Option	2111	40 MI/d capacity raw water abstraction from the	Assessed magnitude of hydrological effect:	Moderate				
Option	2.1.1.1	Trent to Blithfield	Sources & pathways of potential effect:					
Water body type	-	River	his component has been considered for further assessment based on operational activities. When support is required at					
Hydromorph designa	ation	Not designated artificial or heavily modified	e Blithfield Reservoir, 40MI/d will be transferred from the River Trent and discharged to the reservoir. This will lead					
Water body ID		GB104028047300	rougnly a 6.6% decrease in Q95 flows downstream of the River Trent in turn impacting in-channel habitats, water quali					
Water body name		Trent from River Sow to Moreton Brook	pressures and geomorphological processes.					

	Baselin	e Status	Rea	isons fo	or not a	chievin	g good status	Assessment of component				
Status element	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments		
Fish								Prolonged reduction in river flow at times of low river flow may have an impact on diversity, connectivity and usable area of fish habitat in channel. Potential for water quality reductions, from reduction in buffering capacity for continuous and intermittent water quality pressures known in this water body. It is expected that, as this would require a new abstraction license, a suitable hands-off flow condition, in line with that in the CAMS for the Staffordshire Trent Valley would be built include the license to appure	Compliant (low conf.)	Compliant (low conf.)		
Invertebrates							Urbanisation - urban development (probable); Sewage discharge (continuous) (confirmed)	that there would not be any deterioration in the biological status elements.	Compliant (low conf.)	Compliant (low conf.)		
Macrophytes/ phytobenthos							Urbanisation - urban development (probable); Sewage discharge (continuous) (confirmed)		Compliant (low conf.)	Compliant (low conf.)		
Phys-chem water quality (in support of ecological status)					Notes: to Urba develop Sewage (confirm	Phosph inisatior oment (p e discha ned)	ate - Poor. Linked n - urban probable); arge (continuous)	A reduction in river flows could reduce the buffering capacity against the water quality pressures this water body. It is expected that a suitable hands-off flow condition, in line with that in the CAMS for the Staffordshire Trent Valley would be built into the new license to ensure that there would not be any deterioration water quality.	Compliant (low conf.)	Compliant (low conf.)		
Chemicals			Fails or	n mercu	ry & cor	npound	s, and PBDE	It is unlikely that there would be deterioration in chemical status in this water body.	Compliant (med. conf.)	Compliant (med. conf.)		
RBMP2 water body	measures		None					No RBMP2 water body measures associated with this water body.	n/a	Compliant (high conf.)		
								Overall assessment of WFD Regulations compliance of the component in this water body	Com (low o	pliant conf.)		

Ontion	2111	40 MI/d ca	apacity raw water abstraction from the	Assessed	magnitude of hydrological effect:	Minor						
Ориоп	2.1.1.1	Trent to B	lithfield	Sources 8	Sources & pathways of potential effect:							
Water body type		Lake		This comp	his component has been screened for further assessment based on the operational activities. The increase in water							
Hydromorph designa	ation	Heavily M	odified	entering th	ntering the reservoir will increase the water level and displace marginal habitats.							
Water body ID		GB30435	478	1								
Water body name		Blithfield I	Reservoir									
	Baselin	e Status			Assessment of component							
Status element	RBMP2 status (2015)	RBMP3 status	Reasons for not achieving good	status	Assessment	Potential for deterioration	Potential for introduction of impediments					
Phytoplankton			Poor livestock management (probable nutrients) linked to	The ecology in the reservoir environment will be used to variable level regimes since Blithfield Reservoir is a heavily modified water body that is designed for water resources purposes. Increasing the water level of this water body will not lead to deterioration in the biological status elements in this water body.	Compliant (high conf.)	n/a					
Invertebrates	Not assessed	Not assessed				Compliant (high conf.)	n/a					
Macrophytes/ phytobenthos	Not assessed	Not assessed				Compliant (high conf.)	n/a					
Phys-chem water quality (in support of ecological status)			Poor for total phosphorus (poor livesto management- prob.) and bad for total	ock nitrogen	This component is not expected to lead to deterioration in the phys-chem water quality.	Compliant (high conf.)	Compliant (high conf.)					
Chemicals			Fail for PBDE, PFOS and mercury		This component is not expected to lead to deterioration in the chemical water quality.	Compliant (high conf.)	Compliant (high conf.)					
RBMP2 water body	measures		1		No RBMP2 water body measures associated with this water body.	n/a	Compliant (high conf.)					
					Overall assessment of WFD Regulations compliance of the component in this water body	Com (high	pliant conf.)					

Ontion	2211	Increase	storage at Blithfield: Increase dam	Assessed	I magnitude of hydrological effect:	Minor					
Option	2.2.1.1	height by	1m	Sources &	Sources & pathways of potential effect:						
Water body type		Lake		This comp	This component has been screened for further assessment based on the operational activities. The increase in capacity of he reservoir will change the water level and displace marginal habitats.						
Hydromorph designa	ation	Heavily M	lodified	the reserve							
Water body ID		GB30435	478	4							
Water body name		Blithfield I	Reservoir								
·	Baselin	e Status	_		Assessment of component	r					
Status element	RBMP2 status (2015)	RBMP3 status	Reasons for not achieving good	l status	Assessment	Potential for deterioration	Potential for introduction of impediments				
Phytoplankton			Poor livestock management (probable nutrients	e) linked to	The ecology in the reservoir environment will be used to variable level regimes since Blithfield Reservoir is a heavily modified water body that is designed for water resources purposes. Altering the water level of this water body will not lead to deterioration in the biological status elements in this water body.	Compliant (high conf.)	n/a				
Invertebrates	Not assessed	Not assessed				Compliant (high conf.)	n/a				
Macrophytes/ phytobenthos	Not assessed	Not assessed				Compliant (high conf.)	n/a				
Phys-chem water quality (in support of ecological status)			Poor for total phosphorus (poor livesto management- prob.) and bad for total	ock nitrogen	This component is not expected to lead to deterioration in the phys-chem water quality.	Compliant (high conf.)	Compliant (high conf.)				
Chemicals			Fail for PBDE, PFOS and mercury		This component is not expected to lead to deterioration in the chemical water quality.	Compliant (high conf.)	Compliant (high conf.)				
RBMP2 water body	measures		None		No RBMP2 water body measures associated with this water body.	n/a	Compliant (high conf.)				
					Overall assessment of WFD Regulations compliance of the component in this water body	Com (high	pliant conf.)				

Option	2211	Increase storage at Blithfield: Increase dam	Assessed magnitude of hydrological effect:	Minor				
	2.2.1.1	height by 1m	Sources & pathways of potential effect:					
Water body type	-	River	This water body has been progressed to level 3 impact assessment due to the increase in Blithfield Reservoir dam height.					
Hydromorph designation		Heavily modified	The increase in Blithfield Reservoir capacity has the potential to impact the hydrological regime in the downstream					
Water body ID		GB104028046491	to impact in chapped babitate and water quality.					
Water body name		Blithe - Tad Bk to R Trent	to impact in chaminel habitats and water quality.					

	Baseline Status	Rea	asons fo	or not a	chievin	g good status	Assessment of component		
Status element	Draft RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish							Though the hydrological impact is uncertain, the magnitude of flow change is expected to be minor. There is also expected to be negligible water quality impacts. As such, it is not expected that this impact would cause deterioration of the any of the biological status elements in this water body. In order to constrain the potential effects with more certainty, further investigation is recommended into the effects on this water body in response to an increased change in operation of fluctuations.	Compliant (med. conf.)	n/a
Invertebrates							modelling should be utilised to investigate the potential change in hydrological regime in this water body in order to better inform the impacts on the biological status elements.	Compliant (med. conf.)	n/a
Macrophytes/ phytobenthos					Probable			Compliant (med. conf.)	n/a
Phys-chem water quality (in support of ecological status)		Phospl associa (prob) a	hate ach ated with and poo	ieved Pon poor nu r livesto	oor stat utrient n ck mana	us (2019) nanagement agement (prob).	The phys-chem water quality pressures in this water body are unlikely to be exacerbated in response to the change in outflow regime from Blithfield Reservoir.	Compliant (med. conf.)	Compliant (med. conf.)
Chemicals		Fail for	mercur	y and Pl	BDE		This impact is unlikely to cause deterioration in the chemical water quality in this water body.	Compliant (med. conf.)	Compliant (med. conf.)
RBMP2 water body	measures	None					There are no water body measures in this water body.	n/a	Compliant (high conf.)
· · · · · · · · · · · · · · · · · · ·							Overall assessment of WFD Regulations compliance of the component in this water body	Com (med.	pliant conf.)

Ontion	2224	Increase	storage at Blithfield: Increase dam	Assessed	I magnitude of hydrological effect:	Minor					
Οριιοπ	۷.۷.۷ ۱	height by	2m	Sources &	Sources & pathways of potential effect: This component has been screened for further assessment based on the operational activities. The increase in capacity of the reservoir will change the water level and displace marginal habitats.						
Water body type		Lake		This comp							
Hydromorph designa	ation	Heavily M	lodified	the reserve							
Water body ID		GB30435	478	4							
Water body name		Blithfield I	Reservoir								
	Baselin	e Status			Assessment of component						
Status element	RBMP2 status (2015)	RBMP3 status	Reasons for not achieving good	d status	Assessment	Potential for deterioration	Potential for introduction of impediments				
Phytoplankton			Poor livestock management (probable nutrients	e) linked to	The ecology in the reservoir environment will be used to variable level regimes since Blithfield Reservoir is a heavily modified water body that is designed for water resources purposes. Altering the water level of this water body will not lead to deterioration in the biological status elements in this water body.	Compliant (high conf.)	n/a				
Invertebrates	Not assessed	Not assessed				Compliant (high conf.)	n/a				
Macrophytes/ phytobenthos	Not assessed	Not assessed				Compliant (high conf.)	n/a				
Phys-chem water quality (in support of ecological status)			Poor for total phosphorus (poor livestor management- prob.) and bad for total	ock nitrogen	This component is not expected to lead to deterioration in the phys-chem water quality.	Compliant (high conf.)	Compliant (high conf.)				
Chemicals			Fail for PBDE, PFOS and mercury		This component is not expected to lead to deterioration in the chemical water quality.	Compliant (high conf.)	Compliant (high conf.)				
RBMP2 water body	measures		None		No RBMP2 water body measures associated with this water body.	n/a	Compliant (high conf.)				
					Overall assessment of WFD Regulations compliance of the component in this water body	Com (high	pliant conf.)				

Ontion	2221	Increase storage at Blithfield: Increase dam	Assessed magnitude of hydrological effect:	Minor				
Option	2.2.2.1	height by 2m	Sources & pathways of potential effect:					
Water body type		River	This water body has been progressed to level 3 impact assessment due to the increase in Blithfield Reservoir dam height. The increase in Blithfield Reservoir capacity has the potential to impact the hydrological regime in the downstream water					
Hydromorph designation		Heavily modified						
Water body ID		GB104028046491	body. There is uncertainty regarding the magnitude of this change, however, it is likely to be mino	r. This has the potential				
Water body name		Blithe - Tad Bk to R Trent	to impact in channel habitats and water quality.					

	Baseline Status	Rea	isons fo	or not a	chievin	g good status	Assessment of component				
Status element	Draft RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments		
Fish							Though the hydrological impact is uncertain, the magnitude of flow change is expected to be minor. There is also expected to be negligible water quality impacts. As such, it is not expected that this impact would cause deterioration of the any of the biological status elements in this water body. In order to constrain the potential effects with more certainty, further investigation is recommended into the effects on this water body in reconcerte to an increased change in operation of Blithfield Reservoir. Water resources	Compliant (low conf.)	n/a		
Invertebrates							modelling should be utilised to investigate the potential change in hydrological regime in this water body in order to better inform the impacts on the biological status elements.	Compliant (low conf.)	n/a		
Macrophytes/ phytobenthos					Probable			Compliant (low conf.)	n/a		
Phys-chem water quality (in support of ecological status)		Phosph associa (prob) a	nate ach ated with and poo	ieved Po n poor nu r livesto	oor state utrient n ck mana	us (2019) nanagement agement (prob).	The phys-chem water quality pressures in this water body are unlikely to be exacerbated in response to the change in outflow regime from Blithfield Reservoir.	Compliant (med. conf.)	Compliant (med. conf.)		
Chemicals		Fail for	mercury	y and PE	3DE		This impact is unlikely to cause deterioration in the chemical water quality in this water body.	Compliant (med. conf.)	Compliant (med. conf.)		
RBMP2 water body r	measures	None					There are no water body measures in this water body.	n/a	Compliant (high conf.)		
							Overall assessment of WFD Regulations compliance of the component in this water body	Com (low (pliant conf.)		

Option	224	Cholmora	h Dooor		MI/d of	om roici	na	Assessed	a magnitude of hydrological effect:	Major					
Ориоп	2.3.1	Cheimars	n keser		ivii/u - <2		iig	Sources	& pathways of potential effect:	-					
Water body type		River						This water body has been screened into further assessment based on operational activities. There would be a 15MI/d increase in flows in this water body as a result of the releases made from Vyrnwy Reservoir in order to support the							
Hydromorph designation	ation	Heavily M	odified					increase i	increase in flows in this water body as a result of the releases made from Vyrnwy Reservoir in order to support the additional abstraction from the River Severn to Chelmarsh Reservoir. This would lead to a change in flow velocities, depth and marginal habitats.						
Water body ID		GB10905	4049880)				additional							
Water body name		Vyrnwy -	Lake Vy	rnwy to	conf Afc	on Cowr	ıwy	and marg	u marginar nabitats.						
	Baselin	e Status	Rea	isons fo	or not a	chievin	g good	status	Assessment of component						
Status element	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	(Other	Assessment	Potential for deterioration	Potential for introduction of impediments				
Fish	High	High							As part of the Severn-Thames Transfer SRO work, investigations were made into the impact of increasing releases from Vyrnwy Reservoir to the River Vyrnwy to support the associated abstraction. It was found that a flow increase up to 75MI/d in the river would not cause significant change in flow type/aquatic habitat. As a result, there would be no deterioration in the biological status elements as a result of the operation of the operation	Compliant (med. conf.)	n/a				
Invertebrates	Not Assessed								It is important to note that this assessment is based on the assumption that the component would not be operational at the same time as the Severn Regulation Releases.	Compliant (med. conf.)	n/a				
Macrophytes/ phytobenthos	Not Assessed	Not Assessed								Compliant (med. conf.)	n/a				
Phys-chem water quality (in support of ecological status)	Phys-chem water quality (in support of ecological status)								Increasing the flows in this water body would not lead to deterioration in phys-chem water quality status.	Compliant (high conf.)	Compliant (high conf.)				
Chemicals	Chemicals								Increasing the flows in this water body would not lead to deterioration in chemical water quality status.	Compliant (high conf.)	Compliant (high conf.)				
RBMP2 water body	None 3MP2 water body measures								No RBMP2 water body measures associated with this water body.	n/a	Compliant (high conf.)				
									Overall assessment of WFD Regulations compliance of the component in this water body	Com (med.	pliant conf.)				

Ontion	0.0.0	Chalmara	h Door		VII/d	to Ore	roioinc	Assessed	d magnitude of hydrological effect:	Major				
Option	2.3.2	Cheimars	n Keser	voir 30 I	vii/a - up	οιο ∠m	raising	Sources & pathways of potential effect:						
Water body type	-	River						This water body has been screened into further assessment based on operational activities. There would be a 30MI/c increase in flows in this water body as a result of the releases made from Vyrnwy Reservoir in order to support the						
Hydromorph design	ation	Heavily M	odified					increase i	increase in flows in this water body as a result of the releases made from Vyrnwy Reservoir in order to support the additional abstraction from the River Severn to Chelmarsh Reservoir. This would lead to a change in flow velocities, depth and marginal habitats.					
Water body ID		GB10905	4049880)				additional						
Water body name		Vyrnwy - I	Lake Vy	rnwy to	conf Afc	on Cowr	iwy	and marg						
	Baselin	e Status	Rea	isons fo	or not a	chievin	g good	status	Assessment of component					
Status element	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	C	Dther	Assessment	Potential for deterioration	Potential for introduction of impediments			
Fish	High	High							As part of the Severn-Thames Transfer SRO work, investigations were made into the impact of increasing releases from Vyrnwy Reservoir to the River Vyrnwy to support the associated abstraction. It was found that a flow increase up to 75MI/d in the river would not cause significant change in flow type/aquatic habitat. As a result, there would be no deterioration in the biological status elements as a result of the operation of this component.	Compliant (med. conf.)	n/a			
Invertebrates	Not Assessed								It is important to note that this assessment is based on the assumption that the component would not be operational at the same time as the Severn Regulation Releases.	Compliant (med. conf.)	n/a			
Macrophytes/ phytobenthos	Not Assessed	Not Assessed								Compliant (med. conf.)	n/a			
Phys-chem water quality (in support of ecological status)		High					-		Increasing the flows in this water body would not lead to deterioration in phys-chem water quality status.	Compliant (high conf.)	Compliant (high conf.)			
Chemicals									Increasing the flows in this water body would not lead to deterioration in chemical water quality status.	Compliant (high conf.)	Compliant (high conf.)			
RBMP2 water body	None BMP2 water body measures								No RBMP2 water body measures associated with this water body.	n/a	Compliant (high conf.)			
									Overall assessment of WFD Regulations compliance of the component in this water body	Com (med.	pliant conf.)			

Ontion	611	40 MI/d capacity treatment works on the Trent, with 14 day	Assessed magnitude of hydrological effect:	Moderate				
Option	0.1.1	storage	Sources & pathways of potential effect:					
Water body type		River	This component has been considered for further assessment based on operational activities. When support is required,					
Hydromorph designa	ation	Not designated artificial or heavily modified	40MI/d will be transferred from the River Trent and discharged to bankside storage. This will lead	to up to a 6.2% decrease				
Water body ID		GB104028047290	In Q95 flows downstream of the River Trent. This would be a moderate decrease in flow leading to potential changes in I changes in the potential c					
Water body name		Trent from Moreton Brook to River Tame	- channel habitats, water quality and geomorphological processes					

	Baselin	e Status	Rea	asons fo	or not a	chievin	g good status	Assessment of component			
Status element	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments	
Fish				Suspected				Prolonged reduction in river flow at times of low river flow may have an impact on diversity, connectivity and usable area of fish habitat in channel. Potential for water quality reductions, from reduction in buffering capacity for continuous and intermitter water quality pressures known in this water body. It is expected that a suitable hands off flow condition, in line with that in the CAMS for the Staffordshire Trent Valley would be the transformed of the stafford of the	Compliant (low conf.)	Compliant (low conf.)	
Invertebrates								biological status elements.	Compliant (low conf.)	Compliant (low conf.)	
Macrophytes/ phytobenthos						Confirmed			Compliant (low conf.)	Compliant (low conf.)	
Phys-chem water quality (in support of ecological status)			Phosph develop manag dischar dischar	nate - Po pment (p ement (rge (con rge (prot	por asso prob.), p prob.), c f.) and in p.)	ociated v oor lives ontinuo ntermitte	vith urban stock us sewage ent sewage	A reduction in river flows could reduce the buffering capacity against the water quality pressures this water body. It is expected that a suitable hands-off flow condition, in line with that in the CAMS for the Staffordshire Trent Valley would be built into the new license to ensure that there would not be any deterioration water quality.	Compliant (low conf.)	Compliant (low conf.)	
Chemicals			Fails or i)peryle	n mercu ene	ry, PBD	E, and I	Benzo(g-h-	It is unlikely that there would be deterioration in chemical status in this water body.	Compliant (med. conf.)	Compliant (med. conf.)	
RBMP2 water body i	measures		None					No RBMP2 water body measures associated with this water body.	n/a	Compliant (high conf.)	
								Overall assessment of WFD Regulations compliance of the component in this water body	Com (low o	pliant conf.)	

Ontion	745	Third Part	y Option: Canal & Rivers Trust:	Assessed	I magnitude of hydrological effect:	n/a	
Option	7.1.5	Chasewat	er options	Sources &	& pathways of potential effect:	•	
Water body type	-	Groundwa	ter	This option site. There	n has progressed to Step 3 impact assessment due to plans to drill new abstraction well e might be a potential adverse hydrological impact on the groundwater body associated	s at the SSW with this option	/ Pipehill on,
Water body ID		GB404010	G301000	including:	impacts on connected surface water and the overall water balance. It is noted that the F	oor status is	associated
Water body name		Tame Ank Birmingha	er Mease - PT Sandstone m Lichfield	GW body	is poor and the Shenstone GWMU has no water available.	iali status (2	019) of the
	Baselin	ne Status			Assessment of component		
Status element	RBMP2 status (2015)	RBMP3 status	Reasons for not achieving good	d status	Assessment	Potential for deterioration	Potential for introduction of impediments
Dependent surface water body status			Groundwater abstractions and flow		The dependent surface water bodies will be supported through releases from Chasewater Reservoir, so it unlikely that there will be a net decrease in surface water flow.	Compliant (med. conf.)	Compliant (med. conf.)
Ground water dependent terrestrial ecosystem test					The review has highlighted that no SSSI groundwater dependent ecosystems are associated with the groundwater body.	Compliant (med. conf.)	n/a
Saline intrusion					The proposed option has no risk associated with saline intrusion.	Compliant (med. conf.)	n/a
Water balance			Groundwater abstractions and flow		The proposed increase in abstraction rates is not considered to be a significant risk of deterioration to the overall water balance of the wider Permo-Triassic Sandstone water body. However it is noted that the water body is currently classed as Poor status and the GWMU falls within the Water Not Available area (no new licences).	Non- compliant (med. conf.)	Non- compliant (med. conf.)
Chemical (overall)			Agriculture and rural land management	nt	The proposed option is not expected to cause a risk of deterioration in chemical status.	Compliant (low conf.)	Compliant (low conf.)
None RBMP2 water body measures					There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)
					Overall assessment of WFD Regulations compliance of the component in this water body	Non-cc (med.	ompliant conf.)

Ontion	745	Third Part	y Optior	n: Canal	& River	s Trust:	: /	Assessed magnitude of hydrological effect: Uncertain				
Орион	7.1.5	Chasewat	er optio	ns			5	Sources &	& pathways of potential effect:	-		
Water body type	-	River					Т	This water	body has been screened into further assessment based on operational activities. The	option would	augment	
Hydromorph designa	ation	No design	ation				fl	lows in thi	is water body with water from Chasewater Reservoir to free up additional water in this c	atchment for	abstraction	
Water body ID		GB10402	8046480)			u	Jy 3377.	This would lead to a change in now velocities, depth and marginal habitats.			
Water body name		Crane Bro	ook - sou	urce to F	ootherle	ey Brool	k					
	Baselin	e Status	Rea	asons fo	or not a	chievin	g good s	status	Assessment of component		-	
Status element	RBMP2 status (2015)	RBMP3 status	ed Flow Morphology Sanitary water quality Nutrients Nutrients			Oth	her	Assessment	Potential for deterioration	Potential for introduction of impediments		
Fish			Confirmed				Sedir (probab organic r (confir	iment ble) and pollution irmed)	Using water from Chasewater Reservoir will augment the flow in this catchment and allow abstraction elsewhere. This could help to relax the flow and water quality pressures in this water body however it is expected that part of this augmentation flow increase would be counteracted by flow reduction associated with additional abstraction from the new Pipehill borehole.	Compliant (low conf.)	Compliant (low conf.)	
Invertebrates			Probable	Probable					It is not expected that this option would cause deterioration in any of the biological status elements in this water body and would not impede them to achieving good status.	Compliant (low conf.)	Compliant (low conf.)	
Macrophytes/ phytobenthos						Confirmed				Compliant (low conf.)	Compliant (low conf.)	
Phys-chem water quality (in support of ecological status)			Bad for DO ass (prob), urbanis	r ammor sociated continue sation (p	nia, bad with po ous sew rob.)	for phos or nutrie age dise	sphate, po ent manag charge (co	oor for gement conf.) and	Increasing the flows in this water body would not lead to deterioration in phys-chem water quality status.	Compliant (med. conf.)	Compliant (med. conf.)	
Chemicals			Fail for	mercur	y, PBDE	and Pf	FOS		Increasing the flows in this water body would not lead to deterioration in chemical water quality status.	Compliant (med. conf.)	Compliant (med. conf.)	
RBMP2 water body	None RBMP2 water body measures								There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)	
									Overall assessment of WFD Regulations compliance of the component in this water body	Com (med.	pliant conf.)	

Ontion	7511	UU Vyrnw	y reserv	oir raw	water re	lease 1	5 Ml/d	All/d Assessed magnitude of hydrological effect: Major			
Οριιοπ	7.5.1.1	to River S	evern to	suppor	rt SSW			Sources	& pathways of potential effect:	-	
Water body type		River						This wate	r body has been screened into further assessment based on operational activities. Ther	e would be a	15MI/d
Hydromorph designation	ation	Heavily M	odified					increase i	n flows in this water body as a result of the releases made from Vyrnwy Reservoir in ord	er to support	tne
Water body ID		GB10905	4049880)				additional			
Water body name		Vyrnwy - I	_ake Vy	rnwy to	conf Afc	on Cowr	iwy				
	Baselin	e Status	Rea	isons f	or not a	chievin	g good	status	Assessment of component		
Status element	RBMP2 status (2015)	RBMP3 status	Flow	Flow Morphology Sanitary water quality Nutrients				Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	High	High							As part of the Severn-Thames Transfer SRO work, investigations were made into the impact of increasing releases from Vyrnwy Reservoir to the River Vyrnwy to support the associated abstraction. It was found that a flow increase up to 75MI/d in the river would not cause significant change in flow type/aquatic habitat. As a result, there would be no deterioration in the biological status elements as a result of the operation of the component.	Compliant (med. conf.)	n/a
Invertebrates	Not Assessed								It is important to note that this assessment is based on the assumption that the component would not be operational at the same time as the Severn Regulation Releases.	Compliant (med. conf.)	n/a
Macrophytes/ phytobenthos	Not Assessed	Not Assessed								Compliant (med. conf.)	n/a
Phys-chem water quality (in support of ecological status)		High							Increasing the flows in this water body would not lead to deterioration in phys-chem water quality status or introduce an impediment to Good status.	Compliant (high conf.)	Compliant (high conf.)
Chemicals									Increasing the flows in this water body would not lead to deterioration in chemical water quality status.	Compliant (high conf.)	Compliant (high conf.)
RBMP2 water body	RBMP2 water body measures								There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)
									Overall assessment of WFD Regulations compliance of the component in this water body	Com (med.	pliant conf.)

Ontion	7540	UU Vyrnw	y reserv	oir raw	water re	lease 3	0 MI/d	MI/d Assessed magnitude of hydrological effect: Major			
Option	7.5.1.2	to River S	evern to	suppor	rt SSW			Sources	& pathways of potential effect:	-	
Water body type	-	River						This wate	r body has been screened into further assessment based on operational activities. There	e would be a	30MI/d
Hydromorph design	ation	Heavily M	odified					increase i	n flows in this water body as a result of the releases made from Vyrnwy Reservoir in orce	ler to support	the
Water body ID		GB10905	4049880)				auditional	abstraction. This would lead to a change in now velocities, depth and marginal habitats		
Water body name		Vyrnwy - I	_ake Vy	rnwy to	conf Afo	on Cown	wy				
	Baselin	e Status	Rea	isons fo	or not a	chievin	g good	status	Assessment of component		
Status element	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	(Dther	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	High	High							As part of the Severn-Thames Transfer SRO work, investigations were made into the impact of increasing releases from Vyrnwy Reservoir to the River Vyrnwy to support the associated abstraction. It was found that a flow increase up to 75MI/d in the river would not cause significant change in flow type/aquatic habitat. As a result, there would be no deterioration in the biological status elements as a result of the operation of the component.	Compliant (med. conf.)	n/a
Invertebrates	Not Assessed								It is important to note that this assessment is based on the assumption that the component would not be operational at the same time as the Severn Regulation Releases.	Compliant (med. conf.)	n/a
Macrophytes/ phytobenthos	Not Assessed	Not Assessed								Compliant (med. conf.)	n/a
Phys-chem water quality (in support of ecological status)		High							Increasing the flows in this water body would not lead to deterioration in phys-chem water quality status or introduce an impediment to Good status.	Compliant (high conf.)	Compliant (high conf.)
Chemicals									Increasing the flows in this water body would not lead to deterioration in chemical water quality status.	Compliant (high conf.)	Compliant (high conf.)
RBMP2 water body	None RBMP2 water body measures								There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)
									Overall assessment of WFD Regulations compliance of the component in this water body	Com (med.	pliant conf.)

Ontion	7540	UU Vyrnw	y reserv	oir raw	water re	lease 4	5 Ml/d	/II/d Assessed magnitude of hydrological effect: Major			
Option	7.5.1.3	to River S	evern to	suppor	t SSW			Sources	& pathways of potential effect:		
Water body type	-	River						This wate	r body has been screened into further assessment based on operational activities. Ther	e would be a	45MI/d
Hydromorph designa	ation	Heavily M	odified					increase i	n flows in this water body as a result of the releases made from Vyrnwy Reservoir in ord	ler to support	the
Water body ID		GB10905	4049880)				auditional).	
Water body name		Vyrnwy - I	_ake Vy	rnwy to	conf Afc	on Cowr	iwy				
	Baselin	e Status	Rea	sons fo	or not a	chievin	g good	status	Assessment of component		-
Status element	RBMP2 status (2015)	RBMP3 status	Flow	Morphology Sanitary water quality Nutrients				Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	High	High							As part of the Severn-Thames Transfer SRO work, investigations were made into the impact of increasing releases from Vyrnwy Reservoir to the River Vyrnwy to support the associated abstraction. It was found that a flow increase up to 75MI/d in the river would not cause significant change in flow type/aquatic habitat. As a result, there would be no deterioration in the biological status elements as a result of the operation of the operation	Compliant (med. conf.)	n/a
Invertebrates	Not Assessed								It is important to note that this assessment is based on the assumption that the component would not be operational at the same time as the Severn Regulation Releases.	Compliant (med. conf.)	n/a
Macrophytes/ phytobenthos	Not Assessed	Not Assessed								Compliant (med. conf.)	n/a
Phys-chem water quality (in support of ecological status)		High							Increasing the flows in this water body would not lead to deterioration in phys-chem water quality status or introduce an impediment to Good status.	Compliant (high conf.)	Compliant (high conf.)
Chemicals									Increasing the flows in this water body would not lead to deterioration in chemical water quality status.	Compliant (high conf.)	Compliant (high conf.)
RBMP2 water body	RBMP2 water body measures								There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)
									Overall assessment of WFD Regulations compliance of the component in this water body	Com (med.	pliant conf.)

Ontion	7514	UU Vyrnw	y reserv	oir raw	water re	lease 7	5 MI/d	All/d Assessed magnitude of hydrological effect: Major			
Οριιοπ	7.5.1.4	to River S	evern to	suppor	rt SSW			Sources	& pathways of potential effect:	-	
Water body type		River						This wate	r body has been screened into further assessment based on operational activities. Ther	e would be a	75Ml/d
Hydromorph designation	ation	Heavily M	odified					Increase in additional	n flows in this water body as a result of the releases made from Vyrnwy Reservoir in ord	er to support	tne
Water body ID		GB10905	4049880)				adunional			
Water body name		Vyrnwy - I	_ake Vy	rnwy to	conf Afc	on Cowr	iwy				
	Baselin	e Status	Rea	isons f	or not a	chievin	g good	status	Assessment of component		
Status element	RBMP2 status (2015)	RBMP3 status	Flow	Flow Morphology Sanitary water quality Nutrients				Dther	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	High	High							As part of the Severn-Thames Transfer SRO work, investigations were made into the impact of increasing releases from Vyrnwy Reservoir to the River Vyrnwy to support the associated abstraction. It was found that a flow increase up to 75MI/d in the river would not cause significant change in flow type/aquatic habitat. As a result, there would be no deterioration in the biological status elements as a result of the operation of the component.	Compliant (med. conf.)	n/a
Invertebrates	Not Assessed								It is important to note that this assessment is based on the assumption that the component would not be operational at the same time as the Severn Regulation Releases.	Compliant (med. conf.)	n/a
Macrophytes/ phytobenthos	Not Assessed	Not Assessed								Compliant (med. conf.)	n/a
Phys-chem water quality (in support of ecological status)		High							Increasing the flows in this water body would not lead to deterioration in phys-chem water quality status or introduce an impediment to Good status.	Compliant (high conf.)	Compliant (high conf.)
Chemicals									Increasing the flows in this water body would not lead to deterioration in chemical water quality status.	Compliant (high conf.)	Compliant (high conf.)
RBMP2 water body	RBMP2 water body measures								There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)
									Overall assessment of WFD Regulations compliance of the component in this water body	Com (med.	pliant conf.)

Ontion	045	Third Party Option: drill new GW source with		Assessed	I magnitude of hydrological effect:	n/a	
Option	6.1.5	licence trac	de	Sources &	& pathways of potential effect:		
Water body type	-	Groundwat	ter	This option in Burton.	n has progressed to Step 3 impact assessment due to plans to drill new abstraction well There might be a potential adverse hydrological impact on the groundwater body associ	s at the Com	pany X site s option,
Water body ID		GB404020	990800	including:	impacts on connected surface water and the overall water balance.		
Water body name		Tame Ank	er Mease - Secondary Combined				
	Baselir	e Status			Assessment of component		
Status element	RBMP2 status (2015)	RBMP3 status	Reasons for not achieving good	d status	Assessment	Potential for deterioration	Potential for introduction of impediments
Dependent surface water body status					It is not expected that this option would have discerible impacts on any dependent surface water bodies.	Compliant (med. conf.)	n/a
Ground water dependent terrestrial ecosystem test					The review has highlighted that no SSSI groundwater dependent ecosystems are in the vacinity of the groundwater abstraction.	Compliant (med. conf.)	n/a
Saline intrusion					The proposed option has no risk associated with saline intrusion.	Compliant (med. conf.)	n/a
Water balance					The proposed increase in abstraction rates is not considered to be a significant risk of deterioration to the overall water balance of the wider Tame Anker Mease - Secondary Combined water body. The abstraction would be situated close to the Burton GWMU where it is indicated that water may be available for abstraction through license trading.	Compliant (low conf.)	n/a
Chemical (overall)					It is not expected that this option would have discerible impacts on the chemical status of this water.	Compliant (low conf.)	n/a
RBMP2 water body	measures		None		There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)
					Overall assessment of WFD Regulations compliance of the component in this water body	Com (low	pliant conf.)

Ontion	045	Third Part	y Optior	n: drill ne	ew GW :	source v	with	Assessed magnitude of hydrological effect: Uncertain				
Option	ö.1.5	licence tra	ade					Sources &	& pathways of potential effect:	-		
Water body type	-	River					1	This water	body has been screened for further assessment based on the operational impacts. The	ere may be in	creased	
Hydromorph designa	ation	Not desig	nated ar	tificial o	r heavily	/ modifie	ed a	abstraction	n from the. Tame Anker Mease - Secondary Combined groundwater body which may be	e hydrological	ly flavor and so	
Water body ID		GB10402	8047180)				connected lead to ch:	andes in flow velocities, denth and marginal babitats	y. Reduction	in nows may	
Water body name		Trent - R	Tame to	R Dove	9		1		anges in now velocities, acpur and marginal habitats.			
	Baselin	e Status	Rea	sons fo	or not a	chievin	g good s	status	Assessment of component	-	-	
Status element	RBMP2 status (2015)	RBMP3 status	Flow Morphology ed guality water Nutrients				Ot	ther	Assessment	Potential for deterioration	Potential for introduction of impediments	
Fish				Probable	Confirmed				The hydrological change in this water body is only expected to be small as a result of additional groundwater abstraction which is insignificant in the context of the river flows in this water body. As such there are expected to be no significant changes to in- channel habitats. There is also expected to be negligible water quality impacts. As such, it is not expected that this option would cause deterioration or impede Good status of the any of the biological status elements.	Compliant (med. conf.)	Compliant (med. conf.)	
Invertebrates						Confirmed	Organic poor liv manag (pre	; pollution- vestock gement rob.)		Compliant (med. conf.)	Compliant (med. conf.)	
Macrophytes/ phytobenthos						Confirmed				Compliant (med. conf.)	Compliant (med. conf.)	
Phys-chem water quality (in support of ecological status)			Poor fo (prob.), continu (both co	r phosp poor liv ous and onfirmed	hate ass restock r I intermi d).	sociated manage ttent se	l with urba ment (pro wage disc	anisation ob.), charge	Though the actual location of the new borehole is uncertain and the hydrological impact is unclear, the magnitude of flow change is expected to be small in the context of the flows on the River Trent at this location. It is not expected that there would be significant change in dilution of water quality determinands to cause deterioration and impede Good status.	Compliant (med. conf.)	Compliant (med. conf.)	
Chemicals			Fail for	PBDE,	PFOS a	ind mer	cury (201	19)	It is unlikely that there would be deterioration in chemical status in this water body.	Compliant (med. conf.)	Compliant (med. conf.)	
RBMP2 water body	measures		none						There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)	
									Overall assessment of WFD Regulations compliance of the component in this water body	Com (med.	pliant conf.)	

Option	0 2 10	Third-party	option: new raw water storage	Assessed	magnitude of hydrological effect:	n/a	
Option	0.3. Id	reservoir cl	lose to the River Trent	Sources &	A pathways of potential effect:	-	
Water body type	-	Groundwat	ter	This option owned by	n has progressed to Step 3 impact assessment due to plans to utilise existing third party Company X, to fill a new reservoir. These existing licenses may be a mixture of surface	abstraction water abstra	licenses, ction (from
Water body ID		GB40402C	6990800	the River	I rent) and groundwater abstraction from this groundwater body. There might be a poten the groundwater body associated with this option, including impacts on connected suff.	tial adverse h ace water an	nydrological d the overall
Water body name		Tame Anke	er Mease - Secondary Combined	water bala	nce.	ace water an	
	Baselin	e Status			Assessment of component		
Status element	RBMP2 status (2015)	RBMP3 status	Reasons for not achieving good	d status	Assessment	Potential for deterioration	Potential for introduction of impediments
Dependent surface water body status					It is not expected that this option would have discernible impacts on any dependent surface water bodies.	Compliant (med. conf.)	n/a
Ground water dependent terrestrial ecosystem test					The review has highlighted that no SSSI groundwater dependent ecosystems are in the vicinity of the groundwater abstraction.	Compliant (med. conf.)	n/a
Saline intrusion					The proposed option has no risk associated with saline intrusion.	Compliant (med. conf.)	n/a
Water balance					The proposed increase in abstraction rates is not considered to be a significant risk of deterioration to the overall water balance of the wider Tame Anker Mease - Secondary Combined water body. The abstraction would be situated close to the Burton GWMU where it is indicated that water may be available for abstraction through license trading.	Compliant (low conf.)	n/a
Chemical (overall)	mical (overall)				It is not expected that this option would have discernible impacts on the chemical status of this water.	Compliant (low conf.)	n/a
RBMP2 water body	measures		None		There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)
					Overall assessment of WFD Regulations compliance of the component in this water body	Com (low	pliant conf.)

Ontion	9 2 1 2	Third-party option: new raw water storage	Assessed magnitude of hydrological effect: Uncertain						
Option	0.3.1a	reservoir close to the River Trent	Sources & pathways of potential effect: This option has progressed to Step 3 impact assessment due to plans to utilise existing third party abstraction licenses,						
Water body type		River							
Hydromorph designa	ation	Not designated artificial or heavily modified	owned by Company X, to fill a new reservoir. These existing licenses may be a mixture of surface water abstraction (from this water body) and groundwater abstraction. Though the actual abstraction volume is unclear, the reduction in flow may impact in-channel habitats, water quality and geomorphological processes in this water body. There could also be flow reductions associated with groundwater and surface water interaction.						
Water body ID		GB104028047180							
Water body name		Trent - R Tame to R Dove							

	Baselin	e Status	Rea	asons fo	or not a	chievin	g good status	Assessment of component			
Status element	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments	
Fish				Probable	Confirmed			Though the hydrological impact is unclear, the magnitude of flow change is expected to be negligible/minor in the context of the flows on the River Trent at this location and the CAMS indicates that there is water available for abstraction therefore there are expected to be no significant changes to in-channel habitats. There is also expected to be negligible water quality impacts. As such, it is not expected that this option would cause deterioration or impacte Good status of the any of the biological status.	Compliant (med. conf.)	Compliant (med. conf.)	
Invertebrates						Confirmed	Organic pollution- poor livestock management (prob.)	elements.	Compliant (med. conf.)	Compliant (med. conf.)	
Macrophytes/ phytobenthos						Confirmed			Compliant (med. conf.)	Compliant (med. conf.)	
Phys-chem water quality (in support of ecological status)			Poor fo (prob.), continu (both c	r phosp , poor liv ious anc ;onfirme	hate ass /estock r d intermi d).	sociated manage ittent se	with urbanisation ment (prob.), wage discharge	Though the hydrological impact is unclear, the magnitude of flow change is expected to be negligible/minor in the context of the flows on the River Trent at this location and the CAMS indicates that there is water available for abstraction. It is not expected that there would be significant change in dilution of water quality determinands to cause deterioration and impede Good status.	Compliant (med. conf.)	Compliant (med. conf.)	
Chemicals			Fail for	PBDE,	PFOS a	ind mero	cury (2019)	It is unlikely that there would be deterioration in chemical status in this water body.	Compliant (med. con <u>f.</u>)	Compliant (med. conf.)	
RBMP2 water body r	measures		none					There are no RBMP2 water body measures for this water body.	n/a	Compliant (high conf.)	
								Overall assessment of WFD Regulations compliance of the component in this water body	Comr (med.	pliant conf.)	