# Drought Plan 2022 Annex 10: Water Framework Directive Assessment

**Appendix A - WFD Assessment of Drought Permits and Orders** 

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# A.1 Pulborough

In order to protect public water supplies within Southern Water's Central Area in the event of a future drought, Southern Water would make an application to the Environment Agency for the Drought Permits, and to the Secretary of State for the Drought Order, to vary the conditions of abstraction from the River Rother at the Pulborough abstraction intake.

If granted, the Drought Permits would reduce the minimum residual flow requirement (MRF) in the River Rother to 53.65Ml/d or 43.65Ml/d, or under the Drought Order to 33.65Ml/d, so as to allow greater abstraction from the Pulborough surface water intake. There would be no changes to the daily abstraction licence limit. The Drought Permits would provide a maximum yield gain of 10Ml/d to 20Ml/d; the Drought Order would provide a maximum gain of 30Ml/d if implemented independently of the Drought Permits. The precise yield benefit will depend on the prevailing drought flow conditions of the River Rother. The Drought Permits and Order will influence flows in the River Rother downstream of the abstraction intake to the River Arun transitional water body.

The revised abstraction arrangements would legally be authorised for a maximum of 6 months. Use of the Drought Permit / Order powers would be removed sooner if water resources have returned to adequate levels to safeguard future water supplies, as agreed with the Environment Agency.



Table A-1 WFD Status Classifications and screening decisions – Pulborough – Surface Water

Waterbody ID		GB107041012810	GB540704105000
Waterbody Name		Western Rother	Arun (Transitional)
Hydrological Impac	t at Location:	Summer: 10Ml/d – Negligible 20Ml/d – Minor 30Ml/d – Major	Summer: 10Ml/d – Minor 20Ml/d – Minor 30Ml/d – Major
(Major, Moderate, Mi	nor, Negligible)	Winter: 10 Ml/d – Negligible 20 Ml/d – Minor 30 Ml/d – Moderate	Winter: 10 Ml/d – Negligible 20 Ml/d – Minor 30 Ml/d – Moderate
	Overall	Moderate	Moderate
Fish		Moderate	-
	Macroinvertebrates	Good	
RBMP Cycle 2 Status/ Potential (2019):	Macrophytes and Phytobenthos	Good	-
(20.0).	Invertebrates		-
	Macroalgae	-	High
	Phytoplankton	-	-
Hydro-morphology	designations:	Not designated Artificial or Heavily Modified	Heavily Modified
	Overall	-	-
	Fish	-	-
	Macroinvertebrates	-	-
RBMP2 Waterbody Objective (2021):	Macrophytes and Phytobenthos	-	-
, ,	Invertebrates	-	-
	Macroalgae	-	-
	Phytoplankton	-	-
	Overall	Good	Good
	Fish	Good	-
	Macroinvertebrates	-	-
RBMP2 Waterbody Objective (2027):	Macrophytes and Phytobenthos	Good	-
	Invertebrates	-	-
	Macroalgae	-	-
	Phytoplankton	-	-
Scoped in to Environmental Assessment:		10MI/d Summer – No 20MI/d Summer– No 30MI/d Summer– Yes 10MI/d Winter – No 20MI/d Winter – No 30MI/d Winter – Yes	10Ml/d Summer – No 20Ml/d Summer– No 30Ml/d Summer– Yes 10Ml/d Winter – No 20Ml/d Winter – No 30Ml/d Winter – Yes



Table A-2 Overall WFD Compliance Assessment – Pulborough Summer 30MI/d Reduction – River water body GB107041012810

WFD element	RBMP2 (2019) status	Risk of te	Risk of temporary deterioration to WFD waterbody				
Fish	Moderate	High	Temporary m		acts to the fish co	ommunity,	
Macro- invertebrates	Good	Medium	Temporary adverse impacts to adverse impacts to the macroinvertebrate community.				
Macrophytes & Phytobentos	Good	Medium	Temporary a	dverse impacts to	the macrophyte	community.	
Chemical (Overall)	Fail	Negligible	Implementation of the drought order could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.				
Water Body Mitigation Measure	No published m	nitigation mea	sures.				
WFD Protecte	d Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Bird Directive	Hanitate	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive	
NO	YES	NO	NO	YES	NO	YES	
Protected Area I	Details	(washlands flooding. Si ditches. Bo are immedi Arun. Droug Nutrient se nutrient ser	and SPA: and Arun floodplai tes are comprised of the SAC and SP ately downstream of ght option has a min ensitive areas (Nitrates insitive area; however the of the protected	n) are subject to of a series of wet A border and dra of the Western Ronor impact on the vulnerable zoner, the drought m	winter and occasi meadows dissection into the Arun (to other confluence was sites. es): The river is a	onal summer ted by a network of ransitional). Sites with the River ssociated with a	
		Protected A	Drinking water protected area: the river is associated with a Drinking Water Protected Area. There is a negligible risk of adversely affecting the chemical status of the water body.				
Does the com	ponent compl	y with WFD	Objective?				
No deterioration     classes	on between statu		No; there is a high risk of temporary deterioration in status, due to impacts on some fish species.				
2. No impediments to GES/GEP		Ye	Yes; complies with WFD objective, temporary deterioration only.				
3. No compromis objectives	ses to water body	/ Ye	s; complies with W	FD objective.			
4. No effects on	other water bodi		No; there is a high risk of impacting downstream water body GB540704105000				
5. No hindrance objectives for pro		Ye	s; complies with W	FD objective.			
	to measures to a ces, priority hazar other pollutants		s; complies with W	FD objective.			



Table A-3 Overall WFD Compliance Assessment – Pulborough Summer 30MI/d Reduction – Transitional water body GB540704105000

WFD element	RBMP2 (2019) status	Risk of temp	orary deterio	oration to WFD	waterbody		
Fish	Not assessed	Low - High	Temporary n depending o		erse impacts to t	he fish community,	
Invertebrates	Not assessed	Low		dverse impacts to is low and curren		ebrate community, sessed.	
Macroalgae	High	Low	Temporary a	dverse impacts to	the macroalgae	community.	
Phytoplankton	Not assessed	Low	Temporary a	idverse impacts to	the phytoplankto	on community.	
Angiosperms	Not assessed	Not assessed					
Chemical (Overall)	Fail	Negligible	Implementation of the drought option could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.				
Water Body Mitigation Measure	No published m	itigation measur	es.				
WFD Protecte	ed Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive	
NO	YES	YES	YES	NO	NO	NO	
Arun V floodpl compri located drain ir Chann this WI Protected Area Details  Nutrier a nutrie the pro		floodplain) are comprised of a located between drain into the A Channel at Litt this WFD water Nutrient sensition a nutrient sensition protected a Drinking water	In Valley SAC and Arun Valley SPA. Arun Valley (washlands and Arun odplain) are subject to winter and occasional summer flooding. Sites are imprised of a series of wet meadows dissected by a network of ditches, and are lated between Pullborough and Amberly. Both the SAC and SPA border and are in into the Arun (transitional) which eventually discharges into the English annel at Littlehampton. Drought option has a minor impact on these sites within a WFD water body.  It is sensitive areas (Nitrate vulnerable zones): The river is not associated with utrient sensitive area; the drought measure will not affect the management of a protected area.  Inking water protected area: the river is associated with a Drinking Water of the water body.				
Does the com	nponent compl	y with WFD O	bjective?				
	ion between statu	9		sk of temporary de	terioration in stat	us.	
2. No impedime	ents to GES/GEP	Yes; o	complies with W	/FD objective, tem	porary deteriorat	ion only.	
3. No compromobjectives	ises to water body	Yes; o	complies with W	/FD objective.			
4. No effects on	other water bodie	es Yes; o	complies with W	/FD objective.			
5. No hindrance objectives for pr	e to attainment of rotected area	Yes; o	complies with W	/FD objective.			
priority substance	e to measures to a ces, priority hazar I other pollutants		complies with W	/FD objective.			



Table A-4 Overall WFD Compliance Assessment – Pulborough Winter 30Ml/d Reduction – River water body GB107041012810

WFD element	RBMP2 (2019) status	Risk of temp	Risk of temporary deterioration to WFD waterbody				
Fish	Moderate	High	Temporary ma		acts to the fish co	ommunity,	
Macro- invertebrates	Good	Medium		verse impacts to rate community.	adverse impacts	s to the	
Macrophytes & Phytobentos	Good	Medium	Temporary adv	verse impacts to	the macrophyte	community.	
Chemical (Overall)	Fail	Negligible	Implementation of the drought order could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.				
Water Body Mitigation Measure	No published m	itigation measure	es.				
WFD Protecte	ed Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive	
NO	YES	NO	NO	YES	NO	YES	
Protected Area	Details	(washlands and flooding. Sites ditches. Both the are immediated Arun. Drought of Nutrient sensition nutrient sensition management of Drinking water	d Arun floodplain, are comprised of the SAC and SPA by downstream of the option has a minor option has a min	are subject to value a series of wet border and draithe Western Roor impact on the vulnerable zone, the drought merea.	winter and occasi meadows dissect in into the Arun (to other confluence vise sites. es): The river is a easure will not afforticated with a Drinl	ted by a network of ransitional). Sites with the River ssociated with a fect the	
Does the com	ponent comply						
	ion between statu	s No; the		of temporary de	terioration in stat	us, due to impacts	
2. No impediments to GES/GEP		Yes; c	Yes; complies with WFD objective.				
3. No compromi objectives	ises to water body	Yes; c	omplies with WFI	D objective.			
4. No effects on	other water bodie		ere is a high risk ( )704105000	of impacting dov	wnstream water b	oody	
5. No hindrance objectives for pr	to attainment of rotected area	Yes; c	omplies with WFI	D objective.			
priority substant	e to measures to a ces, priority hazar l other pollutants		omplies with WFI	D objective.			



Table A-5 Overall WFD Compliance Assessment – Pulborough Winter 30Ml/d Reduction – Transitional water body GB540704105000

WFD element	RBMP2 (2019) status		Risk of temporary deterioration to WFD waterbody					
Fish	Not assessed	Medium	Temporary a	dverse impacts to	the fish commur	nity.		
Invertebrates	Not assessed	Low	macroinverte	Temporary adverse impacts to adverse impacts to the macroinvertebrate community, however risk is low and current status is not assessed.				
Macroalgae	High	Low	Temporary a however risk	dverse impacts to is low.	the macroalgae	community,		
Phytoplankton	Not assessed	Low		dverse impacts to				
Angiosperms	Not assessed	Not assessed						
Chemical (Overall)	Fail	Negligible	Implementation of the drought option could reduce the dilution other discharges temporarily. The overall risk to deterioration chemical status is considered to be negligible given existing baseline drought conditions.					
Water Body Mitigation Measure	No published m	itigation measur	es.					
WFD Protecte	ed Areas							
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive		
NO	YES	YES	YES	NO	NO	NO		
Arun Vifloodpla compris located drain in Channe this WF Protected Area Details  Nutrien a nutrie the pro  Drinkin Protect		floodplain) are comprised of a located between drain into the A Channel at Litt this WFD water Nutrient sensition a nutrient sensition protected a Drinking water	In Valley SAC and Arun Valley SPA. Arun Valley (washlands and Arun dplain) are subject to winter and occasional summer flooding. Sites are apprised of a series of wet meadows dissected by a network of ditches, and are sted between Pullborough and Amberely. Both the SAC and SPA border and in into the Arun (transitional) which eventually discharges into the English annel at Littlehampton. Drought option has a minor impact on these sites within WFD water body.  Trient sensitive areas (Nitrate vulnerable zones): The river is not associated with utrient sensitive area; the drought measure will not affect the management of protected area.  There is a negligible risk of adversely affecting the chemical status are water body.					
Does the com	ponent compl	y with WFD O	bjective?					
1. No deteriorat classes	ion between statu			n risk of temporar tebrate and macr				
2. No impedime	nts to GES/GEP	Yes; o	complies with W	/FD objective, tem	porary deteriorat	ion only.		
3. No compromi objectives	ises to water body	Yes; o	complies with W	/FD objective.				
4. No effects on	other water bodie	es Yes; o	complies with W	/FD objective.				
5. No hindrance objectives for pr	to attainment of otected area	Yes; o	complies with W	/FD objective.				
priority substance	to measures to a ces, priority hazar other pollutants		complies with W	/FD objective.				



# A.2 Eastern Yar Augmentation Scheme

In order to protect public water supplies within Southern Water's Isle of Wight WRZ in the event of future severe drought conditions, Southern Water would make an application to the Environment Agency for a drought permit to vary the conditions of abstraction from Eastern Yar.

If granted the drought permit would involve two potential reductions to the statutory MRFs on the River Medina at Blackwater and Shide (Newport weir). For both options, the MRFs would be reduced to increase the volume of water available to abstract and transfer from the River Medina to the River Yar via the Medina – Yar transfer pipeline.

The drought order will influence the watercourses downstream of the Blackwater intake on the River Medina and downstream of the discharge point on the River Eastern Yar to the Eastern Yar abstraction intake.

The revised abstraction arrangements would legally be authorised for a maximum of 6 months. Use of the drought order powers would be removed sooner if water resources have returned to adequate levels to safeguard future water supplies, as agreed with the Secretary of State.



Table A-6 WFD Status Classifications and screening decisions – Eastern Yar Augmentation Scheme – Surface Water

Waterbod	y ID	GB107101005990	GB107101006220	GB107101005971	GB520710101600
Waterbody	Name	Medina	Eastern Yar (Upper)	Eastern Yar (Lower)	Medina (transitional)
Hydrologica Location:	al Impact at	Summer – Major (Reach 1 and 2)	Summer – Negligible (Reach 4)	Summer – Negligible (Reach 4)	<b>Summer –</b> Major (Reach 3)
(Major, Mod	, Minor, Neg)	Winter – Major (Reach 1 and 2)	Winter-Negligible (Reach 4)	<b>Winter</b> –Negligible (Reach 4)	<b>Winter</b> – Major (Reach 3)
	Overall	Moderate	Moderate	Moderate	Moderate
RBMP	Fish	Moderate	High	High	-
Cycle 2	Macroinvertebrates	Moderate	Good	Good	Moderate
Status/ Potential	Macrophytes	-	Moderate	-	-
(2019):	Macroalgae	-	-	-	Moderate
	Phytoplankton	-	-	-	High
Hydro-morp	h designations:	heavily modified	heavily modified	heavily modified	heavily modified
	Overall	-	-	-	-
RBMP2	Fish	-	-	-	-
Waterbody	Macroinvertebrates	-	-	-	Good
Objective	Macrophytes	-	-	-	-
(2021):	Macroalgae	-	-	-	-
	Phytoplankton	-	-	-	-
	Overall	Good	Good	Good	Good
RBMP2	Fish	-	-	-	-
Waterbody	Macroinvertebrates	Good	-	-	-
Objective	Macrophytes	-	Good	-	-
(2027):	Macroalgae	-	-	-	Good
	Phytoplankton	-	-	-	-
Scoped In t Assessmen	o Environmental t:	Summer: 1MI/d (Shide + Blackwater) - Yes Winter: 1MI/d (Shide + Blackwater) - Yes	Summer: 1MI/d (Shide + Blackwater) - No Winter: 1MI/d (Shide + Blackwater) - No	Summer: 1MI/d (Shide + Blackwater) - No Winter: 1MI/d (Shide + Blackwater) - No	Summer: 1MI/d (Shide + Blackwater) - Yes Winter: 1MI/d (Shide + Blackwater) - Yes



# A.2.1 Eastern Yar Augmentation Scheme - Summer

Table A-7 Overall WFD Compliance Assessment – Eastern Yar Summer– River water body GB107101005990

WFD element	RBMP2 (2019) status	Risk of temp	orary deteriora	ntion to WFD	waterbody		
Fish	Moderate	High	Temporary adv	erse impacts to	the fish commun	ity.	
Macro- invertebrates	Moderate	Medium	Temporary adv	erse impacts to	the macroinverte	brate community.	
Macrophytes & Phytobentos	Not assessed	Low	Temporary adv	erse impacts to	the macrophyte o	community.	
Chemical (overall)	Fail	Negligible	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.				
Water Body Mitigation Measure	Mitigation No published mitigation measures.						
WFD Protect	ed Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive	
NO	Yes	NO	NO	YES	NO	NO	
Protected Area	Protected Area Details  Nutrien nutrient		inking water protected area: the river is associated with a Drinking Water of objected Area. There is a negligible risk of adversely affecting the chemical status the water body.  It rient sensitive areas (Nitrate vulnerable zones): The river is associated with a trient sensitive area; however, the drought measure will not affect the anagement of the protected area.				
Does the con	nponent compl	·	· · · · · · · · · · · · · · · · · · ·				
1. No deteriorat classes	No deterioration between status classes		No; there is a high risk of temporary deterioration in status due to impacts on the fish community.				
	2. No impediments to GES/GEP		Yes; complies with WFD objective, temporary deterioration only.				
3. No compromises to water body objectives		y Yes; c	Yes; complies with WFD objective.				
4. No effects or	n other water bodi	es No; the	ere is risk of impa	cting downstrea	m water body GE	3520710101600	
<b>5.</b> No hindrance objectives for p	e to attainment of rotected area	Yes; c	omplies with WFI	objective.			
priority substan	e to measures to a ces, priority haza d other pollutants		Yes; complies with WFD objective.				



Table A-8 Overall WFD Compliance Assessment – Eastern Yar Augmentation Scheme Summer– Transitional water body GB520710101600

WFD element	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody					
Fish	Not assessed	Medium - High	Temporary moderate to major adverse impacts to the fish community, depending on species.				
Invertebrates	Moderate	Low	Temporary adverse impacts to the macroinvertebrate community.				
Macroalgae	Moderate	Low	Temporary adverse impacts to the macroalgae community.				
Phytoplankton	High	Low	Temporary adverse impacts to the phytoplankton community.				
Angiosperms	Not assessed	-					
Chemical (overall)	Fail	Negligible	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration or chemical status is considered to be negligible given existing baseline drought conditions.				
Water Body Mitigation Measure	No published m	nitigation measure	es.				
WFD Protecte	ed Areas						
	Drinking	Conservation	Urban Waste				

Does the component comply with WFD Objective?						
No deterioration between status classes	No; there is a high risk of temporary deterioration in status due to impacts on the fish community.					
2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only.					
3. No compromises to water body objectives	Yes; complies with WFD objective.					
4. No effects on other water bodies	Yes; complies with WFD objective.					
<b>5.</b> No hindrance to attainment of objectives for protected area	No; there is a high risk of impacting Solent and Southampton Water SPA and Solent Maritime SAC. Further assessment is required.					
<b>6.</b> No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.					



# A.2.2 Eastern Yar Augmentation Scheme - Winter

Table A-9 Overall WFD Compliance Assessment – Eastern Yar Augmentation Scheme Winter– River water body GB107101005990

WFD element	RBMP2 (2019) status	Risk of temp	orary deterio	ation to WFD	waterbody		
Fish	Moderate	High	Temporary ad	verse impacts to	the fish commun	ity.	
Macro- invertebrates	Moderate	Medium	Temporary ad	verse impacts to	the macroinverte	ebrate community.	
Macrophytes & Phytobentos	Not assessed	Low	Temporary adverse impacts to the macrophyte community.				
Chemical (overall)	Fail	Negligible	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.				
Water Body Mitigation Measure	No published m	itigation measure	es.				
WFD Protecte	ed Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive	
NO	Yes	NO	NO	YES	NO	NO	
Protected Area	Details	Protected Area of the water bo  Nutrient sensiti nutrient sensiti	i. There is a neglidy.	igible risk of adv vulnerable zone r, the drought me		ne chemical status	
Does the con	nponent compl	y with WFD O	bjective?				
<ol> <li>No deteriorat classes</li> </ol>	ion between statu		ere is a high risk fish community.		terioration in stat	us due to impacts	
2. No impediments to GES/GEP			Yes; complies with WFD objective, temporary deterioration only.				
3. No compromises to water body objectives			Yes; complies with WFD objective.				
4. No effects on	other water bodi	es No; th	ere is risk of imp	acting downstrea	am water body Gl	3520710101600	
5. No hindrance objectives for pr	e to attainment of rotected area	Yes; o	omplies with WF	D objective.			
priority substan	e to measures to a ces, priority hazar I other pollutants		Yes; complies with WFD objective.				



Table A-10 Overall WFD Compliance Assessment – Eastern Yar Augmentation Scheme Winter– Transitional water body GB520710101600

WFD element	RBMP2 (2019) status	Risk of tempor	ary deteriora	ation to WFD w	aterbody		
Fish	Not assessed	Medium - High	Temporary moderate to major adverse impacts to the fish community, depending on species.				
Invertebrates	Moderate	Low		dverse impacts to		ebrate communit	
Macroalgae	Moderate	Low		idverse impacts to			
Phytoplankton	High	Low	Temporary a	dverse impacts to	the phytoplankto	on community.	
Angiosperms	Not assessed	Not assessed		·		-	
Chemical (overall)	Fail	Negligible	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration chemical status is considered to be negligible given existing baseline drought conditions.				
Water Body Mitigation Measure	No publishe	d mitigation measure	es.				
WFD Protecte	ed Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Wast Water Treatment Directive	
NO	NO	YES	YES	YES	YES	YES	
Protected Area		Protected area SA salinity impacts m water quality may community. The li importance of the Solent and South to the Medina trar On a precautional drought order. The a change in prey a saltmarsh), grey p Shellfish Waters: temporarily. Howe given the dynamic measure.  Nutrient sensitive of the protected a	ray result in characters the residence the residence the residence of the second terms	anges within mud isk of algal bloom re assessed as mificance of impact SPA: The impact is expected to be derate impact counich feed on mudicomposition are; seasure could reduct to the Shellfish Vironment and the vulnerable zones	flat and sandflat I is and changes in inor, but due to the is assessed as nof the reduction if e greatest during Id arise from implificats, and thereforeshelduck, redshall the the dilution of the the dilution of the considered short-term natureshort.	nabitats. Reduce the phytoplankthe international noderate. In freshwater inplow tide conditionementation of the could experient (also feeds or and dunlin, discharges at to be negligible of the drought associated with a	
Does the con	nponent con	nply with WFD Ob	jective?				
<ol> <li>No deteriorat classes</li> </ol>	ion between s	tatus No; the	No; there is a low risk of temporary deterioration in status.				
2. No impedime	ents to GES/G	EP Yes; co	omplies with W	FD objective, tem	porary deteriorat	ion only.	
3. No compromises to water body objectives		oody Yes; co	Yes; complies with WFD objective.				
4. No effects on other water bodies				•			
	other water b	oodies Yes; co	omplies with W				

and Solent Maritime SAC.

Yes; complies with WFD objective.



objectives for protected area

substances and other pollutants

**6.** No hindrance to measures to address priority substances, priority hazardous

# A.3 River Medway Scheme

The proposed Drought Permit / Order involves the proposed reduction in the statutory MRF at the gauged EA operated (40003) Medway at Teston gauge, with details of the seasonal changes in MRF. The reduction in MRF at Teston would allow for a greater abstraction at Smallbridge, Maidstone and Springfield (river flow permitting) and also allow for a greater volume of water to be abstracted in 'drought conditions' for the refill of Bewl Water during the winter period. Additionally, the relaxation of the release factor would also enable longer term storage of in Bewl Water.

The Stage 4 assessment has remained unchanged since the previous assessment where the Teston MRFs and flow release factor were reduced to zero. The MRFs and flow release factor have been increased following discussions with the Environment Agency in December 2020 to reduce the environmental impact of Stage 4. The new hydrological impacts will need to be assessed via modelling and the WFD assessment updated in due course. Until this update is complete, in line with a precautionary approach, the previous Stage 4 hydrological impact assessment is retained.



Table A-11 WFD Status Classifications and screening decisions – River Medway Scheme – Surface Water for Stages 1, 2, 3 and 4

Waterbody	y ID	GB1060400 18500	GB10604001 8520	GB10604001 8260	GB10604001 8140	GB10604001 8130	GB10604001 8440	GB53060400 2300	GB30644398
Waterbody	y Name	Bewl River	Teise at Lamberhurst	Teise and Lesser Teise	Beult at Maidstone	Lower Teise	Medway at Maidstone	Medway (transitional)	Bewl Water (Lake)
Hydrological Impact at Location:  (Major, Moderate, Minor, Negligible)		Reach 1 Stage 1 - Minor Stage 2 and	Reach 1 Stage 1 - Minor Stage 2 and 3 -	Reach 2 (& 3b)  Stage 1 - Negligible  Stage 2 - Minor	Reach 3b  Stage 1 - Negligible Stage 2 - Minor	Reach 3a  Stage 1 - Negligible Stage 2 - Minor Stage 3 -	Reach 4 & 5  Stage 1, 2 and 3 - Minor  Stage 4 -	Reach 6 Stage 1, 2 and 3 Minor	Bewl Water  Stage 1, 2 and 3 - Minor Beneficial
		3 – Moderate Stage 4 - Major	Moderate Stage 4 - Major	Stage 3 - Moderate Stage 4 - Major	Stage 3 - Moderate Stage 4 - Major	Moderate Stage 4 - Major	Minor for Reach 4 and Major for Reach 5	Stage 4 - Major	Stage 4 – Moderate Beneficial
	Overall	Moderate	Poor	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
	Fish	Good	-	Poor	-	Poor	Moderate	-	-
	Macroinvertebrates	Good	High	High	Good	Moderate	High	Good	-
RBMP Cycle 2 Status/ Potential	Macrophytes and Phytobenthos	-	Poor	-	-	Moderate	-	-	-
(2019):	Invertebrates	-	-	-	-	-	-	Good	-
	Macroalgae	-	-	-	-	-	-	Good	-
	Phytoplankton	-	-	-	-	-	-	High	-
Hydro-morp	hology designations:	heavily modified	heavily modified	heavily modified	heavily modified	heavily modified	heavily modified	heavily modified	-
RBMP2	Overall		-			-			
Water body	Fish	-	-	-	-	-	-	-	-
Objective (2021):	Macroinvertebrates	-	-	-	-	-	-	-	-

Waterbody	/ ID	GB1060400 18500	GB10604001 8520	GB10604001 8260	GB10604001 8140	GB10604001 8130	GB10604001 8440	GB53060400 2300	GB30644398	
Waterbody	/ Name	Bewl River	Teise at Lamberhurst	Teise and Lesser Teise	Beult at Maidstone	Lower Teise	Medway at Maidstone	Medway (transitional)	Bewl Water (Lake)	
	Macrophytes and Phytobenthos	-	-	-	-	-	-	-	-	
	Invertebrates	-	-	-	-	-	-	-	-	
	Macroalgae	-	-	-	-	-	-	-	-	
	Phytoplankton	-	-	-	-	-	-	-	-	
	Overall	-	Good	Good	-	-	-	-	Good	
	Fish	-	-	-	-	-	-		Good	
	Macroinvertebrates	-	-	-	Good	-	-	-	Good	
RBMP2 Water body Objective	Macrophytes and Phytobenthos	-	-	-	-	-	-	-	-	
(2027):	Invertebrates	-	-	-	-	-	-	-	-	
	Macroalgae	-	-	-	-	-	-	-	-	
	Phytoplankton	-	-	-	-	-	-	-	-	
Scoped in to Assessment	Environmental ::	Stage 1 to 4 - Yes	Stage 1 to 4 - Yes	Stage 2 to 4 - Yes	Stage 2 to 4 - Yes	Stage 2 to 4 - Yes	Stage 1 to 4 - Yes	Stage 1 to 4 - Yes	Yes	

Table A-12 Overall WFD Compliance Assessment – River Medway Scheme Stages 1 to 4 – River water body GB106040018500

WFD element	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody					
Fish	Poor	Low (stage 2 to 3) Medium (stage 4)	Temporary adverse impacts to the fish community.				
Macro- invertebrates	Good	Low (stage 2 to 3) Medium (stage 4)	Temporary adverse impacts to the macroinvertebrate community.				
Macrophytes & Phytobentos	Not assessed	Low	Temporary adverse impacts.				
Chemical (Overall)	Fail	Negligible	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.				
Water Body Mitigation Measure	No published m	nitigation meas	sures.				

Mitigation Measure
WFD Protect

WFD Protect	ed Areas							
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive		
NO	NO	NO	NO	YES	NO	NO		
Protected Area	Details	importand marshes. includes Benfleet & on sites w Nutrient s with a nut	The SPA forms the SPA forms the Thames E Southend Mar rithin this WFD ensitive areas	of grazing mars part of the Grestuary and Marshes SPA. Drougwater body.  (Nitrate vulnerations; however, the second secon	shes, inter-tidal reater Thames Co rshes SPA, the ght option has a r	nd of international mudflats and salt omplex which also Swale SPA and minor likely impact river is associated sure will not affect		
Does the component comply with WED Objective?								

Does the component comply with WFD Objective?						
No deterioration between status classes	No; there is a low to medium risk of temporary deterioration in status.					
2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only.					
3. No compromises to water body objectives	Yes; complies with WFD objective.					
4. No effects on other water bodies	No; there is a risk of impacting downstream GB106040018520.					
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.					
6. No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.					



Table A-13 Overall WFD Compliance Assessment – River Medway Scheme Stages 1 to 4 – River water body GB106040018520

WFD element	RBMP2 (2019) status	Risk of temp	Risk of temporary deterioration to WFD waterbody				
Fish	Not assessed	Low (stage 1 to 3) Medium (stage 4)	Temporary adverse impacts to the fish community				
Macro- invertebrates	High	Low (stage 2 to 3) Medium (stage 4)	Temporary adverse impacts to adverse impacts to the macroinvertebrate community.				
Macrophytes & Phytobentos	Not assessed	Medium	Temporary adverse impacts to the macroalgae.				
Chemical (Overall)	Fail	Negligible	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.				
Water Body Mitigation Measure	No published m	itigation measure	es.				

WFD Prote	cted Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive	
NO	NO	NO	NO	NO	NO	NO	
The Medway Estuary and Marshes is considered a wetland of international importance comprising of grazing marshes, inter-tidal mudflats and salt marshes. The SPA forms part of the Greater Thames Complex which also includes the Thames Estuary and Marshes SPA, the Swale SPA and Benfleet & Southend Marshes SPA. Drought option has a minor likely impact on sites within this WFD water body.							

Does the component comply with WFD Objective?						
No deterioration between status classes	No; there is a low to medium risk of temporary deterioration in status.					
2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only.					
3. No compromises to water body objectives	Yes; complies with WFD objective.					
4. No effects on other water bodies	No; there is a risk of impacting downstream water body GB106040018260.					
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.					
6. No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.					



Table A-14 Overall WFD Compliance Assessment – River Medway Scheme Stages 2 to 4 – River water body GB106040018260

WFD element	RBMP2 (2019) status	Risk of temp	oorary dete	rioration to W	FD waterbody	
Fish	Poor	Low (stage 2 to 3) Medium (stage 4)	Tempora	ry adverse impad	cts to the fish cor	mmunity.
Macro- invertebrates	High	Low (stage 2 to 3) Medium (stage 4)	Tempora commun	ry adverse impac ity.	ets to the macroin	nvertebrate
Macrophytes & Phytobentos	Not assessed	Medium	Tempora	ry adverse impac	cts to the macroa	llgae community
Chemical (Overall)	Fail	Low	Implementation of the drought measure could redilution of other discharges temporarily. The overdeterioration of chemical status is considered to given existing baseline drought conditions.			ne overall risk to red to be low
Water Body Mitigation Measure	No publishe	d mitigation measเ	ures.			
WFD Protecte	d Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Was Water Treatment Directive
NO	YES	NO	NO	YES	NO	NO
Protected Area I	Details	importance co marshes. The includes the T & Southend M within this WF Drinking water Protected Area status of the w	mprising of g SPA forms p hames Estual arshes SPA. D water body protected ar a. There is a vater body. tive areas (Ni sensitive area	rea: the river is as negligible risk of trate vulnerable a ea; however, the	inter-tidal mudflar Thames Compl SPA, the Swale S as a minor likely esociated with a adversely affecti zones): The river	ats and salt lex which also SPA and Benfle r impact on sites Drinking Water ng the chemical
Does the com	ponent com	oly with WFD OI				
1. No deteriorati	•		here is a low	to medium risk o	of temporary dete	erioration in
olabboo	nts to GES/GEF	Yes;	complies wit	h WFD objective	, temporary dete	rioration only.
2. No impedime						
2. No impedime		dy Yes;	complies wit	h WFD objective		
	ses to water bo	nies No; t		of impacting dov		oody

Yes; complies with WFD objective.



6. No hindrance to measures to address priority substances, priority hazardous substances and other pollutants

Table A-15 Overall WFD Compliance Assessment – River Medway Scheme Stages 2 to 4 – River water body GB106040018140

Fish Macro-	Not assessed Good	Low (stage 2 to 3) Medium (stage 4)	Temporary adverse impacts to the fish community.
Macro- invertebrates	Good	Laur (atama 0	
		Low (stage 2 to 3) Medium (stage 4)	Temporary adverse impacts to the macroinvertebrate community.
Macrophytes & N Phytobentos	Not assessed	Medium	Temporary adverse impacts to the macroalgae.
F Chemical (Overall)	Fail	Low	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk t deterioration of chemical status is considered to be low given existing baseline drought conditions.
Water Body Mitigation Measure	No published mit	igation measures	5.

WFD Protect	cted Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	NO	NO	NO	NO	NO	NO
Protected Are	ea Details	importar marshes includes Benfleet	nce comprising s. The SPA form the Thames I	of grazing mar ns part of the Gr Estuary and Ma arshes SPA. Dro	shes, inter-tidal eater Thames Co arshes SPA, the	mud of international mudflats and salt omplex which also Swale SPA and a minor impact on

Does the component comply with WFD Objective?					
1. No deterioration between status classes	No; there is a low to medium risk of temporary deterioration in status.				
2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only.				
3. No compromises to water body objectives	Yes; complies with WFD objective.				
4. No effects on other water bodies	No; there is a risk of impacting downstream water body GB106040018130.				
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.				
No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.				



Table A-16 Overall WFD Compliance Assessment – River Medway Scheme Stages 2 to 4 – River water body GB106040018130

WFD element	RBMP2 (2019) status	Risk of temp	orary deterio	ration to WFD w	vaterbody	
Fish	Poor	Low (stage 2 to 3) Medium (stage 4)	Temporary a	dverse impacts to	the fish commu	nity.
Macro- invertebrates	Moderate	Low (stage 2 to 3) Medium (stage 4)	Temporary a community.	dverse impacts to	the macroinvert	ebrate
Macrophytes & Phytobentos	Moderate	Low	Temporary a	dverse impacts to	the macroalgae	community.
Chemical (Overall)	Fail	Low - Medium	dilution of oth deterioration	on of the drought in her discharges tem of chemical status g baseline drought	porarily. The ov is considered to	erall risk to
Water Body Mitigation Measure	No published mitigation measures.					
WFD Protected	d Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	NO	NO	NO	YES	NO	NO
Protected Area D	etails	importance con marshes. The S includes the Th & Southend Ma this WFD water Nutrient sensiti	nprising of grazi SPA forms part of ames Estuary a arshes SPA. Dro body. ve areas (Nitrati tive area; howe	shes is considered ng marshes, inter- of the Greater Tha and Marshes SPA, ought option has a e vulnerable zones ver, the drought marea.	tidal mudflats ar mes Complex w the Swale SPA minor impact or s): The river is as	nd salt which also and Benfleet n sites within ssociated with
Does the comp	onent compl			arou.		
No deterioratio classes		10		medium risk of tem	nporary deteriora	ation in status.
2. No impediment	ts to GES/GEP	Yes; o	Yes; complies with WFD objective, temporary deterioration only.			
No compromises to water body objectives		1	Yes; complies with WFD objective.			
4. No effects on other water bodies			No; there is a risk of impacting downstream water body GB106040018440.			
5. No hindrance to objectives for pro-		Yes; o	complies with W	/FD objective.		
6. No hindrance to priority substance substances and co	es, priority hazar		complies with W	/FD objective.		



Table A-17 Overall WFD Compliance Assessment – River Medway Scheme Stage 1 to 4 – River water body GB106040018440

WFD element	RBMP2 (2019) status	Risk of tempor	rary deter	ioration to Wi	D waterbody	
Fish	Moderate	Low (stage 1 to 3 Medium (stage 4		orary adverse im	pacts to the fish o	community.
Macro- invertebrates	High	Low (stage 1 to 3 Medium (stage 4		orary adverse im invertebrate com	pacts to adverse munity.	impacts to the
Macrophytes & Phytobentos	Not assessed	Low (summer) - Medium (winter)	Tempo		pacts to the mac	oalgae
Chemical (Overall)	Fail	low - medium	dilutior to dete	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be low – medium given existing baseline drought conditions.		
Water Body Mitigation Measure	No publishe	ed mitigation measu	res.			
WFD Protecte	d Areas					
Bathing Water Directive	Drinking Water Directive		abitats irective	Nitrates Directive	Shellfish Directive	Urban Wasi Water Treatment Directive
NO	YES	NO N	0	YES	NO	NO
Protected Area [		The Medway Estimportance comportance comportance comportance in the Second Mars of the Second Mars of the WFD water but the Second Mars of the Water protected Area. It is that is of the water of the Water protected Area of the Water protected Area. It is that is of the water protected Area of the Water protected Area of the Water protected Area. The Water protected Area of the Water protecte	orising of graph of forms particular shes SPA. In the specific of the specific	azing marshes, in art of the Greater y and Marshes Someon hear the river is as a legligible risk of a legent wever, the drought or the drought wever, the drought of the risk of a legent hear the drought marked wever, the drought art of the drought of the drought marked wever, the drought art of the drought marked wever, the drought art of the drought marked were.	nter-tidal mudflater Thames Completer SPA, the Swale Spass a minor impacts as a minor impact adversely affecting tones): The river	s and salt ex which also PA and Benflee et on sites within Drinking Water eg the chemical is associated wi
Does the com	ponent compl	y with WFD Obj	ective?			
1. No deteriorati	on between statu	us classes		ere is a low to mo ration in status.	edium risk of tem	porary
2. No impedimer	nts to GES/GEP			omplies with WF eration only.	D objective, temp	oorary
3. No compromis	ses to water bod	y objectives	Yes; c	omplies with WF	D objective.	
4. No effects on	other water bodi	es		ere is a risk of im GB53060400230	pacting the dowr 0.	stream water
5. No hindrance protected area	to attainment of	objectives for	Yes; c	omplies with WF	D objective.	

Yes; complies with WFD objective.



pollutants

6. No hindrance to measures to address priority

substances, priority hazardous substances and other

Table A-18 Overall WFD Compliance Assessment – River Medway Scheme Stage 1 to 4 – Transitional water body GB530604002300

rater body GB530604002300					
WFD element	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody			
Fish	Not assessed	Low	Temporary adverse impacts to some of the fish community.		
Invertebrates	Good	Low	Temporary adverse impacts to adverse impacts to the macroinvertebrate community.		
Macroalgae	Good	Low	Temporary adverse impacts to the macroalgae community.		
Phytoplankton	High	Low	Temporary adverse impacts to the phytoplankton community.		
Angiosperms	Not assessed	Not assessed	Not assessed		
Chemical (Overall)	Fail		The overall risk to deterioration of chemical status is considered to be moderate from the two discharges within this waterbody, although a degree of uncertainty exists due to the unknown chemical make-up of this effluent.		
Water Body Mitigation Measure	No published	mitigation measur	res.		

WFD Protect	WFD Protected Areas							
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive		
YES	NO	YES	NO	YES	YES	NO		
Protected Are	a Details	considered a marshes, inte Greater Thar Marshes SP/Drought optic Conservation breeding bird Nutrient sens a nutrient sen management Shellfish Wattemporarily. I	wetland of inter-tidal mudflames Complex A, the Swale Son has a minor of birds: the distance areas (Nositive area; has tof the protecters: the droug-however, the great he dynames.	owever, the droug	ance comprising es. The SPA form es the Thames Es. Southend Mars within this WFD will not affect the inor. ones): The river the measure will reduce the dilutrish Water is con	of grazing ns part of the stuary and shes SPA. vater body. wintering or is associated with not affect the ion of discharges sidered to be		

Does the component comply with W	/FD Objective?
No deterioration between status classes	No; there is a low risk of temporary deterioration in status.
2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only.
3. No compromises to water body objectives	Yes; complies with WFD objective.
4. No effects on other water bodies	Yes; complies with WFD objective.
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.
6. No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.



Table A-19 Overall WFD Compliance Assessment – River Medway Scheme Stage 1 to 4 – Lake water body GB30644398

WFD element	RBMP2 (2019) status	Risk of	temporary	deterioration to	WFD waterbo	ody
Ecological (Overall)	Moderate	Not asse	essed Not a	ssessed.		
Chemical (Overall)	Fail	Negligib	e Implementation of the drought option could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.			
Water Body Mitigation Measure	No publish	ed mitigation mo	easures.			
WFD Protecte	d Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	YES	NO	NO	NO	NO	YES
Protected Area	Details	Protecte		is a negligible risk		n a Drinking Water ecting the chemical
Does the com	ponent comp	oly with WFD	Objective?			
1. No deteriorati				s with WFD object		
2. No impedime			Yes; complies with WFD objective, temporary deterioration only.			
3. No compromises to water body objectives		Yes; complies with WFD objective.				
4. No effects on other water bodies		Yes; complies with WFD objective.				
5. No hindrance for protected are		f objectives	Yes; complie	s with WFD object	tive.	
6. No hindrance priority substances and	ces, priority haz	ardous	Yes; complie	s with WFD objec	tive.	

## A.4 Weir Wood Reservoir

In order to protect public water supplies within the Sussex North WRZ in the event of future severe drought conditions, Southern Water would make an application to the Environment Agency for a drought permit to vary the conditions of abstraction from Weir Wood Reservoir.

If granted, the drought permit involves a proposed reduction of the statutory compensation flow rate from 3.64 Ml/d in winter and 5.46 Ml/d in summer, to 2.5 Ml/d. The permit would be introduced to sustain the continued abstraction of water from the reservoir to maintain essential public water supplies. The drought permit will influence flows in the River Medway downstream of the reservoir.

The drought order powers would legally be authorised for a maximum of six months. Use of drought order powers would conclude earlier if water resources have returned to adequate levels to safeguard future water supplies, as agreed with the Environment Agency.



The drought permit may be required at any time of the year, either to support reservoir refill in the winter or to secure continued abstraction following prolonged dry weather in summer.

Table A-20 WFD Status Classifications and screening decisions – Weir Wood Reservoir – Surface Water

Waterbody ID		GB106040018070	GB106040018181	GB30644310
Waterbody Name  Hydrological Impact at Location:		Medway at Weir Wood	Mid Medway from Hartfield to Eden Confluence	Weir Wood Reservoir
		Reach 1	Reach 2 & 3	
(Major, Moderate	e, Minor, Negligible)	Minor – Summer Negligible – Winter	Minor – Summer Negligible – Winter	Minor Beneficial
	Overall	Moderate	Moderate	Poor
RBMP Cycle 2 Status/	Fish	Moderate	Good	-
Potential	Macroinvertebrates	Good	Good	-
(2019):	Macrophytes and Phytobenthos	Moderate	-	High
Hydro-morpholo	gy designations:	Heavily modified	Not designated artificial or heavily modified	Heavily modified
	Overall	-	-	-
RBMP2	Fish	-	-	-
Waterbody Objective	Macroinvertebrates	-	-	-
(2021):	Macrophytes and Phytobenthos	-	-	-
	Overall	-	-	Good
RBMP2	Fish	-	-	-
Waterbody Objective	Macroinvertebrates	-	-	-
(2027): Macrophytes and Phytobenthos		-	-	-
Scoped in to Environmental Assessment:		Reduce compensation flow (Summer)- Yes reduce compensation flow (Winter) - No	Reduce compensation flow (Summer)- Yes reduce compensation flow (Winter) - No	Reduce compensation flow (Summer)- No reduce compensation flow (Winter) - No



#### A.4.1 Weir Wood Reservoir Summer

Table A-21 Overall WFD Compliance Assessment – Weir Wood Reservoir Summer– River water body GB106040018070

WFD element	RBMP2 (2019) status	Risk of temp	orary deterio	ration to WFD	waterbody		
Fish	Moderate	Low	Temporary a	dverse impacts to	the fish commun	ity.	
Macro- invertebrates	Good	Low	Temporary adverse impacts to adverse impacts to the macroinvertebrate community.			to the	
Macrophytes & Phytobentos	Moderate	Low	Temporary a	dverse impacts to	the macrophyte	community.	
Chemical (overall)	Fail	Negligible	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration o chemical status is considered to be negligible given existing baseline drought conditions.			to deterioration of	
Water Body Mitigation Measure	No published n	No published mitigation measures.					
WFD Protecte	ed Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive	
NO	NO	NO	YES	YES	NO	YES	
Protected Area	Details	The water from qualifying featuresult, the likeliminor.	n Ashdown Fore ures are not dire y impacts on As	est drains into the ectly dependent or shown Forest SA	C and SPA are c	nd therefore the ay for water. As a onsidered to be	
		nutrient sensiti	It sensitive areas (Nitrate vulnerable zones): The river is associated with a t sensitive area; however, the drought measure will not affect the ement of the protected area.				
Does the con	nponent comp	ly with WFD O	bjective?				
1. No deteriorat classes	ion between stat	us No; th	No; there is a low risk of temporary deterioration in status.				
2. No impedime	ents to GES/GEP	Yes; o	Yes; complies with WFD objective, temporary deterioration only.				
3. No compromises to water body objectives		y Yes; o	Yes; complies with WFD objective.				
4. No effects on	other water bod	ies No; th	No; there is risk of impacting downstream water body GB106040018181.				
5. No hindrance objectives for pr	e to attainment of rotected area	Yes; o	complies with W	FD objective.			
priority substan	e to measures to ces, priority haza I other pollutants		Yes; complies with WFD objective.				



Table A-22 Overall WFD Compliance Assessment – Weir Wood Reservoir Summer– River water body GB106040018181

WFD element	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody				
Fish	Good	Low	Temporary adverse impacts to the fish community.			
Macro- invertebrates	Good	Low		Temporary adverse impacts to adverse impacts to the macroinvertebrate community.		
Macrophytes & Phytobentos	Not assessed	N/A – Not classified (but would be Low)	Temporary adverse impacts to the macrophyte community.			
Chemical (overall)	Fail	Negligible	Implementation of the Weir Wood drought order could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.			
Water Body Mitigation Measure	No published m	nitigation measure	es.			
WFD Protect	ed Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Wast Water Treatment Directive
NO	NO	NO	NO	YES	NO	NO
Protected Area	Details	The water from qualifying featu	Ashdown Forestres are not direct	t drains into the tly dependent o	SAC and Ashdow River Medway, and the River Medway C and SPA are co	nd therefore the ay for water. As
		nutrient sensitiv		, the drought m	es): The river is as easure will not affe	

nutrient sensitive area; however, the drought measure will not affect the management of the protected area.						
Does the component comply with V	Does the component comply with WFD Objective?					
1. No deterioration between status classes	No; there is a low risk of temporary deterioration in status.					
2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only.					
3. No compromises to water body objectives	Yes; complies with WFD objective.					
4. No effects on other water bodies	Yes; the impact on downstream water body GB106040018182 is negligible.					
<b>5.</b> No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.					
<b>6.</b> No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.					



# A.5 Darwell Reservoir

The proposed drought permit involves a temporary reduction in the statutory Minimum Residual Flow (MRF) at the Udiam flow gauging weir on the River Rother in the summer and/or a temporary increase in the daily licence during the winter from 56.8 to 70Ml/d (with no change to the existing MRF) to capture more water under high flow events winter.

Table A-23 WFD Status Classifications and screening decisions – Darwell Reservoir – Surface Water

Waterbody	'ID	GB107040013640	GB540704016100	GB30744955
Waterbody Name  Hydrological Impact at Location:		Lower Rother from Etchingham to Scott's Float		Darwell Reservoir (Lake)
		Reaches 1 to 4	Reach 6	
(Major, Mod,	Minor, Neg)	Summer – Negligible - Moderate	Summer – Minor Winter - Negligible	Summer and Winter – Minor beneficial
		Winter - Negligible		
	Overall	Moderate	Moderate	Moderate
RBMP	Fish	Good	-	-
Cycle 2	Macroinvertebrates	High	-	-
Status/ Potential	Macrophytes and Phytobenthos	Good	-	-
(2019):	Macroalgae		High	-
	Phytoplankton		High	Good
Hydro-morph	n designations:	Heavily Modified	Heavily Modified	Heavily Modified
	Overall	-	-	-
RBMP2 Water body	Fish	-	-	-
Objective	Macroinvertebrates	-	-	-
(2021):	Macrophytes and Phytobenthos	-	-	-
	Overall	Moderate	-	Good
RBMP2 Water body	Fish	Good	-	-
Objective	Macroinvertebrates	Good	-	-
(2027): Macrophytes and Phytobenthos		Good	-	-
Scoped In to Assessment:	Environmental	Reduce MRF (Summer: 18.5Ml/d) – Yes Maintain MRF (Winter: 13.2 Ml/d) - No	Reduce MRF (Summer: 18.5Ml/d) – No Maintain MRF (Winter: 13.2 Ml/d) - No	Reduce MRF (Summer: 18.5Ml/d) – Yes Maintain MRF (Winter: 13.2 Ml/d - Yes



# A.5.1 Darwell Reservoir - reduce MRF (Summer: 18.5Ml/d)

Table A-24 Overall WFD Compliance Assessment – Darwell Reservoir Summer – River water body GB107040013640

WFD element	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody						
Fish	Good	Medium		Temporary ad	verse impacts to	the fish commun	iity.	
Macro- invertebrates	High	Negligible	е	No adverse im	pacts to the ma	croinvertebrate co	ommunity.	
Macrophytes & Phytobentos	Good	Medium		Temporary adverse impacts to the macrophyte community.				
Chemical (overall)	Fail	Negligible	9			n of chemical stat seline drought co	us is considered to nditions.	
Water Body Mitigation Measure	No published m	itigation measures.						
WFD Protect	ed Areas							
Bathing Water Directive	Drinking Water Directive	Conserva of Wild B Directive	irds	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive	
No	No	Yes		No	Yes	No	No	
Protected Area	impacte ponds, conditio			cted area SAC and SPA: Dungeness, Romney Marsh and Rye Bay SPA: The ted reaches are associated with a diversity of habitats including ditches, drains, marshes and floodplains. Overall, taking account of the baseline drought ions and the physical environment impacts of the drought permit the likely t is considered to be minor to moderate.				
		nutrient s	nt sensitive areas (Nitrate vulnerable zones): The river is associated with a nt sensitive area; however, the drought measure will not affect the management protected area.					
Does the con	nponent comp	ly with W	FD O	jective?				
No deteriorat classes	tion between statu	ıs I	No; there is a medium risk of temporary deterioration in status.					
2. No impedime	ents to GES/GEP	,	Yes; complies with WFD objective, temporary deterioration only.					
3. No comprom objectives	ises to water bod	у	Yes; complies with WFD objective.					
4. No effects or	other water bodi		No; there is risk of having a minor impact on the downstream water body GB540704016100.					
5. No hindrance objectives for p	e to attainment of rotected area	,	Yes; complies with WFD objective.					
priority substan	e to measures to ces, priority haza d other pollutants		Yes; complies with WFD objective.					



## A.5.2 Darwell Reservoir (all option variants)

Table A-25 Overall WFD Compliance Assessment – Darwell Reservoir (all option variants) – Lake water body GB30744955

WFD element	RBMP2 (2019) status	Pick of tomporary dotorioration to WED waterbody							
Ecological (overall)	Good	Medium	eutrophication relatively shall Cyanobacteria impact fish and affect informal need for mitiga	in the reservoir ow water colum i (blue-green alg d other wildlife s and formal recr	d to increased risk and associated a n due to the effectate) growth is a risuch as birds, as weation. There materials address this risk and address this risk and associated as the second seco	lgal growth in a ts of drought. sk that would vell as potentially ay therefore be a			
Chemical (overall)	Fail	Medium	nutrient loadin deterioration o	g within the rese					
Water Body Mitigation No published mitigation measures. Measure									
WFD Protecte	ed Areas								
Bathing Water Directive	Drinking Water Directive	Conservatio n of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive			
No	Yes	No	No	No	No	Yes			
Protected Area	Details	and the asso adversely affer eutrophication Nutrient sensit a nutrient sensit	ciated chemical ecting the WFD in the reservoir. tive areas (Nitrat	status test is status with inc e vulnerable zor owever, the dro	Good. There is creased loading I	ter Protected Area a medium risk of eading to risks of r is associated with will not affect the			
Does the con	nponent comply	with WFD Ob	jective?						
<ol> <li>No deteriorat classes</li> </ol>	ion between status	No; the	ere is a medium i	risk of temporar	y deterioration in s	status.			
2. No impedime	ents to GES/GEP	Yes; co	omplies with WF	D objective, tem	porary deteriorati	on only.			
3. No comprom objectives	ises to water body	Yes; co	omplies with WF	D objective.					
4. No effects on	other water bodies	s Yes; co	omplies with WF	D objective.					
5. No hindrance objectives for pr	e to attainment of rotected area	No; the	No; there is a risk of impacting the drinking water protected area:						
priority substan	e to measures to ac ces, priority hazard I other pollutants		Yes; complies with WFD objective.						



# A.6 Lukely Brook WSW

The proposed drought permit involves the temporary relaxation of the surface water maintained flow condition on the Lukely Brook WSW groundwater abstraction licence. Lukely Brook WSW is licensed at a peak daily rate of 13.5Ml/d with an annual limit of 3,041Ml (daily average abstraction rate of 8.33Ml/d). Abstraction from the groundwater source is constrained by the condition to maintain a flow over the Sheep Dip Weir (SZ 4814 8752) in the Lukely Brook, located 1.3km downstream of the abstraction source within Plaish Meadows. There is no specific prescribed flow at the Sheep Dip Weir; the licence only specifies that 'some flow' must be maintained over the weir.

Historical abstraction data show that in, average years, Lukely Brook WSW typically pumps between 2 to 4Ml/d, whilst in drier years, the output drops below 2Ml/d due to the abstraction licence flow constraint.

The Deployable Output (DO) assessment for Lukely Brook WSW shows that the primary constraint affecting the source output is the flow condition on the licence. Without this constraint, the daily peak source output would be constrained by the total current installed pump capacity.

The drought permit would allow abstraction to continue at Lukely Brook WSW regardless of whether there was any flow in Lukely Brook flowing over the Sheep Dip Weir. This would potentially reduce flows in the Lukely Brook due to groundwater-surface water connectivity. However, the drought permit application will include provision for an augmentation compensation flow discharge of 0.4Ml/d from Lukely Brook WSW to the Lukely Brook as mitigation for the groundwater abstraction. The proposed mitigation involves laying a small diameter pipeline on the bed of the Lukely Brook from Southern Water's Lukely Brook WSW to the discharge point at the Sheep Dip Weir.

The anticipated supply gain from the drought permit will vary depending on:

- Demand conditions (and how much is required from this source compared to other Southern Water sources)
- Prevailing groundwater levels and confirmed installed pump capacity in each well/borehole

For the purpose of this assessment, an abstraction of up to 4.4MI/d has been assumed which includes a 0.4MI/d compensation flow to the Sheep Dip Weir and assumes no changes are made to the annual abstraction licence limit.

Table A-26 WFD Status Classifications and screening decisions – Lukely Brook WSW - Groundwater

Waterbody ID		GB40701G503200
Waterbody Name		IOW Central Downs Chalk
Hydrological Impact at Location:		Moderate
(Major, Mod, Minor, Neg)		
	Overall	Poor
RBMP Cycle 2 Status/Potential:	Quantitative	Good
	Chemical (GW)	Poor
	Overall	-
RBMP2 Waterbody Objective (2021):	Quantitative	-
	Chemical (GW)	-
	Overall	-
RBMP2 Waterbody Objective (2027):	Quantitative	-
	Chemical (GW)	Good
Scoped In to Environmental Assessment:		Yes



Table A-27 Overall WFD Compliance Assessment – Lukely Brook WSW – Groundwater body GB40701G503200

WFD Status	Test	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody				
Quantitative (0	Overall)	Poor					
Dependent Su Body Status	ırface Water	Good	Medium	There is risk of moderately impacting the flows in one dependent water body the Lukely Brook (GB107101006020). There is a medium risk of temporary deterioration (within class) of the Dependent Surface Water Body Status.			
				See WFD assessment for GB107101006020.			
				There are no known Natura 2000 or SSSI groundwater dependent habitats associated with the groundwater body.			
GWDTEs test		Good	Low	There is a groundwater dependent NERC priority habitats; Lowland fen. There is an area of fen habitat downstream of the Plaish Tributary confluence with Lukely Brook. Groundwater levels would naturally be low during this period; however, the drought measure would result in prolonged recovery. However, the area of habitat is outside of the drought measure zone of influence.			
Saline Intrusio	n	Good	Negligible	The drought measure will not increase saline intrusion.			
Water Balance	e	Good	Medium	During a drought, there would be limited recharge to the aquifer and abstraction would be mainly at the expense of groundwater storage. This would reduce groundwater levels within the Chalk throughout the catchment. The duration of impact would depend on how long the drought continued and the nature of the following recharge period.			
				Taking into account the depleted Chalk storage and knock- on impact of delayed recovery, the there is a medium risk of temporary deterioration (within class) of Water Balance of the groundwater body.			
Chemical (Ove	erall)	Poor					
Dependent Su Body Status	ırface Water	Good	Medium	It is also possible that there may be a change in water quality in the Lukely Brook as a result of reduction in baseflow (if the features were not already disconnected from the Chalk aquifer). There is a medium risk of temporary deterioration of the Dependent Surface Water Body Status.			
D: 1: W.1	5			See WFD assessment for GB107101006020.  There is a negligible risk of adversely affecting the chemical			
Drinking Wate Area	r Protected	Poor	Negligible	status beyond normal baseline drought conditions at groundwater body scale.			
GWDTEs test		Good	Negligible	Negligible risk of temporary deterioration at a groundwater body scale. See Quantitative GWDTE status test.			
Saline Intrusio	n	Good	Negligible	The drought measure will not increase saline intrusion.			
General Chem	nical Test	Good	Negligible	Negligible risk of temporary deterioration at a groundwater body scale.			
WFD Protec	ted Areas	No publish	ed mitigation r	neasures.			
Drotooted	WFD Prote	ected Areas					
Protected Area Details	Bathing Water Directive	Drinking Water Directive	Conserv Wild Bird Directive	ds Habitats Nitrates Shellfish Water  Directive Directive Directive Treatment			



	NO	YES	NO	NO	YES	NO	NO	
	associated status at gr Nutrient se	chemical status oundwater body nsitive areas (N	s test is Poor. T y scale. litrate vulnerabl	here is a negligible zones): The gro	e risk of adv undwater bo	ersely affect ody is associ		
Does the cor	nponent c	omply with W	/FD Objective	?				
1. No deteriora classes	tion betweer			dium risk of tempo k of temporary de			antitative status tatus (within class).	
2. No impediments to GES/GEP			Yes; complies with WFD objective, temporary deterioration only.					
3. No compromises to water body objectives			Yes; complies with WFD objective.					
4. No effects or	n other wate	r nonies	The second secon	otential to impact 06250 and GB520			ater bodies water	
5. No hindrance objectives for p		ν γε	es; complies wit	h WFD objective.				
6. No hindrance address priority hazardous subspollutants	substances	s, priority	es; complies wit	h WFD objective.				

Table A-28 WFD Status Classifications and screening decisions – Lukely Brook WSW – Surface Water

Waterbody ID		GB107101006250	GB520710101600
Waterbody Name		Lukely Brook	Medina (Transitional)
Hydrological Impact at	Location:	Madauta	Minan
(Major, Mod, Minor, Ne	eg)	Moderate	Minor
	Overall	Moderate	Moderate
RBMP Cycle 2 Status/Potential:	Fish	Moderate	-
	Macroinvertebrates	High	Moderate
	Macrophytes	Moderate	-
	Macroalgae	-	Moderate
	Phytoplankton		High
Hydro-morph designations:		Heavily modified	Heavily modified
	Overall	-	-
	Fish	-	-
RBMP2 Waterbody	Macroinvertebrates	-	Good
Objective (2021):	Macrophytes	Good	-
(202.).	Macroalgae	-	-
	Phytoplankton	-	-
	Overall	Good	Good
	Fish	Good	-
RBMP2 Waterbody	Macroinvertebrates	-	-
Objective (2027):	Macrophytes	-	-
	Macroalgae	-	Good
	Phytoplankton	-	-
Scoped In to Environm	ental Assessment:	Yes	Yes



# Table A-29 Overall WFD Compliance Assessment – Lukely Brook WSW – River water body GB107101006250

WFD element	RBMP2 (2019) status	Risk of tem	porary	deterioration	to WFD water	rbody	
Fish	Moderate	Medium	Temp	orary adverse i	mpacts to the fis	h community.	
Macro- invertebrates	High	Medium	Temp	oorary adverse i	mpacts to the ma	acroinvertebrate c	community.
Macrophytes & Phytobentos	Moderate	Medium	Temp	oorary adverse i	mpacts to the ma	acrophyte commu	nity.
Chemical (Overall)	Fail	Negligible	disch statu	arges temporari	ly. The overall ri	re could reduce to sk to deterioration given existing base	
Water Body Mitigation Measure  No published mitigation measures.							
WFD Protect	ted Areas						
Bathing Water Directive	Drinking \ Directive	Vater Conser of Wild Directiv	Birds	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	NO	NO		NO	YES	YES	NO
Protected Area		temporarily. H given the dyna measure. Nutrient sensi with a nutrient management	owever amic es tive are sensition of the p	, the risk is to th tuarine environr as (Nitrate vulne ve area; howeve rotected area.	e Shellfish Wate nent and the sho erable zones): Th	ne dilution of disc r is considered to rt-term nature of t ne river water bod easure will not aft	be negligible the drought y is associated
		omply with W					
		n status classes				emporary deterior	
2. No impedim				Yes; complies with WFD objective, temporary deterioration only.			
3. No compron	nises to wate	er body objective	es	Yes; complies with WFD objective.			
4. No effects o	n other wate	r bodies		No; there is the potential to impact the transitional water body downstream (GB520710101600)			
5. No hindrand protected area		ent of objectives	for	Yes; complies	with WFD object	tive.	
		es to address pi lous substances		Yes; complies	with WFD object	tive.	



other pollutants

Table A-30 Overall WFD Compliance Assessment – Lukely Brook WSW – Transitional Water body GB520710101600

WFD element	RBMP2 (2019) status	Assessed status (construction and operation)				
Fish	Not assessed	Low - Medium	Temporary minor to moderate adverse impacts to the fish community, depending on species.			
Invertebrates	Moderate	Low	Temporary adverse impacts to adverse impacts to the macroinvertebrate community.			
Macroalgae	Moderate	Low	Temporary adverse impacts to the macroalgae community.			
Phytoplankton	High	Low	Temporary adverse impacts to the phytoplankton community.			
Angiosperms	Not assessed	Negligible	Temporary adverse impacts to adverse impacts to the angiosperm community.			
Chemical (Overall)	Good	Negligible	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.			

Water Body Mitigation Measure No published mitigation measures.

WFD Protect	ted Areas
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Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	NO	YES	YES	YES	YES	YES
Protected Area [	Details	Solent M would ha Shellfish discharge considere the short- Nutrient s body is a	aritime SAC: the ve no likely sign waters: the dropes temporarily. The dropes temporarily are to be negligible term nature of sensitive areas associated with a series of the series of the sensitive areas associated with a series of the	the drought mea	eluded that the di in these Natura 2 ould reduce the k is to the Shellf namic estuarine asure. ole zones): The to ve area; howeve	rought permit 2000 sites. dilution of ish Water is environment and transitional water er, the drought

Does the component comply with WFD Obj	jecuve :
No deterioration between status classes	No; there is a medium risk of temporary deterioration in status due to impacts on fish community.
2. No impediments to GES/GEP	Yes; complies with WFD objective.
3. No compromises to water body objectives	Yes; complies with WFD objective.
4. No effects on other water bodies	Yes; complies with WFD objective.
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.

6. No hindrance to measures to address priority	
substances, priority hazardous substances and	
other pollutants	

Yes; complies with WFD objective.



#### A.7 North Arundel WSW

The proposed drought order involves a temporary increase in groundwater abstraction at North Arundel WSW. This water source typically pumps at 4.5Ml/d and output is constrained by the abstraction licence conditions. The drought order would increase the daily abstraction licence limit by 2.5Ml/d to a maximum of 7Ml/d, which is the peak deployable output of the source.

Table A-31 WFD Status Classifications and screening decisions – North Arundel WSW – Groundwater

Waterbody ID		GB40701G505200	
Waterbody Name		Chichester chalk	
Hydrological Impact at Location:		Madarata (uncartain)	
(Major, Mod, Minor, Neg)		Moderate (uncertain)	
RBMP Cycle 2 Status/Potential:	Overall	Poor	
	Quantitative	Poor	
	Chemical (GW)	Poor	
Hydro-morph designations:		not applicable	
RBMP2 Waterbody Objective (2021):	Overall	-	
	Quantitative	-	
	Chemical (GW)	-	
RBMP2 Waterbody Objective (2027):	Overall	-	
	Quantitative	-	
	Chemical (GW)	Good	
Scoped In to Environmental Assessment:		Yes	

Table A-32 Overall WFD Compliance Assessment – North Arundel WSW – Groundwater body GB40701G505200

WFD Status Test	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody	
Quantitative (Overall)	Poor		
Dependent Surface Water Body Status	Poor	Negligible	The Arun (GB540704105000) transitional waterbody is on the outer edge of the area of potential impact, so it is possible that there will be very minor impacts on flow, which theoretically could extend downstream. However, given the tidal nature, it is unlikely any impacts would be detectable either within or downstream of the zone of influence.
GWDTEs test	Good	Medium	There are no known Natura 2000 groundwater dependent habitats associated with the groundwater body. There are SSI with groundwater dependent habitats including Arun Banks SSSI and Arundel Park SSSI. The potential impact of the drought measure is likely to prolonging the period of limited or no spring flow to the lake in the Arundel Park SSSI and it is considered to be a moderate impact. The impact on the Arun Banks SSSI is considered to be negligible.



There are groundwater dependent NERC priority habitats within the area of influence of the drought measure, including coastal and floodplain grazing marsh, lowland fens and priority river habitats – headwaters. The impact on the lowland fen is considered to be minor due to increased desiccation of the fen over and above that due to natural drought; the drought order will also prolong any recovery time of groundwater levels and spring flows. The impact on coastal and floodplain grazing marsh, and priority river habitats – headwaters will be minor.

Overall there is a medium risk of temporary deterioration of GWDTE quantitative status due to the potential impact on the Arundel Park SSSI lake and the lowland fen in the WWT reserve.

Saline Intrusion	Good	Negligible	The drought measure will not increase saline intrusion.
Water Balance	Good	Negligible	The drought measure may extend the recovery period of groundwater levels and flows after the drought ends. There is a negligible risk of temporary deterioration (within class) of Water Balance of the groundwater body.
Chemical (Overall)	Poor		
Dependent Surface Water Body Status	Good	Negligible	There is a negligible risk of temporary deterioration of the Dependent Surface Water Body Status.
Drinking Water Protected Area	Poor	Negligible	There is a negligible risk of adversely affecting the chemical status beyond normal baseline drought conditions at groundwater body scale
GWDTEs test	Good	Negligible	Negligible risk of temporary deterioration to the chemical status of GWDTEs.
Saline Intrusion	Good	Negligible	The drought measure will not increase saline intrusion.
General Chemical Test	Poor	Negligible	Negligible risk of temporary deterioration at a groundwater body scale.

Water Body Mitigation Measure

No published mitigation measures.

	WFD Prote	cted Areas					
Protected Area	Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
Details	NO	YES	NO	NO	YES	NO	NO
Drinking water protected area: Chichester Chalk is a Drinking Water Protected Area and the associated chemical status test is Poor. There is a negligible risk of adversely affecting the							

associated chemical status test is Poor. There is a negligible risk of adversely affecting the chemical status at groundwater body scale.



Nutrient sensitive areas (Nitrate vulnerable zones): The groundwater body is associated with a nutrient sensitive area; however, the drought measure will not affect the management of the protected area

Does the component comply with WFD Objective?					
No deterioration between status classes	No; there is a medium (low confidence) risk of temporary deterioration in quantitative status.				
2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only.				
3. No compromises to water body objectives	Yes; complies with WFD objective.				
4. No effects on other water bodies	Yes; complies with WFD objective.				
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.				
6. No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.				

Table A-33 WFD Status Classifications and screening decisions – North Arundel WSW – Surface Water

Waterbody ID		GB540704105000
Waterbody Name		Arun (Transitional)
Hydrological Impact at Location:		Negligible
(Major, Mod, Minor, Neg)		Negligible
	Overall	Moderate
	Fish	-
RBMP Cycle 2 Status/Potential:	Invertebrates	-
	Macroalgae	High
	Phytoplankton	-
Hydro-morph designations:		heavily modified
	Overall	-
DDMD0 W ( )   Oli (	Fish	-
RBMP2 Waterbody Objective (2021):	Invertebrates	-
(2021).	Macroalgae	-
	Phytoplankton	-
	Overall	Good
DDMD0 W ( )   Oli (	Fish	-
RBMP2 Waterbody Objective (2027):	Invertebrates	-
(2021).	Macroalgae	-
	Phytoplankton	-
Scoped In to Environmental Asses	ssment:	No

The conceptual understanding indicates that Swanbourne Lake, Mill Stream and the Wildfowl and Wetlands Trust Reserve are the primary hydrological receptors of the effects of this drought measure but these are not a Water Framework Directive water body and is therefore beyond the scope of this assessment. However, it is located within the Arundel Park SSSI and is considered in the GWDTE status tests assessments.



### A.8 East Worthing WSW

The proposed drought permit involves removing the seasonal abstraction licence constraint relating to Southern Water's groundwater abstraction at East Worthing WSW. The daily abstraction licence limit between January and September is 7Ml/d, but this reduces to 4.5Ml/d between October and December. The drought permit would seek to temporarily increase the abstraction licence limit to 7 Ml/d during October to December.

Table A-34 WFD Status Classifications and screening decisions – East Worthing WSW - Groundwater

Waterbody ID		GB40701G505300
Waterbody Name		Worthing chalk
Hydrological Impact at Location:		Madarata (un cortain)
(Major, Mod, Minor, Neg)		Moderate (uncertain)
	Overall	Poor
RBMP Cycle 2 Status/Potential:	Quantitative	Poor
	Chemical (GW)	Poor
	Overall	-
RBMP2 Waterbody Objective (2021):	Quantitative	-
	Chemical (GW)	-
	Overall	-
RBMP2 Waterbody Objective (2027):	Quantitative	-
	Chemical (GW)	Good
Sensitivity:		Quantitative – Not Sensitive
(High, Medium, Low, Not Sensitive)		Chemical – Not Sensitive
Scoped In to Environmental Assessment:		Yes

Table A-35 Overall WFD Compliance Assessment – East Worthing WSW – Groundwater body GB40701G505300

WFD Status Test	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbod	
Quantitative (Overall)	Poor		
Dependent Surface Water Body Status	Poor	Negligible	There is risk of having a negligible impact on the flows in one dependent water body the Teville Stream (GB107041011940). Therefore, there is a negligible risk of temporary deterioration (within class) of the Dependent Surface Water Body Status.
GWDTEs test	Good	Negligible	There are no known Natura 2000 groundwater dependent habitats associated with the groundwater body.  The Cissbury Ring SSSI is located in the vicinity of the site but none of the ecological features are considered to be highly sensitive to groundwater levels therefore no impacts are anticipated from the drought measure.  There are no known groundwater dependent NERC priority habitats within the area of influence of the drought measure.
Saline Intrusion	Good	Negligible	Although close to the coast, the risk of saline intrusion is believed to be negligible due to the



			Chichester syncline. The drought measure will therefore not increase saline intrusion.
Water Balance	Good	Negligible	The drought measure may extend the recovery period of groundwater levels and flows after the drought ends. There is a negligible risk of temporary deterioration (within class) of Water Balance of the groundwater body.
Chemical (Overall)	Poor		
Dependent Surface Water Body Status	Good	Negligible	It is also possible that there may be a change in water quality in the Teville Stream as a result of reduction in baseflow (if the features were not already disconnected from the Chalk aquifer). There is a negligible risk of temporary deterioration (within class) of the Dependent Surface Water Body Status.
Drinking Water Protected Area	Poor	Negligible	There is a negligible risk of adversely affecting the chemical status beyond normal baseline drought conditions at groundwater body scale.
GWDTEs test	Good	Negligible	Negligible risk of temporary deterioration at a groundwater body scale. See Quantitative GWDTE status test.
Saline Intrusion	Good	Negligible	Although close to the coast, the risk of saline intrusion is believed to be negligible due to the Chichester syncline. The drought measure will therefore not increase saline intrusion.
General Chemical Test	Poor	Negligible	Negligible risk of temporary deterioration at a groundwater body scale.
Water Body			

Water Body Mitigation Measure

Area Details No published mitigation measures.

	Bat
	Wa
Drotootod	Dire
Protected	

**WFD Protected Areas** 

Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	YES	NO	NO	YES	NO	NO

Drinking water protected area: Worthing Chalk is a Drinking Water Protected Area and the associated chemical status test is Poor. There is a negligible risk of adversely affecting the chemical status at groundwater body scale.

Nutrient sensitive areas (Nitrate vulnerable zones): The groundwater body is associated with a nutrient sensitive area; however, the drought measure will not affect the management of the protected area.

Does the component comply wit	h WFD Objective?
No deterioration between status classes	Yes; complies with WFD objective
2. No impediments to GES/GEP	Yes; complies with WFD objective.
3. No compromises to water body objectives	Yes; complies with WFD objective.
4. No effects on other water bodies	Yes; complies with WFD objective.
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.
6. No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.



Table A-36 WFD Status Classifications and screening decisions – East Worthing WSW – Surface Water

Waterbody ID		GB107041011940
Waterbody Name		Teville Stream
Hydrological Impact at Location:		Nogligible
(Major, Mod, Minor, Neg)		Negligible
	Overall	Bad
RBMP Cycle 2 Status/Potential:	Fish	Bad
RDMF Cycle 2 Status/Fotential.	Macroinvertebrates	Bad
	Macrophytes	-
Hydro-morph designations:		heavily modified
	Overall	-
RBMP2 Waterbody Objective (2021):	Fish	-
NDIVIFZ Waterbody Objective (2021).	Macroinvertebrates	-
	Macrophytes	-
	Overall	Good
RBMP2 Waterbody Objective (2027):	Fish	Good
	Macroinvertebrates	-
	Macrophytes	-
Scoped In to Environmental Assessment:		No

We have removed what was previously A9 because it related to the Faversham drought permit that we are no longer including in this drought plan. As we explain the main drought plan, we do not require that drought permit anymore because abstraction licence changes mean that we would no longer get a supply benefit from using the permit.

#### A.9 Caul Bourne WSW

The proposed drought permit involves increasing groundwater abstraction at Caul Bourne WSW. This groundwater source is licensed for 2.64Ml/d as a daily peak abstraction and 1.64Ml/d as an annual average. However, abstraction is constrained by a Minimum Residual Flow (MRF) requirement in the Caul Bourne such that abstraction must cease when the flow at the Calbourne gauging station is less than 4 l/s (0.3Ml/d). Furthermore, if flow drops below 20 l/s (1.7Ml/d), the total abstraction within a 30-day period must not exceed a total of 40Ml (1.3Ml/d). The drought permit would modify the abstraction licence conditions as follows:

- To temporarily reduce the MRF at which abstraction must cease from 4l/s (0.3Ml/d) to 2l/s (0.15Ml/d)
- To temporarily remove the constraint that limits abstraction to 40 MI (1.3MI/d) within a 30-day period when the flow at Calbourne gauging station falls below 20I/s (1.7MI/d).

It is noted that the supply benefit of this drought permit is uncertain due to uncertainty as to how much the source would be able to pump from the groundwater under the relaxed licence conditions due to the hydrogeological limitations on deployable output of the source under severe drought conditions.



For the purposes of this Environmental Assessment, a precautionary approach has been adopted which assumes that abstraction would be possible up to the daily peak licence rate. The expected supply gain has therefore been calculated as the difference between the daily peak licence limit and the sustained peak deployable output derived by Southern Water.

Table A-37 WFD Status Classifications and screening decisions - Caul Bourne WSW - Groundwater

Waterbody ID		GB40701G503200
Waterbody Name		IOW Central Downs Chalk
Hydrological Impact at Location:		Moderate
(Major, Mod, Minor, Neg)		
	Overall	Poor
RBMP Cycle 2 Status/Potential:	Quantitative	Good
	Chemical (GW)	Poor
Hydro-morph designations:		not applicable
	Overall	-
RBMP2 Waterbody Objective (2021):	Quantitative	-
	Chemical (GW)	-
	Overall	-
RBMP2 Waterbody Objective (2027):	Quantitative	-
	Chemical (GW)	Good
Scoped In to Environmental Assessment:		Yes

Table A-38 Overall WFD Compliance Assessment – Caul Bourne WSW – Groundwater body GB40701G503200

WFD Status Test	RBMP2 (2019) status	Risk of temporary	deterioration to WFD waterbody				
Quantitative (Overall)	Good						
Dependent Surface Water Body Status	Good	(GB10 flows could groun condit lasting also in comp down: The down droug anticip	deadwaters of the Caul Bourne 07101006020) experience naturally low during a drought, the drought order further reduce flow. The reduction in adwater levels could result in low flow tions being experienced earlier, and g for longer after the drought. It could increase the risk of the stream drying letely. The impacts may propagate stream due to the reduction in flow. It lownstream reaches may be supported w from Shalcombe Stream, although that flow along this tributary is pated to be very low. There is a um risk of temporary deterioration in s.				
GWDTEs test	Good	groun Wedium with the	e are no known Natura 2000 or SSSI idwater dependent habitats associated he groundwater body.				
			e are groundwater dependent NERC by habitats within the area of influence				



			of the drought measure, including coastal and floodplain grazing marsh, lowland fens and chalk river.  No direct loss or disturbance to fen habitat is anticipated as a result of the drought measure. However, indirect effects of the drought measure whereby the reduction in river flow in the Caul Bourne could impact the coastal and floodplain grazing marsh, lowland fens and chalk river. Overall there is a medium risk of temporary deterioration of
Saline Intrusion	Good	Negligible	GWDTE quantitative status.  The drought measure will not increase saline
Water Balance	Good	Medium	intrusion.  The depleted Chalk storage and knock-on impact of delayed recovery, the hydrogeological impact of the drought order on the Chalk aquifer is considered to be moderate and therefore there is a medium risk of temporary deterioration of status (within class). The degree and duration of impact will depend on the actual abstraction rate, the length of the drought and the nature of the recharge period.
Chemical (Overall)	Poor		
Dependent Surface Water Body Status	Good	Low	There is a negligible to low risk of temporary deterioration of the Dependent Surface Water Body Status.
Drinking Water Protected Area	Poor	Negligible	There is a negligible risk of adversely affecting the chemical status beyond normal baseline drought conditions at groundwater body scale
GWDTEs test	Good	Negligible	Negligible risk of temporary deterioration to the chemical status of GWDTEs.
Saline Intrusion	Good	Negligible	The drought measure will not increase saline intrusion.
General Chemical Test	Good	Negligible	Negligible risk of temporary deterioration at a groundwater body scale.

Water Body Mitigation Measure

No published mitigation measures.

# WFD Protected Areas

Protected Area Details

Bathing Water Directive	Drinking Water Directive	Conservatio n of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	YES	NO	NO	YES	NO	NO

Drinking water protected area: IOW Central Downs Chalk is a Drinking Water Protected Area and the associated chemical status test is Poor. There is a negligible risk of adversely affecting the chemical status at groundwater body scale.

Nutrient sensitive areas (Nitrate vulnerable zones): The groundwater body is associated with a nutrient sensitive area; however, the drought measure will not affect the management of the protected area.

Does the component comply with WFD Objective?



No deterioration between status classes	No; there is a medium risk of temporary deterioration in quantitative status
2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only
3. No compromises to water body objectives	Yes; complies with WFD objective.
4. No effects on other water bodies	No; there are surface water bodies that will be potentially impacted (GB107101006020 and GB520710101700).
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.
6. No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.

Table A-39 WFD Status Classifications and screening decisions – Caul Bourne WSW – Surface Water

Waterbody ID		GB107101006020	GB520710101700	
Waterbody Name		Caul Bourne	Newtown River (Transitional)	
Hydrological Impact at L (Major, Mod, Minor, Neg		Major (uncertain)	Major	
	Overall	Moderate	Moderate	
	Fish	Good	-	
RBMP Cycle 2	Macroinvertebrates	High	Moderate	
Status/Potential:	Macrophytes	-	-	
	Macroalgae	-	-	
	Phytoplankton		High	
Hydro-morph designation	ons:	heavily modified	not designated artificial or heavily modified	
	Overall	-	-	
	Fish	-	-	
RBMP2 Waterbody	Macroinvertebrates	-	Good	
Objective (2021):	Macrophytes	-	-	
	Macroalgae	-	-	
	Phytoplankton	-	-	
	Overall	-	Good	
	Fish	-	-	
RBMP2 Waterbody	Macroinvertebrates	-	-	
Objective (2027):	Macrophytes	-	-	
	Macroalgae	-	Good	
	Phytoplankton	-	-	
Scoped In to Environme	ental Assessment:	Yes	Yes	

Table A-40 WFD Status Classifications and screening decisions – Caul Bourne WSW – Surface water GB107101006020

WFD element	RBMP2 (2019) status	Risk of to	Risk of temporary deterioration to WFD waterbody	
Fish	Good	High	Temporary high adverse impacts to the fish community.	



Macro- invertebrates	High	Medium	Moderate adve	rse impacts to th	ne macroinverteb	rate community.
Macrophytes & Phytobentos	Not assessed	Medium	Temporary mod community.	derate adverse i	mpacts to the ma	crophyte
Chemical (overall)	Fail	Negligible	of other discha	rges temporarily s is considered to	measure could re . The overall risk o be negligible giv	to deterioration of
Water Body Mitigation Measure						
WFD Protecto	ed Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	NO	NO	YES	YES	NO	NO
Protected Area Details  Protected Area Details  Protected Area Details  Protected Area Details  South saltma green		Protected area Maritime SAC a freshwater input Maritime SAC a sandflats not control to the Solent and abundance and tailed godwit, ripintail and dunit Southampton Waltmarsh), BR greenshank, litt understand the	could be impacted by seawat Southampton Ward composition; Menged plover, teal, lin (feeding). And Water Ramsar count DB invertebrate at le egret and water implications on the south of the segret and water count of the segret and water the segret and water implications on the south of the segret and water of the segre	his drought optic buthampton Wateek. The following d; estuaries, Atla er at low tide. The following criter SPA could be diterranean gull curlew, shelduce the following criterial de impacted; assemblage and for rail (feeding).	on could impact the SPA and Ram ng qualifying feat ntic salt meadow he following qualitie impacted by cheat, redshank, greyterion of the Soler habitats (mudflat spotted redshank Further assessm	ne Solent sar by reducing tures of the Solent mudflats and ifying features of anges to prey nt goose, black- plover, wigeon, nt and as and sandflats, as, common ent is required to
	nponent complicion between statu			of temporary det	erioration in statu	s due to impacts
classes	ion between statt		No; there is a high risk of temporary deterioration in status, due to impacts on the fish community.			
	ents to GES/GEP		Yes; complies with WFD objective, temporary deterioration only.			on only.
3. No compromises to water body objectives		Yes; c	Yes; complies with WFD objective.			
4. No effects on other water bodies			No; there is a risk of impacting downstream transitional water body GB520710101700			ater body
<b>5.</b> No hindrance to attainment of objectives for protected area			No; potential impact to Solent and Southampton Water SPA Solent Maritime SAC. Further assessment required.			PA Solent
<b>6.</b> No hindrance to measures to address priority substances, priority hazardous substances and other pollutants			complies with WFD objective.			



Table A-41 Overall WFD Compliance Assessment – Caul Bourne WSW –Transitional water body GB520710101700

WFD element	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody			
Fish	Not assessed	Low - High	Temporary minor – major adverse impacts to the fish community, depending on species		
Invertebrates	Moderate	Medium	Temporary adverse impacts to the macroinvertebrate community, lessening downstream.		
Macroalgae	Not assessed	Medium	Temporary adverse impacts to the macroalgae community. Most significant in the mid and lower estuary.		
Phytoplankton	High	Medium	Temporary adverse impacts to the phytoplankton community. Most significant in the mid and lower estuary.		
Angiosperms	Not assessed				
Chemical (overall)	Fail	Negligible	Implementation of the drought measure could reduce the dilution of other discharges temporarily. The overall risk to deterioration of chemical status is considered to be negligible given existing baseline drought conditions.		
Water Body Mitigation Measure	No published m	mitigation measures.			

WFD Protected Areas
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THE PROJECT AND ADDRESS OF THE PROJECT AND ADDRE							
	Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
	NO	NO	YES	YES	YES	YES	YES
	Protected Area	Details	nutrient sensitive management of Shellfish Water temporarily. Hot negligible given the drought me  Protected area Maritime SAC afreshwater input Maritime SAC of sandflats not country the Solent and abundance and tailed godwit, ripintail and dunl	re area; however, f the protected and set the drought me wever, the risk is a the dynamic estrator.  SAC and SPA: The and Solent and	easure could redu to the Shellfish W uarine environment his drought option outhampton Wate	ce the dilution of /ater is considerent and the short-to r could impact the r SPA and Rams g qualifying featutic salt meadow, e following qualifying the could be considered by chadark-bellied brent, redshank, greyrion of the Solent	discharges ed to be erm nature of  e Solent ar by reducing ares of the Solent mudflats and ying features of nges to prey t goose, black- plover, wigeon, t and

#### Does the component comply with WFD Objective?

**1**. No deterioration between status classes

No; there is a high risk of temporary deterioration in status, due to impact on the fish community.

saltmarsh), BRDB invertebrate assemblage and spotted redshank, common greenshank, little egret and water rail (feeding). Further assessment is required to understand the implications on the conservation objectives and site integrity.



2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only.
3. No compromises to water body objectives	Yes; complies with WFD objective.
4. No effects on other water bodies	Yes; complies with WFD objective.
<b>5.</b> No hindrance to attainment of objectives for protected area	No; potential impact to Solent and Southampton Water SPA Solent Maritime SAC. Further assessment required.
<b>6.</b> No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.

We have removed what was previously A11 because it related to the Sandwich drought permit that we are no longer including in this drought plan. As we explain the main drought plan, we do not require that drought permit anymore because abstraction licence changes mean that we would no longer get a supply benefit from using the permit.

#### A.10 Lower Itchen Sources

In order to protect public water supplies within Southern Water's Western Area in the event of a future severe drought, Southern Water would make an application to the Secretary of State for a drought order to vary the abstraction licence conditions for its Lower Itchen sources and those governing the abstraction by Portsmouth Water from the Lower Itchen. The drought order may be required at any time of the year.

If granted, the drought order would involve a temporary change to the abstraction licence conditions that prevent abstraction below the specified flow:

- Relaxing the specified flow condition at Allbrook and Highbridge from 198Ml/d down to 160 Ml/d (for the Southern Water abstraction licence)
- Relaxing the specified flow condition at Riverside Park gauging station from 194Ml/d down to 150Ml/d (for the Portsmouth Water abstraction licence).

Table A-42 WFD Status Classifications and screening decisions – Lower Itchen sources – Groundwater

Waterbody ID		GB40701G505000
Waterbody Name		River Itchen Chalk
Hydrological Impact at Location:		Moderate
(Major, Mod, Minor, Neg)		Moderate
	Overall	Poor
RBMP Cycle 2 Status/Potential:	Quantitative	Poor
	Chemical (GW)	Poor
Hydro-morph designations:		
	Overall	-
RBMP2 Waterbody Objective (2021):	Quantitative	-
	Chemical (GW)	-
DRMP2 Weterhody Objective (2027)	Overall	-
RBMP2 Waterbody Objective (2027):	Quantitative	-



Waterbody ID		GB40701G505000
Waterbody Name		River Itchen Chalk
	Chemical (GW)	Good
Scoped in to Environmental Assessment:		Yes

Table A-43 Overall WFD Compliance Assessment – Lower Itchen Sources – Groundwater body GB40701G505000

WFD Status Test	RBMP2 (2019) status	Risk of te	mporary deterioration to WFD waterbody
Quantitative (Overall)	Poor		
			The drought measure has the potential to impact on the flows in dependent surface water bodies including Itchen (GB107042022580) and Bow Lake stream (GB107042016650).
Dependent Surface Water Body Status	Poor	Negligible	During extreme droughts, groundwater heads in the chalk aquifer would already be low and any incremental effect of additional abstraction would only have a low level of impact on flows in the River Itchen. Impacts on Bow Lake stream are likely to be negligible since the underlying aquifer is partially confined at this location. These waterbodies are assessed in the tables below.
			There are no known Natura 2000 groundwater dependent habitats associated with the groundwater body. There are groundwater dependent NERC priority habitats within the area of influence of the drought measure, including fens (within the SSSI), and floodplain grazing marsh.
GWDTEs test	Good	Negligible	The River Itchen SSSI has a Lowland wet grassland and meadow and fen, marsh and swamp habitats. The impact of the drought measure on these habitats is likely to be negligible, as wetland water levels at locations close to the River Itchen are likely to be primarily controlled by water levels in the River Itchen, which have a low sensitivity to changes in low flows.
Saline Intrusion	Good	Negligible	The drought measure will not increase saline intrusion.
Water Balance	Good	Negligible	River flows have been shown to recover rapidly after drought conditions and given the high connectivity between the river and the aquifer, the aquifer is assessed to be at negligible risk of temporary deterioration with respect to its water balance
Chemical (Overall)	Poor		
Dependent Surface Water Body Status	Good	Negligible	Both dependent surface waterbodies are currently at good chemical status and there is a negligible risk of deterioration to their chemical status during the operation of the drought order.



Drinking Water Protected Area	Poor	Negligible	There is a negligible risk of adversely affecting the chemical status beyond normal baseline drought conditions at groundwater body scale
GWDTEs test	Good	Negligible	Negligible risk of temporary deterioration to the chemical status of GWDTEs.
Saline Intrusion	Good	Negligible	The drought measure will not increase saline intrusion.
General Chemical Test	Poor	Negligible	Negligible risk of temporary deterioration at a groundwater body scale.

#### Water Body Mitigation Measure

No published mitigation measures.

	WFD Prote	cted Areas					
Protected Area	Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
	NO	YES	NO	NO	YES	NO	NO
Details	Drinking water protected area: River Itchen Chalk is a Drinking Water Protected Area and the associated chemical status test is Poor. There is a minor risk of adversely affecting the chemical status at groundwater body scale.  Nutrient sensitive areas (Nitrate vulnerable zones): The groundwater body is associated with a nutrient sensitive area; however, the drought measure will not affect the management of the protect area.						chemical with a

Does the component comply with	Does the component comply with WFD Objective?					
No deterioration between status classes	Yes; complies with WFD objective,					
2. No impediments to GES/GEP	Yes; complies with WFD objective.					
3. No compromises to water body objectives	Yes; complies with WFD objective.					
4. No effects on other water bodies	Yes; complies with WFD objective.					
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.					
6. No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.					

## Table A-44 WFD Status Classifications and screening decisions – Lower Itchen Sources – Surface Water

Waterbody ID		GB107042022580	GB107042016650	GB520704202800
Waterbody Name		Itchen	Bow Lake Stream	Southampton Water
Hydrological Impact at Location:		Minor	Negligible	Negligible
(Major, Mod, Minor, Neg)			3 3	3 3
	Overall	Moderate	Bad	Moderate
RBMP Cycle 2 Status/Potential:	Fish	High	Bad	Good
	Macroinvertebrates	High	Moderate	Good
	Macrophytes	Good	Good	Good



Waterbody ID		GB107042022580	GB107042016650	GB520704202800
Waterbody Name		Itchen	Bow Lake Stream	Southampton Water
Hydro-morph designations:		not designated artificial or heavily modified	not designated artificial or heavily modified	heavily modified
	Overall	-	-	-
RBMP2 Waterbody	Fish	-	-	-
Objective (2021):	Macroinvertebrates	-	-	-
	Macrophytes	-	-	-
	Overall	-	Good	Moderate
RBMP2 Waterbody Objective (2027):	Fish	-	Good	Good
	Macroinvertebrates	-	Good	Good
	Macrophytes	-	Good	Good
Scoped in to Environmenta	l Assessment	Yes	No	Yes

Table A-45 Overall WFD Compliance Assessment – Lower Itchen Sources – River water body GB107042022580

WFD element	RBMP2 (2019) status	Risk of temp	Risk of temporary deterioration to WFD waterbody				
Fish	High	Medium	drought orde	rs may lead to a ı	onditions and the a medium risk of ter 's WFD fish status	nporary	
Macro- invertebrates	High	Medium	The combination of drought conditions and the application of the drought orders may lead to a medium risk of temporary deterioration to the waterbody's WFD macro-invertebrate status.				
Macrophytes & Phytobentos	Good	Medium	The combination of drought conditions and the application of the drought orders may lead to a medium risk of temporary deterioration to the waterbody's WFD macrophyte and phytobenthos status.				
Chemical (overall)	Fail	Negligible			terioration to the veration of the drou		
Water Body Mitigation Measure	No published	I mitigation measure	es.				
WFD Protecte	ed Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive	
NO	YES	NO	YES	YES	NO	YES	
					ne drought measu minor and revers		
Protected Area	Details		ry adverse effe	cts on the chemic	nking Water Prote al status is neglig		

Nutrient sensitive areas (Nitrate vulnerable zones): The river is associated with a

nutrient sensitive area; however, the drought measure will not affect the

management of the protected area.



Does the component comply with \	WFD Objective?
No deterioration between status classes	No; medium risk of temporary deterioration to WFD status
2. No impediments to GES/GEP	Yes; complies with WFD objective, temporary deterioration only.
3. No compromises to water body objectives	Yes; complies with WFD objective.
4. No effects on other water bodies	Yes; complies with WFD objective.
<b>5.</b> No hindrance to attainment of objectives for protected area	No; risks to the River Itchen SAC cannot be ruled out
<b>6.</b> No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.

Table A-46 Overall WFD Compliance Assessment – Lower Itchen Sources – Transitional water body GB520704202800

WFD element	RBMP2 (2019) status	Risk of tem	Risk of temporary deterioration to WFD waterbody		
Fish	Good	Negligible	The estuarine hydrology is dominated by the tidal cycle and the drought orders will not affect the tidal regime or elicit significant impacts on salinity gradients in drought conditions.		
Invertebrates	Good	Negligible	The drought orders will not affect the tidal regime or elicit significant impacts on salinity gradients in the Itchen Estuary (Southampton Water) and therefore, there is no risk of deterioration to WFD invertebrate status.		
Macroalgae	Good	Negligible	The drought orders will not affect the tidal regime or elicit signific impacts on salinity gradients in the Itchen Estuary (Southamp		
Phytobenthos	Good	Negligible	Water) and therefore, there is no risk of deterioration to WFD macroalgae and phytobenthos status.		
Chemical (overall)	Fail	Negligible	The waterbody is currently failing to achieve good status and there is a negligible risk of further deterioration to the waterbody's chemical status during the operation of the drought order.		
Water Body Mitigation Measure	No published	mitigation measu	res.		

WFD Protect	ed Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	YES	YES	YES	YES	YES	YES
Protected Area Details  Nutrient sen vulnerable z sensitive are scheme will changes in w EA discharge  Shellfish Wa impacts on t  SPA: South			e under the Ni under the Urba of affect the ma er quality are ex- permit controls. rs: The propose shellfish design	trates Directive. an Waste Water anagement of th pected; the discl ed drought mea ation. esignated under	(Southampton W Treatment Direct e protected area narge would be pe sures will not res	urface water nitrate /ater) is a nutrient tive. However, the and no significant rmitted through the ult in any adverse southampton Water posed SPA - Solent



and Dorset Coast pSPA. The operation of the scheme during prevailing drought conditions is unlikely to impact marine habitats significantly more than the prevailing drought conditions due to the dynamic relationship between tidal inundation and the freshwater inputs and the distance of these designated habitats from the abstraction

II ESTIWA	ater imputs and the distance of these designated habitats from the abstraction					
Does the component comply with \	Does the component comply with WFD Objective?					
1. No deterioration between status classes	Yes; complies with WFD objective.					
2. No impediments to GES/GEP	Yes; complies with WFD objective.					
3. No compromises to water body objectives	Yes; complies with WFD objective.					
4. No effects on other water bodies	Yes; complies with WFD objective.					
<b>5.</b> No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.					
<b>6.</b> No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.					

### A.11 Candover Augmentation Scheme Drought Order

In order to protect public water supplies within Southern Water's Western Area in the event of a future drought, Southern Water may make an application to the Secretary of State for a drought order to vary the Environment Agency's Candover Augmentation Scheme abstraction licence as follows:

- Hourly limit: increase from 209m3/hr to 1.125Ml/hr
- Daily limit: increase from 5MI/d to 27MI/d (but limited to 20 MI/d between 1st May and 31st August)
- Annual limit: increase from 750Ml/yr to 3,750Ml/yr (an average of 20.8Ml/d over 6 months)

The drought order will also allow the abstracted water to be discharged to the river environment as follows:

- At all times of drought order operation, up to 5MI/d would be available for environmental flow support to the Candover Stream via the existing Environment Agency pipeline and discharge;
- Up to 27MI/d (depending on the volume discharged to the Candover Stream and the time of year) would be discharged directly to the River Itchen via a new temporary pipeline and discharge facility upstream of the Easton gauging station.

Abstraction would be increased over a period of several days up to the full required discharge rate to prevent any sudden increase in flows in the River Itchen; similarly, reductions in discharge would be carried out over a period of day to prevent a sudden decrease in river flow.

Abstraction and discharges to the water environment will only be permitted when flows in the River Itchen at Allbrook and Highbridge are at or below 205Ml/d.

The drought order would help to support river flows and continued abstraction by Southern Water at its downstream Lower Itchen sources.



Table A-47 WFD Status Classifications and screening decisions – Candover Drought Order – Groundwater

Waterbody ID		GB40701G505000
Waterbody Name		River Itchen Chalk
Hydrological Impact at Location:		Negligible
(Major, Mod, Minor, Neg)		Negligible
	Overall	Poor
RBMP Cycle 2 Status/Potential:	Quantitative	Poor
	Chemical (GW)	Poor
Hydro-morph designations:		
	Overall	-
RBMP2 Waterbody Objective (2021):	Quantitative	-
	Chemical (GW)	-
	Overall	-
RBMP2 Waterbody Objective (2027):	Quantitative	-
	Chemical (GW)	Good
Scoped in to Environmental Assessment:		Yes

Table A-48 Overall WFD Compliance Assessment – Candover Drought Order – Groundwater body GB40701G505000

WFD Status Test	RBMP2 (2019) status	Risk of te	mporary deterioration to WFD waterbody
Quantitative (Overall)	Poor		
Dependent Surface Water Body Status	Poor	Negligible	The abstraction will not result in any adverse effects on the flows in the Candover Brook (GB107042022620) or River Itchen (GB107042022580) sufficient to lead to any WFD deterioration.
			There are no known Natura 2000 groundwater dependent habitats directly associated with the groundwater body.
GWDTEs test	Good	Negligible	The River Itchen SSSI has a Lowland wet grassland and meadow and fen, marsh and swamp habitats. There are groundwater dependent NERC priority habitats within the area of influence of the drought measure, including fens (within the SSSI), and floodplain grazing marsh. Some of these habitats are also present in the SSSI units in Candover Valley.
Saline Intrusion	Good	Negligible	The drought measure will not increase saline intrusion.
Water Balance	Poor	Negligible	The drought measure may exacerbate the level of groundwater head drop, however, the increase in drawdown will be marginal compared to the natural variation in groundwater heads during drought conditions. Hence, there is a negligible risk of temporary deterioration to the Water Balance of the groundwater body.
Chemical (Overall)	Poor		
Dependent Surface Water Body Status	Good	Negligible	The level of drawdown is small compared to the natural drawdown experienced during



			droughts. Therefore, the small drop in groundwater levels will not adversely impact the chemical status for the River Itchen and Candover Brook.
Drinking Water Protected Area	Poor	Negligible	There is a negligible risk of adversely affecting the chemical status beyond normal baseline drought conditions at groundwater body scale
GWDTEs test	Good	Negligible	Negligible risk of temporary deterioration to the chemical status of GWDTEs.
Saline Intrusion	Good	Negligible	The drought measure will not increase saline intrusion.
General Chemical Test	Poor	Negligible	Negligible risk of temporary deterioration at a groundwater body scale.

Water Body Mitigation Measure

No published mitigation measures.

<b>Protected</b>
Area
Details

WFD Protected Areas						
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	YES	NO	NO	YES	NO	NO

Drinking water protected area: River Itchen Chalk is a Drinking Water Protected Area and the associated chemical status test is Poor. There is a negligible risk of adversely affecting the chemical status at groundwater body scale.

Nutrient sensitive areas (Nitrate vulnerable zones): The groundwater body is associated with a nutrient sensitive area; however, the drought measure will not affect the management of the protected area.

Does the component	comply with	WED Objective?
Dues the component	COMPLY WILL	WIFD ODIECTIVE!

No deterioration between status classes	Yes; complies with WFD objective
2. No impediments to GES/GEP	Yes; complies with WFD objective
3. No compromises to water body objectives	Yes; complies with WFD objective.
4. No effects on other water bodies	Yes; complies with WFD objective.
5. No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.
6. No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.



Table A-49 WFD Status Classifications and screening decisions – Candover Drought Order – Surface Water

Waterbody ID		GB107042022580	GB107042022620	GB520704202800
Waterbody Na	ame	Itchen	Candover Brook	Southampton Water
Hydrological Imp (Major, Mod, Mir		Beneficial	Beneficial	None
	Overall	Moderate	Moderate	Moderate
RBMP Cycle 2	Fish	High	-	Good
Status/Potenti al:	Macroinvertebrat es	High	High	Good
	Macrophytes	Good	Moderate	Good
Hydro-morph de	signations:	not designated artificial or heavily modified	not designated artificial or heavily modified	heavily modified
	Overall	-	-	-
RBMP2 Waterbody	Fish	-	-	-
Objective (2021):	Macroinvertebrat es	-	-	-
( - /	Macrophytes	-	-	-
	Overall	-	Good	Moderate
RBMP2 Waterbody	Fish	-	Good	Good
Objective (2027):	Macroinvertebrat es	-	Good	Good
	Macrophytes	-	Good	Good
Scoped in to En	vironmental	Yes	Yes	No

Table A-50 Overall WFD Compliance Assessment – Candover Drought Order – River water body GB107042022580

WFD element	RBMP2 (2019) status	Risk of temp	orary deterio	ration to WFD	waterbody	
Fish	High	Low				
Macro- invertebrates	High	Low	There is a low risk of WFD deterioration to fish, macro-			
Macrophytes & Phytobentos	Good	Low	invertebrate community, macrophytes and phytobenthos.			obentnos.
Chemical (overall)	Fail	Negligible			terioration to the veration of the drou	
Water Body Mitigation	No published	mitigation measure	es.			
Measure						
Measure WFD Protect	ted Areas					
	Drinking	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive



	Protected Area SAC: The potential for adverse effects on the qualifying features of River Itchen SAC cannot be ruled out with certainty without further monitoring and implementation of mitigation measures agreed with Natural England and the Environment Agency.				
Protected Area Details	Drinking water protected area: the river is a Drinking Water Protected Area. The risk of temporary adverse effects on the chemical status is negligible during the operation of the drought order.				
	Nutrient sensitive areas (Nitrate vulnerable zones): The river is associated with a nutrient sensitive area; however, the drought measure will not affect the management of the protected area.				
Does the component comply	Does the component comply with WFD Objective?				
1. No deterioration between status classes	Yes; complies with WFD objective.				
2. No impediments to GES/GEP	Yes; complies with WFD objective.				
3. No compromises to water body objectives	Yes; complies with WFD objective.				
4. No effects on other water bodie	Yes; complies with WFD objective.				
<b>5.</b> No hindrance to attainment of objectives for protected areas	No; the potential for adverse effects on the qualifying features of River Itchen SAC cannot be ruled out and therefore the Drought Order may hinder attainment of the Conservation Objectives of the SAC.				
<b>6.</b> No hindrance to measures to a priority substances, priority hazard substances and other pollutants					

Table A-51 Overall WFD Compliance Assessment – Candover Drought Order – River water body GB107042022620

WFD element	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody				
Fish	-	Low				
Macro- invertebrates	High	Low	There is a low risk of deterioration to fish, macro-invertebrate community, macrophytes and phytobenthos.		o-invertebrate	
Macrophytes & Phytobentos	Moderate	Low				
Chemical (overall)	Fail	Negligible		0 0	terioration to the veration of the drou	•
Water Body Mitigation Measure	'	mitigation measure	es.			
WFD Protecte	ed Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	NO	NO	YES	YES	NO	NO
Protected Area SAC: The potential for adverse effects on the qualifying features of River Itchen SAC cannot be ruled out with certainty without further monitoring and implementation of mitigation measures agreed with Natural England and the Environment Agency.						



nutrie	Nutrient sensitive areas (Nitrate vulnerable zones): The river is associated with a nutrient sensitive area; however, the drought measure will not affect the management of the protected area.			
Does the component comply with WFD Objective?				
1. No deterioration between status classes	No; low risk of temporary deterioration to WFD status.			
2. No impediments to GES/GEP	Yes; complies with WFD objective.			
3. No compromises to water body objectives	Yes; complies with WFD objective.			
4. No effects on other water bodies	Yes; complies with WFD objective.			
5. No hindrance to attainment of objectives for protected area	No; the potential for adverse effects on the qualifying features of River Itchen SAC cannot be ruled out and therefore the Drought Order may hinder attainment of the Conservation Objectives of the SAC.			
<b>6.</b> No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.			



## A.12 Test Surface Water Drought Permit and Drought Order

In order to protect public water supplies within Southern Water's Western Area, Southern Water may make an application to the Secretary of State for a Drought Permit or a Drought Order to vary the abstraction licence conditions for its Test Surface Water source.

The Drought Permit or Drought Order will support water supplies for the Western Area and would involve temporary modifications to the proposed revisions to the Test Surface Water abstraction licence condition relating to the "Test Total Flow" as defined in the proposed revised abstraction licence as follows:

- Drought Permit: Temporarily reduce the Test Total Flow condition from 355Ml/d down to 265 Ml/d
- Drought Order: Temporarily reduce the Test Total Flow condition from 355MI/d down to 200 MI/d.

Table A-52 WFD Status Classifications and screening decisions – Test Surface Water Drought Permit and Drought Order – Surface Water

Waterbody ID		GB107042016840	GB520704202800
Waterbody Name		Test (Lower)	Southampton Water
Hydrological Impact at Location: (Major, Mod, Minor, Neg)		Negligible-Minor	Negligible
	Overall	Moderate	Moderate
	Fish	Good	Good
RBMP Cycle 2 Status/Potential:	Macroinvertebrates	High	Good
	Macrophytes and phytobenthos/macroalgae	High	Good
Hydro-morph designations:		not designated artificial or heavily modified	heavily modified
	Overall	-	-
PPMP2 Waterhody Objective (2021):	Fish	-	-
RBMP2 Waterbody Objective (2021):	Macroinvertebrates	-	-
	Macrophytes	-	-
	Overall	Good	Moderate
	Fish	Good	Good
RBMP2 Waterbody Objective (2027):	Macroinvertebrates	High	Good
	Macrophytes and phytobenthos/macroalgae	Good	Good
Scoped in to Environmental Assessment		Yes	Yes

The assessment in Table A-53 below is based on the best available evidence; however, there is some uncertainty due to the lack of WFD monitoring in the Lower River Test downstream of the abstraction intake. This uncertainty applies to the WFD assessments for both the Drought Permit and the Drought Order.

In respect of the WFD compliance risks associated with the Test Surface Water Drought Permit, this has been updated following the Hampshire Abstraction Licences Public Inquiry held in March 2018 and the agreement reached between Southern Water and the Environment Agency as part of the inquiry process and formalised in an operating agreement under Section 20 of the Water Resources Act 1991 (the "Section 20 Agreement").

WATER Southern Water

In the event that agreed monitoring of the Lower River Test concludes that the Drought Permit implementation may lead to a temporary deterioration in the Water Framework Directive status of the River Test, then it is agreed in principle within the Section 20 Agreement, that the provisions of Article 4(6) of the Water Framework Directive, can be used to enable the grant of a Test Surface Water Drought Permit authorising abstraction below 355Ml/d and that low flows on the River Test between 355Ml/d and 265Ml/d are also capable of constituting exceptional circumstances for the purpose of Article 4(6) of the Water Framework Directive.

While not wanting to fetter the Environment Agency's discretion, it is presumed by Southern Water that on the basis of this principle in relation to Article 4 (6) having been agreed with the Environment Agency for the Test Surface Water Drought Permit application, the Environment Agency would support (or at least not oppose) this same principle being presented by Southern Water in any Test Drought Order application to the Secretary of State; and that low flows on the River Test of between 265Ml/d and 200Ml/d may equally be capable of constituting exceptional circumstances for the purposes of Article 4(6) of the Water Framework Directive. It is acknowledged that acceptance of this principle in a Test Drought Order application would be at the discretion of the Secretary of State. Southern Water would seek to secure the support of the Environment Agency prior to submission of a Test Drought Order as part of its pre-application consultations.

Article 4(6) of the WFD details the circumstances in which temporary deteriorations do not amount to breaches of the requirements of the Directive.

Table A-53 Overall WFD Compliance Assessment – Test Surface Water Drought Permit and Drought Order – River water body GB107042016840

WFD element	RBMP2 (2019) status	Risk of temporary deterioration to WFD waterbody				
Fish	Good	Medium (low confidence)	The risk of deterioration in the fish element as a result of the application of the drought permit/order on the interim classifications of the Test (lower) waterbody is medium.			
Macro- invertebrates	High	Low- (low confidence)	The application of the drought permit/order carries a low risk of WFD status deterioration for the macroinvertebrate community downstream of the abstraction in the short term for interim classifications and is unlikely to result in a deterioration in the water body High status within the 6 year reporting cycle of the WFD.			
Macrophytes & Phytobentos	High	Low- (low confidence)	The application of the drought permit/order carries a low risk of WFD status deterioration for the macrophyte community downstream of the abstraction for interim classification in the short term and is unlikely to result in a deterioration in the water body High status within the reporting cycle of the WFD.			
Chemical (overall)	Fail	Negligible	There is a negligible risk of further deterioration to the waterbody's chemical status during the operation of the drought order.			
Water Body Mitigation Measure  No published mitigation measures.						
WFD Protected	d Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive
NO	YES	YES	NO	YES	NO	YES



SPA: The Lower Test Valley is also designated as part of the Solent and Southampton Water SPA and Ramsar sites both of which are also included in the proposed SPA - Solent and Dorset Coast pSPA. The operation of the scheme during prevailing drought conditions is unlikely to impact marine habitats significantly more than the prevailing drought conditions due to the dynamic relationship between tidal inundation and the freshwater inputs and the distance of these designated habitats from the abstraction

**Protected Area Details** 

Drinking water protected area: the river is a Drinking Water Protected Area. The risk of temporary adverse effects on the chemical status during the operation of the drought order is negligible.

Nutrient sensitive areas (Nitrate vulnerable zones): The river is associated with a nutrient sensitive area; however, the drought measure will not affect the management of the protected area.

of the protected area.					
Does the component comply with WFD Objective?					
No deterioration between status classes	No (low confidence). There is a low to medium (low confidence) risk of deterioration to WFD status. There is uncertainty due to the lack of WFD monitoring in the Lower River Test downstream of the abstraction intake).				
2. No impediments to GES/GEP	Yes; complies with WFD objective.				
3. No compromises to water body objectives	Yes; complies with WFD objective.				
4. No effects on other water bodies	Yes; complies with WFD objective.				
<b>5.</b> No hindrance to attainment of objectives for protected area	Yes; complies with WFD objective.				
<b>6.</b> No hindrance to measures to address priority substances, priority hazardous substances and other pollutants	Yes; complies with WFD objective.				

Table A-54 Overall WFD Compliance Assessment – Test Surface Water Drought Permit and Drought Order – Transitional water body - GB520704202800

order – Transit		ouy OBOZOTO-				
WFD element	RBMP2 (2019) status	Risk of temp	Risk of temporary deterioration to WFD waterbody			
Fish	Good	Negligible			not result in an	y adverse impacts ody
Invertebrates	Good	Negligible	The drought permit/order will not result in any adverse impacts upon invertebrate communities in the transitional waterbody			
Macroalgae	Good	Negligible	The drought permit/order will not result in any adverse impact upon macroalgae and phytobenthos in the transitional waterbody			
Phytobenthos	Good	Negligible				
Chemical (overall)	Fail	Negligible	The waterbody is currently failing to achieve good status and there is a negligible risk of further deterioration to the waterbody's chemical status during the operation of the drought order.			
Water Body Mitigation Measure	No published	mitigation measure	es.			
WFD Protect	ed Areas					
Bathing Water Directive	Drinking Water Directive	Conservation of Wild Birds Directive	Habitats Directive	Nitrates Directive	Shellfish Directive	Urban Waste Water Treatment Directive



NO	YES	YES	YES	YES	YES	YES		
Protected	l Area Details	vulnerab sensitive scheme changes EA disch Shellfish impacts SPA: So SPA and and Dor condition drought	Nutrient sensitive areas: The water body is associated with a surface water nitrate vulnerable zone under the Nitrates Directive. (Southampton Water) is a nutrient sensitive area under the Urban Waste Water Treatment Directive. However, the scheme will not affect the management of the protected area and no significant changes in water quality are expected; the discharge would be permitted through the EA discharge permit controls.  Shellfish Waters: The proposed drought measures will not result in any adverse impacts on the shellfish designation.  SPA: Southampton Water is designated under the Solent and Southampton Water SPA and Ramsar sites both of which are also included in the proposed SPA - Solent and Dorset Coast pSPA. The operation of the scheme during prevailing drought conditions is unlikely to impact marine habitats significantly more than the prevailing drought conditions due to the dynamic relationship between tidal inundation and the freshwater inputs and the distance of these designated habitats from the abstraction					
Does th	e component com	ply with W	FD Objective?					
1. No deterioration between status classes		Yes; complies with WFD objective.						
2. No imp	pediments to GES/GEI	<b>-</b>	Yes; complies with WFD objective.					
3. No compromises to water body objectives			Yes; complies with WFD objective.					
4. No effe	ects on other water bo	dies	Yes; complies with	NFD objective.				
	drance to attainment of sfor protected area	of	Yes; complies with	WFD objective.				
priority su	drance to measures to abstances, priority haz es and other pollutants	ardous	Yes; complies with	n WFD objective.				

