

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

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	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 into the license to ensure that there would not be any deterioration in the biological status elements.	Compliant (low conf.)	Compliant (low conf.)
Invertebrates							Urbanisation - urban development (probable); Sewage discharge (continuous) (confirmed)		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: Phosphate - Poor. Linked to Urbanisation - urban development (probable); Sewage discharge (continuous) (confirmed)			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 on mercury & compounds, 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									Compliant (low conf.)	

Option	2.1.1.1	40 MI/d capacity raw water abstraction from the Trent to Blithfield	Assessed magnitude of hydrological effect: Sources & pathways of potential effect:	Minor
Water body type	Lake		This component has been screened for further assessment based on the operational activities. The increase in water entering the reservoir will increase the water level and displace marginal habitats.	
Hydromorph designation	Heavily Modified			
Water body ID	GB30435478			
Water body name	Blithfield Reservoir			

Status element	Baseline Status		Reasons for not achieving good status	Assessment	Assessment of component	
	RBMP2 status (2015)	RBMP3 status			Potential for deterioration	Potential for introduction of impediments
Phytoplankton			Poor livestock management (probable) linked to nutrients	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 livestock management- prob.) and bad for total 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					Compliant (high conf.)	

Option	2.2.1.1	Increase storage at Blithfield: Increase dam height by 1m	Assessed magnitude of hydrological effect:	Minor
Water body type	Lake		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.	
Hydromorph designation	Heavily Modified			
Water body ID	GB30435478			
Water body name	Blithfield Reservoir			

Status element	Baseline Status		Reasons for not achieving good status	Assessment	Assessment of component	
	RBMP2 status (2015)	RBMP3 status			Potential for deterioration	Potential for introduction of impediments
Phytoplankton			Poor livestock management (probable) linked to nutrients	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 livestock management- prob.) and bad for total 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					Compliant (high conf.)	

Option	2.2.1.1	Increase storage at Blithfield: Increase dam height by 1m	Assessed magnitude of hydrological effect:	Minor
Water body type	River		Sources & pathways of potential effect: 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 body. There is uncertainty regarding the magnitude of this change, however, it is likely to be minor. This has the potential to impact in channel habitats and water quality.	
Hydromorph designation	Heavily modified			
Water body ID	GB104028046491			
Water body name	Blithe - Tad Bk to R Trent			

Status element	Baseline Status		Reasons for not achieving good status				Assessment of component		
	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 Blithfield Reservoir. Water resources 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
Invertebrates								Compliant (med. conf.)	n/a
Macrophytes/ phytobenthos					Probable			Compliant (med. conf.)	n/a
Phys-chem water quality (in support of ecological status)		Phosphate achieved Poor status (2019) associated with poor nutrient management (prob) and poor livestock management (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 and PBDE					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								Compliant (med. conf.)	

Option	2.2.2.1	Increase storage at Blithfield: Increase dam height by 2m	Assessed magnitude of hydrological effect: Sources & pathways of potential effect:	Minor
Water body type	Lake		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.	
Hydromorph designation	Heavily Modified			
Water body ID	GB30435478			
Water body name	Blithfield Reservoir			

Status element	Baseline Status		Reasons for not achieving good status	Assessment	Assessment of component	
	RBMP2 status (2015)	RBMP3 status			Potential for deterioration	Potential for introduction of impediments
Phytoplankton			Poor livestock management (probable) linked to nutrients	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 livestock management- prob.) and bad for total 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					Compliant (high conf.)	

Option	2.2.2.1	Increase storage at Blithfield: Increase dam height by 2m	Assessed magnitude of hydrological effect:	Minor
Water body type	River		Sources & pathways of potential effect: 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 body. There is uncertainty regarding the magnitude of this change, however, it is likely to be minor. This has the potential to impact in channel habitats and water quality.	
Hydromorph designation	Heavily modified			
Water body ID	GB104028046491			
Water body name	Blithe - Tad Bk to R Trent			

Status element	Baseline Status		Reasons for not achieving good status				Assessment of component		
	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 Blithfield Reservoir. Water resources 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
Invertebrates								Compliant (low conf.)	n/a
Macrophytes/ phytobenthos					Probable			Compliant (low conf.)	n/a
Phys-chem water quality (in support of ecological status)		Phosphate achieved Poor status (2019) associated with poor nutrient management (prob) and poor livestock management (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 and PBDE					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								Compliant (low conf.)	

Option	2.3.1	Chelmarsh Reservoir 15 MI/d - <2m raising	Assessed magnitude of hydrological effect:	Major
Water body type	River		Sources & pathways of potential effect: 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 additional abstraction from the River Severn to Chelmarsh Reservoir. This would lead to a change in flow velocities, depth and marginal habitats.	
Hydromorph designation	Heavily Modified			
Water body ID	GB109054049880			
Water body name	Vyrnwy - Lake Vyrnwy to conf Afon Cownwy			

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	Good	Good						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. 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
Invertebrates	Not Assessed	Good							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)	Good	Good						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	Good	Good						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 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									Compliant (med. conf.)	

Option	2.3.2	Chelmarsh Reservoir 30 MI/d - up to 2m raising	Assessed magnitude of hydrological effect:	Major
Water body type	River		Sources & pathways of potential effect: This water body has been screened into further assessment based on operational activities. There would be a 30MI/d 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.	
Hydromorph designation	Heavily Modified			
Water body ID	GB109054049880			
Water body name	Vyrnwy - Lake Vyrnwy to conf Afon Cownwy			

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	Good	Good						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. 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
Invertebrates	Not Assessed	Good							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)	Good	Good						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	Good	Good						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 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									Compliant (med. conf.)	

Option	6.1.1	40 Ml/d capacity treatment works on the Trent, with 14 day storage	Assessed magnitude of hydrological effect:	Moderate
Water body type	River		Sources & pathways of potential effect: This component has been considered for further assessment based on operational activities. When support is required, 40Ml/d will be transferred from the River Trent and discharged to bankside storage. This will lead to up to a 6.2% decrease in Q95 flows downstream of the River Trent. This would be a moderate decrease in flow leading to potential changes in in-channel habitats, water quality and geomorphological processes..	
Hydromorph designation	Not designated artificial or heavily modified			
Water body ID	GB104028047290			
Water body name	Trent from Moreton Brook to River Tame			

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	Orange	Orange		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 intermittent 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 built into the new license to ensure that there would not be any deterioration in the biological status elements.	Compliant (low conf.)	Compliant (low conf.)
Invertebrates	Green	Green							Compliant (low conf.)	Compliant (low conf.)
Macrophytes/ phytobenthos	Yellow	Orange				Confirmed			Compliant (low conf.)	Compliant (low conf.)
Phys-chem water quality (in support of ecological status)	Yellow	Yellow					Phosphate - Poor associated with urban development (prob.), poor livestock management (prob.), continuous sewage discharge (conf.) and intermittent sewage discharge (prob.)	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	Green	Red					Fails on mercury, PBDE, and Benzo(g-h-i)perylene	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									Compliant (low conf.)	

Option	7.1.5	Third Party Option: Canal & Rivers Trust: Chasewater options	Assessed magnitude of hydrological effect: Sources & pathways of potential effect:	n/a
Water body type	Groundwater		This option has progressed to Step 3 impact assessment due to plans to drill new abstraction wells at the SSW Pipehill site. There might be a potential adverse hydrological impact on the groundwater body associated with this option, including: impacts on connected surface water and the overall water balance. It is noted that the Poor status is associated with test failures on dependent surface water bodies as well as the overall water balance. The overall status (2019) of the GW body is poor and the Shenstone GWMU has no water available.	
Water body ID	GB40401G301000			
Water body name	Tame Anker Mease - PT Sandstone Birmingham Lichfield			

Status element	Baseline Status		Reasons for not achieving good status	Assessment of component		
	RBMP2 status (2015)	RBMP3 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	The proposed option is not expected to cause a risk of deterioration in chemical status.	Compliant (low conf.)	Compliant (low 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					Non-compliant (med. conf.)	

Option	7.1.5	Third Party Option: Canal & Rivers Trust: Chasewater options	Assessed magnitude of hydrological effect:	Uncertain
Water body type	River		Sources & pathways of potential effect: This water body has been screened into further assessment based on operational activities. The option would augment flows in this water body with water from Chasewater Reservoir to free up additional water in this catchment for abstraction by SSW. This would lead to a change in flow velocities, depth and marginal habitats.	
Hydromorph designation	No designation			
Water body ID	GB104028046480			
Water body name	Crane Brook - source to Fotherley Brook			

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish			Confirmed				Sediment (probable) and organic pollution (confirmed)	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					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 ammonia, bad for phosphate, poor for DO associated with poor nutrient management (prob), continuous sewage discharge (conf.) and urbanisation (prob.)		Increasing the flows in this water body would not lead to deterioration in phys-chem water quality status.	Compliant (med. conf.)
Chemicals							Fail for mercury, PBDE and PFOS	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 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									Compliant (med. conf.)	

Option	7.5.1.1	UU Vyrnwy reservoir raw water release 15 MI/d to River Severn to support SSW	Assessed magnitude of hydrological effect: Sources & pathways of potential effect:	Major
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 additional abstraction. This would lead to a change in flow velocities, depth and marginal habitats.	
Hydromorph designation	Heavily Modified			
Water body ID	GB109054049880			
Water body name	Vyrnwy - Lake Vyrnwy to conf Afon Cownwy			

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	Compliant (med. conf.)	Compliant (med. conf.)						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. 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
Invertebrates	Not Assessed	Compliant (med. conf.)							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)	Compliant (high conf.)	Compliant (med. conf.)						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	Compliant (high conf.)	Compliant (high conf.)						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 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	Compliant (med. conf.)	

Option	7.5.1.2	UU Vyrnwy reservoir raw water release 30 MI/d to River Severn to support SSW	Assessed magnitude of hydrological effect: Sources & pathways of potential effect:	Major
Water body type	River		This water body has been screened into further assessment based on operational activities. There would be a 30MI/d increase in flows in this water body as a result of the releases made from Vyrnwy Reservoir in order to support the additional abstraction. This would lead to a change in flow velocities, depth and marginal habitats.	
Hydromorph designation	Heavily Modified			
Water body ID	GB109054049880			
Water body name	Vyrnwy - Lake Vyrnwy to conf Afon Cownwy			

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	Compliant (med. conf.)	Compliant (med. conf.)						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. 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
Invertebrates	Not Assessed	Compliant (med. conf.)							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)	Compliant (high conf.)	Compliant (med. conf.)						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	Compliant (high conf.)	Compliant (high conf.)						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 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									Compliant (med. conf.)	

Option	7.5.1.3	UU Vyrnwy reservoir raw water release 45 MI/d to River Severn to support SSW	Assessed magnitude of hydrological effect: Sources & pathways of potential effect:	Major
Water body type	River		This water body has been screened into further assessment based on operational activities. There would be a 45MI/d increase in flows in this water body as a result of the releases made from Vyrnwy Reservoir in order to support the additional abstraction. This would lead to a change in flow velocities, depth and marginal habitats.	
Hydromorph designation	Heavily Modified			
Water body ID	GB109054049880			
Water body name	Vyrnwy - Lake Vyrnwy to conf Afon Cownwy			

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	Compliant (med. conf.)	Compliant (med. conf.)						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. 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
Invertebrates	Not Assessed	Compliant (med. conf.)							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)	Compliant (high conf.)	Compliant (med. conf.)						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	Compliant (high conf.)	Compliant (high conf.)						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 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									Compliant (med. conf.)	

Option	7.5.1.4	UU Vyrnwy reservoir raw water release 75 MI/d to River Severn to support SSW	Assessed magnitude of hydrological effect: Major
Water body type	River		Sources & pathways of potential effect: This water body has been screened into further assessment based on operational activities. There would be a 75MI/d increase in flows in this water body as a result of the releases made from Vyrnwy Reservoir in order to support the additional abstraction. This would lead to a change in flow velocities, depth and marginal habitats.
Hydromorph designation	Heavily Modified		
Water body ID	GB109054049880		
Water body name	Vyrnwy - Lake Vyrnwy to conf Afon Cownwy		

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	Assessment	Potential for deterioration	Potential for introduction of impediments
Fish	Good	Good						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. 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
Invertebrates	Not Assessed	Good							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)	Good	Good						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	Good	Good						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 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									Compliant (med. conf.)	

Option	8.1.5	Third Party Option: drill new GW source with licence trade	Assessed magnitude of hydrological effect: Sources & pathways of potential effect:	n/a
Water body type	Groundwater		This option has progressed to Step 3 impact assessment due to plans to drill new abstraction wells at the Company X site in Burton. There might be a potential adverse hydrological impact on the groundwater body associated with this option, including: impacts on connected surface water and the overall water balance.	
Water body ID	GB40402G990800			
Water body name	Tame Anker Mease - Secondary Combined			

Status element	Baseline Status		Reasons for not achieving good status	Assessment of component		
	RBMP2 status (2015)	RBMP3 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)				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					Compliant (low conf.)	

Option	8.1.5	Third Party Option: drill new GW source with licence trade	Assessed magnitude of hydrological effect:	Uncertain
Water body type	River		Sources & pathways of potential effect: This water body has been screened for further assessment based on the operational impacts. There may be increased abstraction from the. Tame Anker Mease - Secondary Combined groundwater body which may be hydrologically connected to this water body. It is unclear how much flows in this water body would be reduced by. Reduction in flows may lead to changes in flow velocities, depth and marginal habitats.	
Hydromorph designation	Not designated artificial or heavily modified			
Water body ID	GB104028047180			
Water body name	Trent - R Tame to R Dove			

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	RBMP2 status (2015)	RBMP3 status	Flow	Morphology	Sanitary water quality	Nutrients	Other	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							Organic pollution- poor livestock management (prob.)		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 for phosphate associated with urbanisation (prob.), poor livestock management (prob.), continuous and intermittent sewage discharge (both confirmed).					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 and mercury (2019)					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									Compliant (med. conf.)	

Option	8.3.1a	Third-party option: new raw water storage reservoir close to the River Trent	Assessed magnitude of hydrological effect: Sources & pathways of potential effect:	n/a
Water body type	Groundwater		This option has progressed to Step 3 impact assessment due to plans to utilise existing third party abstraction licenses, owned by Company X, to fill a new reservoir. These existing licenses may be a mixture of surface water abstraction (from the River Trent) and groundwater abstraction from this groundwater body. There might be a potential adverse hydrological impact on the groundwater body associated with this option, including: impacts on connected surface water and the overall water balance.	
Water body ID	GB40402G990800			
Water body name	Tame Anker Mease - Secondary Combined			

Status element	Baseline Status		Reasons for not achieving good status	Assessment of component		
	RBMP2 status (2015)	RBMP3 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)				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	Compliant (low conf.)	

Option	8.3.1a	Third-party option: new raw water storage reservoir close to the River Trent	Assessed magnitude of hydrological effect:	Uncertain
Water body type	River		Sources & pathways of potential effect: This option has progressed to Step 3 impact assessment due to plans to utilise existing third party abstraction licenses, 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.	
Hydromorph designation	Not designated artificial or heavily modified			
Water body ID	GB104028047180			
Water body name	Trent - R Tame to R Dove			

Status element	Baseline Status		Reasons for not achieving good status					Assessment of component		
	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 impede Good status of any of the biological status elements.	Compliant (med. conf.)	Compliant (med. conf.)
Invertebrates						Confirmed	Organic pollution-poor livestock management (prob.)		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 for phosphate associated with urbanisation (prob.), poor livestock management (prob.), continuous and intermittent sewage discharge (both 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. 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 and mercury (2019)					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									Compliant (med. conf.)	