from restrictions on using water? Yes, and particularly with the focus on supporting more vulnerable customers. We'd like to see that a risk based decision is made on best available data and evidence at the time.

6. Do you support the need to use the North Arundel Drought Permit in severe droughts to abstract more water to maintain supplies? Yes, however we would like to be assured that this is sensible and precautionary and will not lead to further unintended consequences. The viability of this as being a 'Plan A' will need to be kept under constant review with associate Environmental and Sustainability Due Diligence undertaken through appraisals and impact assessments. Perhaps a range of 'Emergency sites need to be explored (Plan B and C?)

7. Would you support the introduction of emergency restrictions such as standpipes or rota cuts in an emergency to safeguard essential supplies? Yes although we would want to be reassured that our most vulnerable residents are supported, and are keen to work with water companies through our Resilience and Emergencies teams. This would be part of our remit as Category One Responders under the duties of the Civil Contingencies Act (CCA) and used alongside our multi Agency Plans via the Sussex Resilience Forum.

8**. Would you be willing to significantly reduce your water use to 50-80 litres of water each day in order to avoid standpipes or rota cuts? This** step would require careful messaging to our residents and we would want to ensure our most vulnerable residents are fully supported, again taking a risk based decision.

9. Do you think we have got the right balance between reducing demand for water, using the drought permit to produce more water and protecting the environment? Yes, although we would like to continue to see a year round approach to reducing demand for water and not only when a drought is imminent. Flexible all year round permitting is the way to go however likely to require amendments to primary legislation that could make the process more complex and lengthy.

10. What do you think is the best way to tell customers about a drought and restrictions? We like the approach taken last summer, when you emailed customers in very specific supply zones to ask them to help conserve water. This targeted and timely ask we understand was very effective. Using trusted partners such as the County Council to reach as many residents as possible is also important to consider, and being aware that social media isn't appropriate for all. Water Resources should be an all year round message or 'alert level' communicated with respect to climate change adaptation and resilience.

H8: National Farmers Union

The National Farmers Union (NFU) provided their representation by annotating comments on the summary Drought Plan. These are provided in the table below.

Relevant Section and Content	Representation
Exemptions from restrictions – Some will be allowed in every Drought Customers using an approved drip or trickle irrigation system fitted with a pressure-reducing valve and timer	Can we have a paragraph in here which does stipulate Agriculture use. Horticulture, arable, and livestock farmers will require a water source. Farmers & Growers in the South East contribute to the food chain, and any restriction on water use will afect food production in the South East
Exemptions from restrictions – Others we may allow for a while, depending on the water levels Using an approved drip or trickle irrigation system fitted with a pressure-reducing valve and timer set for evenings or during the night	Horticultultural Growers will require irragation to maintain their crops. Can you include a seperate exemption for Agricultural use.

From: Sam Loades
Sent: 13 August 2021 16:24
To: Liz Coulson
Subject: [EXTERNAL] RE: Our drought plan consultation and webinar catch-up

Good afternoon Liz

I haven't heard back regarding the consultation so here is our comments attached.

The main issue regarding the drought plan is the exemptions. There is text and detail and around trickle irrigation, but there is no reference to agriculture and horticulture exemptions in the PWS region. As you are aware Horticulture, Arable, and Livestock farming is a key user of water in the region. For any restrictions to be placed on those sectors would impact food production in the south east. Would you consider adding in a section of exemptions to Agricultural activities where food production is crucial.

Such example activities which we would like to see exemptions applied to are as follows

- Irrigation of arable and horticultural crops
- Use of water in the spraying application of arable and horticultural crops
- Use of water for supplying livestock with suitable drinking water
- Use of water in the use of washing down clean areas for food and livestock preparation / treatment

I have attached the PWS consultation with comments attached

Any questions please do not hesitate to contact me.

Regards

Sam

Sam Loades

Environment & Land Use Adviser
NFU
South East Region

The voice of British farming - www.nfuonline.com

BACK BRITISH FARMING: SETTING THE STANDARD

If you wish to send me large files. Please use the file drop link below.
File Drop

From: Liz Coulson >
Sent: 20 July 2021 12:34
Cc: WRMP@PORTSMOUTHWATER.CO.UK
Subject: Our drought plan consultation and webinar catch-up

Hello,

We're really grateful for all the feedback we've had so far on our latest plans to manage droughts. Our consultation will finish on **2nd August**, when we'll start analysing your feedback.

Our updated Drought Plan outlines how we will encourage water efficiency, reduce leaks and, if necessary, introduce temporary restrictions on domestic and commercial water use – before we use drought permits to maintain essential supplies.

During the consultation, in collaboration with Southern Water, we held a webinar to explain our plans and answer your questions. A recording is available online if you weren't able to join or want to watch again.

All our drought plan documents, including a summary, as well as an opportunity to share more feedback can be found at portsmouthwater.co.uk/droughtplan

Thanks,

Liz Coulson C.WEM C.Env
Water Resources Manager

Email.
Web. www.portsmouthwater.co.uk

Portsmouth Water
Excellence I respect I integrity