	ļ	'ear Dist(km)			. AA Summary		I/C Summary
WS	Storage (SNZ): River Adur Offline	2046	7 No effect	n/a - No	-	No AE I/C	Construction effects ave
	Reservoir (19.5MI/d)			LSE			Horsham Recycling will
WS	Recycling (SNZ): Horsham with	2058 0.3/DS	Uncertain	No AE		No AE I/C	1
	storage at Pulborough (6.8MI/d)				WwTW discharge will be recovered. The Arun Valley SAC/SPA/Ramsar are functionally linked to the River		Petworth on surface wa
					Arun being a series of wet meadows which are periodically flooded/ inundated. However, evidence from		assumed then the option
					ongoing studies indicates that the wetlands are not fundamentally supported fluvially (i.e. they are are not		reduce flows in the Aru
					reliant / dependent on (for example) winter flooding from the Arun to maintain water levels), and whilst there		adjacent to the designate
					may be some localised inputs from the river where sluices etc. are not operating correctly, the vast majority of		flows per se are arguably
					the site is not supported by inward flows from the Arun but by groundwater or other surface water inputs		flows in the river may im
					from the catchment (i.e. the dominant direction of flow is from the wetlands to the river). High flows in the		wetlands is largely deter
					river may impede discharges from the wetlands, but the hydrology of the wetlands is largely determined by		management of the wate
					groundwater inputs and subsequent interventionist management of the water levels in the ditch network. The		the options on high flow
					operation of the scheme will potentially reduce flows in the Arun by 9.5Ml/d, which be around 8% of the Q95		confirm the precise oper
					flow (lowest flows) in the Arun based on gauging flow data from the Rother at Hardham, Station No. 41009;		implementation annually
					and Arun at Pallingham, Station No. 41014 (note this is conservative). However, the impact on low flows		achievable and so advers
					within the river is not considered critical to the designated site integrity for the reasons noted above; at high		there is sufficient time to
					(flood) flows (e.g. Q10) the maximum impact is around 0.4%, which is not considered likely to adversely affect		additional design and inv
					the site habitats given the understood hydrological functioning of the site. On this basis, adverse operational		additional effects from P
					effects would not be anticipated. Construction effects are all minor and avoidable with normal measures.		-
SWS	Groundwater (SNZ): New borehole	2031 4.4/DS	Uncertain	No AE	The hydrological impact of the Petworth abstraction on the Arun Valley sites alone is considered to be	No AE I/C	
	at Petworth (4MI/d)				negligible, particularly in relation to the dominant effect of groundwater supply to the designated sites and the		
					active management of water levels within the sites; the predicted flow reductions in the Arun will not be of		
					sufficient magnitude to adversely affect the site alone either directly or through secondary mechanisms such as		
					via impacts on water quality. It is considered that there is sufficient confidence to enable a conclusion of no		
					adverse effect on the integrity of the Arun Valley SPA, Arun Valley Ramsar and Arun Valley SAC to be drawn		
					for the WRMP HRA in relation to this option, alone and in combination. Construction effects can be reliably		
	Constant (CNIZ) Determinated		L la contrala		avoided with established measures.		-
5005	Groundwater (SNZ): Petersfield	2029 DS/DS	Uncertain	No AE		No AE I/C	
	refurbishment (1.6MI/d)				this is principally because:		
					• the effect of the abstraction on flows in the River Arun would be nominal (less than 1% at all except the		
					lowest flows), and only if it is assumed that the entirety of the abstraction is expressed in river flows; and		
					•although water from the River Arun enters the Arun valley sites, they are not understood to be fundamentally		
					reliant on flooding (etc.) from the River Arun for maintenance of favourable condition for a range of reasons,		
					including the role played by active water level management within the site and inputs of freshwater water from other sources (this is consistent with the position from the Pulborough Environmental WINEP investigations).		
C/ V/C	Groundwater (SNZ): Reinstate West	2029 3.1/DS	Uncortain	No AE	The effects of the abstraction 'alone' will be negligible, and not adversely affect the integrity of the site; this is	No AE I/C	-
3003		2029 3.1/D3	Uncertain	NU AE		NU AE I/C	
	Chiltington (3.1MI/d)				principally because		
					•it is not considered possible for the abstraction to directly influence spring flows within the European sites and		
					hence GWDTEs .		
					•the effect of the abstraction on flows in the River Arun would be nominal (less than 1% at all except the		
					lowest flows), and only if it is assumed that the entirety of the abstraction is expressed in river flows; •although water from the River Arun enters the Arun valley sites, they are not understood to be fundamentally		
					reliant on flooding (etc.) from the River Arun for maintenance of favourable condition for a range of reasons, including the role played by active water level management within the site and inputs of freeburater water from		
					including the role played by active water level management within the site and inputs of freshwater water from other sources (this is consistent with the position from the Pulborough Pasin WINER investigations); and		
					other sources (this is consistent with the position from the Pulborough Basin WINEP investigations); and		
					•there does not appear to be substantive connectivity between the River Stor and the designated sites (no		
C/V/C	Docucling (SNIZ), Littlehematen	2021 1/00	poortain*	No AF	sluices are noted in this section of the site based on the Pulborough Basin investigations).		-
2115	Recycling (SNZ): Littlehampton	2031 1/DS	Uncertain*	INU AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme level measures that are known to be available achievable and likely to be effective, residual effects	NU AE I/C	
	WTW with river discharge (15MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
C1 A /C	Bulk import (SNZ), SEMUDZE to	2040 1 4/00	poorto!=*		after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		-
2002	Bulk import (SNZ): SEW RZ5 to	2040 1.6/DS	Uncertain*	INO AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme level measures that are known to be evidence and likely to be effective residual effects.	INU AE I/C	
	Pulborough				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
C1 A /C	Dulk import (CNIZ), Lauret Thister	2040 1 1/00	*		after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		-
SAA10	Bulk import (SNZ): Havant Thicket	2040 1.1/DS	Uncertain*	INO AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	INO AE I/C	
3003	December to D. H. L. (Fort HUN)						
3003	Reservoir to Pulborough (50MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		

avoidable with best practice. Operation of Petworth GW and vill affect flows in the River Arun as it passes the site; the precise sely quantified (in part due to limited information on the effects of water flows in the Rother) but if a precautionary position is ions i/c will (depending on the precise parameters of operation) run by ~13.5MI/d; this would be ~11.5% of Q95 flows in the Arun ated site, and ~0.6% of Q10 flows. As noted, however, Q95 bly of limited relevance to the site integrity, and although high impede discharges from the wetlands the hydrology of the termined by groundwater inputs and subsequent interventionist ater levels in the ditch network; and, in any case, the impact of ows is negligible. Additional investigations will be required to perational parameters of the schemes including timing of ally, but operational mitigation for flow impacts is likely to be erse i/c effects would not be anticipated. It should be noted that to accurately characterise the effects of the options through investigation as the schemes are not required until 2039. NO PW option.

SWS	Desalination (SWZ): Tidal River	2046	4.6 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C
	Arun				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.
SWS	Desalination (SWZ): Tidal River	2046	4.6 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C
	Arun				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.
SWS	Interzonal transfer (SNZ-SWZ):	2040 0.2/DS	No effect	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C
	Pulborough to Worthing				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.
PW	Slindon drought permit	2026	8.4 No effect	n/a - No	0 No AE I/C
				LSE	

	Arun Valley SAC	Year	Dist(km)	Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Storage (SNZ): River Adur Offline	204	6	7 No effect	n/a - No	-	No AE I/C	Assessment as per
	Reservoir (19.5MI/d)				LSE			_
SWS	Recycling (SNZ): Horsham with	205	8 0.3/DS	Uncertain	No AE	Operation of the scheme will reduce flows in the River Arun downstream of Horsham as a proportion of the	No AE I/C	
	storage at Pulborough (6.8MI/d)					WwTW discharge will be recovered. The Arun Valley SAC/SPA/Ramsar are functionally linked to the River		
						Arun being a series of wet meadows which are periodically flooded/ inundated. However, evidence from		
						ongoing studies indicates that the wetlands are not fundamentally supported fluvially (i.e. they are are not		
						reliant / dependent on (for example) winter flooding from the Arun to maintain water levels), and whilst there		
						may be some localised inputs from the river where sluices etc. are not operating correctly, the vast majority of		
						the site is not supported by inward flows from the Arun but by groundwater or other surface water inputs		
						from the catchment (i.e. the dominant direction of flow is from the wetlands to the river). High flows in the		
						river may impede discharges from the wetlands, but the hydrology of the wetlands is largely determined by		
						groundwater inputs and subsequent interventionist management of the water levels in the ditch network. The		
						operation of the scheme will potentially reduce flows in the Arun by 9.5MI/d, which be around 8% of the Q95		
						flow (lowest flows) in the Arun based on gauging flow data from the Rother at Hardham, Station No. 41009;		
						and Arun at Pallingham, Station No. 41014 (note this is conservative). However, the impact on low flows		
						within the river is not considered critical to the designated site integrity for the reasons noted above; at high		
						(flood) flows (e.g. Q10) the maximum impact is around 0.4%, which is not considered likely to adversely affect		
						the site habitats given the understood hydrological functioning of the site. It should also be noted that the		
						qualifying features of the SAC are understood to be located in reedbeds some distance from the river. On this		
						basis, adverse operational effects would not be anticipated. Construction effects are all minor and avoidable		_
SWS	Groundwater (SNZ): New borehole	203	1 4.9/DS	Uncertain	No AE	The hydrological impact of the Petworth abstraction on the Arun Valley sites alone is considered to be	No AE I/C	
	at Petworth (4MI/d)					negligible, particularly in relation to the dominant effect of groundwater supply to the designated sites and the		
						active management of water levels within the sites; the predicted flow reductions in the Arun will not be of		
						sufficient magnitude to adversely affect the site alone either directly or through secondary mechanisms such as		
						via impacts on water quality. It is considered that there is sufficient confidence to enable a conclusion of no		
						adverse effect on the integrity of the Arun Valley SPA, Arun Valley Ramsar and Arun Valley SAC to be drawn		
						for the WRMP HRA in relation to this option, alone and in combination. Construction effects can be reliably		
						avoided with established measures.		_
SWS	Groundwater (SNZ): Petersfield	202	9 DS/DS	Uncertain	No AE	The effects of the abstraction 'alone' will be very limited, and will not adversely affect the integrity of the site;	No AE I/C	
	refurbishment (1.6MI/d)					this is principally because:		
						•the effect of the abstraction on flows in the River Arun would be nominal (less than 1% at all except the		
						lowest flows), and only if it is assumed that the entirety of the abstraction is expressed in river flows; and		
						•although water from the River Arun enters the Arun valley sites, they are not understood to be fundamentally		
						reliant on flooding (etc.) from the River Arun for maintenance of favourable condition for a range of reasons,		
						including the role played by active water level management within the site and inputs of freshwater water from		
						other sources (this is consistent with the position from the Pulborough Environmental WINEP investigations).		

SWS i/c assessment; no additional effects from PW option.

SWS	Groundwater (SNZ): Reinstate West	2029 3.1/DS	Uncertain	No AE	The effects of the abstraction 'alone' will be negligible, and not adversely affect the integrity of the site; this is	No AE I/C
	Chiltington (3.1MI/d)				principally because	
					•it is not considered possible for the abstraction to directly influence spring flows within the European sites and	
					hence GWDTEs.	
					•the effect of the abstraction on flows in the River Arun would be nominal (less than 1% at all except the	
					lowest flows), and only if it is assumed that the entirety of the abstraction is expressed in river flows;	
					•although water from the River Arun enters the Arun valley sites, they are not understood to be fundamentally	
					reliant on flooding (etc.) from the River Arun for maintenance of favourable condition for a range of reasons,	
					including the role played by active water level management within the site and inputs of freshwater water from	
					other sources (this is consistent with the position from the Pulborough Basin WINEP investigations); and	
					•there does not appear to be substantive connectivity between the River Stor and the designated sites (no	
					sluices are noted in this section of the site based on the Pulborough Basin investigations).	
SWS	Recycling (SNZ): Littlehampton	2031 1.2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	WTW with river discharge (15MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Bulk import (SNZ): SEW RZ5 to	2040 1.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	Pulborough				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Bulk import (SNZ): Havant Thicket	2040 1.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	Reservoir to Pulborough (50MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Desalination (SWZ): Tidal River	2046	4.6 No effect	n/a - No	-	No AE I/C
SWS	Desalination (SWZ): Tidal River	2046	4.6 No effect	n/a - No	-	No AE I/C
SWS	Interzonal transfer (SNZ-SWZ):	2040 0.2/DS	No effect	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	Pulborough to Worthing				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
PW	Slindon drought permit	2026	8.4 No effect	n/a - No	C	No AE I/C

	Arun Valley SPA	Year	Dist(km)	Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Storage (SNZ): River Adur Offline	204	16	7 No effect	n/a - No	-	No AE I/C	Assessment as per SW
014/0	Reservoir (19.5MI/d)		0.00/00		LSE			-
SWS	Recycling (SNZ): Horsham with	205	58 0.3/DS	Uncertain	No AE	Operation of the scheme will reduce flows in the River Arun downstream of Horsham as a proportion of the	No AE I/C	
	storage at Pulborough (6.8MI/d)					WwTW discharge will be recovered. The Arun Valley SAC/SPA/Ramsar are functionally linked to the River		
						Arun being a series of wet meadows which are periodically flooded/ inundated. However, evidence from		
						ongoing studies indicates that the wetlands are not fundamentally supported fluvially (i.e. they are not		
						reliant / dependent on (for example) winter flooding from the Arun to maintain water levels), and whilst there		
						may be some localised inputs from the river where sluices etc. are not operating correctly, the vast majority of		
						the site is not supported by inward flows from the Arun but by groundwater or other surface water inputs		
						from the catchment (i.e. the dominant direction of flow is from the wetlands to the river). High flows in the		
						river may impede discharges from the wetlands, but the hydrology of the wetlands is largely determined by		
						groundwater inputs and subsequent interventionist management of the water levels in the ditch network. The		
						operation of the scheme will potentially reduce flows in the Arun by 9.5MI/d, which be around 8% of the Q95		
						flow (lowest flows) in the Arun based on gauging flow data from the Rother at Hardham, Station No. 41009;		
						and Arun at Pallingham, Station No. 41014 (note this is conservative). However, the impact on low flows		
						within the river is not considered critical to the designated site integrity for the reasons noted above; at high		
						(flood) flows (e.g. Q10) the maximum impact is around 0.4%, which is not considered likely to adversely affect		
						the site habitats given the understood hydrological functioning of the site. On this basis, adverse operational		
						effects would not be anticipated. Construction effects are all minor and avoidable with normal measures.		
SWS	Groundwater (SNZ): New borehole	203	31 4.4/DS	Uncertain	No AE	The hydrological impact of the Petworth abstraction on the Arun Valley sites alone is considered to be	No AE I/C	-
	at Petworth (4MI/d)					negligible, particularly in relation to the dominant effect of groundwater supply to the designated sites and the		
						active management of water levels within the sites; the predicted flow reductions in the Arun will not be of		
						sufficient magnitude to adversely affect the site alone either directly or through secondary mechanisms such as		
						via impacts on water quality. It is considered that there is sufficient confidence to enable a conclusion of no		
						adverse effect on the integrity of the Arun Valley SPA, Arun Valley Ramsar and Arun Valley SAC to be drawn		
						for the WRMP HRA in relation to this option, alone and in combination. Construction effects can be reliably		
						avoided with established measures.		

SWS i/c assessment; no additional effects from PW option.

S/V/C	Croundwater (CNIZ), Deterofield	2029 DS/DS	Incortain	No AF	The offects of the abstraction (alone) will be very limited and will not adversely effect the integrity of the site		-
002	Groundwater (SNZ): Petersfield refurbishment (1.6MI/d)	2029 DS/DS	Uncertain	No AE	The effects of the abstraction 'alone' will be very limited, and will not adversely affect the integrity of the site; this is principally because:	No AE I/C	
					•the effect of the abstraction on flows in the River Arun would be nominal (less than 1% at all except the		
					lowest flows), and only if it is assumed that the entirety of the abstraction is expressed in river flows; and		
					•although water from the River Arun enters the Arun valley sites, they are not understood to be fundamentally		
					reliant on flooding (etc.) from the River Arun for maintenance of favourable condition for a range of reasons,		
					including the role played by active water level management within the site and inputs of freshwater water from		
					other sources (this is consistent with the position from the Pulborough Environmental WINEP investigations).		
2/1/2	Groundwater (SNZ): Reinstate West	2029 3.1/DS	Uncortain	No AE		No AE I/C	-
3003	Chiltington (3.1MI/d)	2029 3.1/D3	Uncertain	NU AE	The effects of the abstraction 'alone' will be negligible, and not adversely affect the integrity of the site; this is	NU AE I/C	
	Childington (3. TMi/d)				principally because		
					•it is not considered possible for the abstraction to directly influence spring flows within the European sites and		
					hence GWDTEs.		
					• the effect of the abstraction on flows in the River Arun would be nominal (less than 1% at all except the		
					lowest flows), and only if it is assumed that the entirety of the abstraction is expressed in river flows;		
					•although water from the River Arun enters the Arun valley sites, they are not understood to be fundamentally		
					reliant on flooding (etc.) from the River Arun for maintenance of favourable condition for a range of reasons,		
					including the role played by active water level management within the site and inputs of freshwater water from		
					other sources (this is consistent with the position from the Pulborough Basin WINEP investigations); and		
					•there does not appear to be substantive connectivity between the River Stor and the designated sites (no		
					sluices are noted in this section of the site based on the Pulborough Basin investigations).		_
SWS	Recycling (SNZ): Littlehampton	2031 1.1/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
	WTW with river discharge (15MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
SWS	Bulk import (SNZ): SEW RZ5 to	2040 1.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
	Pulborough				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
SWS	Bulk import (SNZ): Havant Thicket	2040 1.1/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
	Reservoir to Pulborough (50Ml/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
SWS	Desalination (SWZ): Tidal River	2046	4.6 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
	Arun				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
SWS	Desalination (SWZ): Tidal River	2046	4.6 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	_
	Arun				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
SWS	Interzonal transfer (SNZ-SWZ):	2040 0.2/DS	No effect	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	-
	Pulborough to Worthing				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
PW	Slindon drought permit	2026	8.4 No effect	n/a - No	0	No AE I/C	-
					AA Summary		I/C Summary
SWS	Bulk import (SNZ): SES to SNZ	2034	6.8 No effect	n/a - No	-	No LSE I/C	Not affected by any SV
	(10MI/d)			LSE			_
SEW	New Company Transfer: RZ2 to	2040	5.5 No	n/a - No		No LSE I/C	
	RZ7 Transfer - Cottage Hill to Bewl			LSE			
	(5 Ml/d)						_
SEW	New Bulk Supply: SESW Outwood	2049	8.5 No	n/a - No	-	No LSE I/C	
	to SEW Whitely Hill			LSE			
014/0		Year Dist(kr			AA Summary		I/C Summary
2002	Bulk import (SNZ): SES to SNZ	2034	6.8 No effect	n/a - No	-	IND LSE I/C	Not affected by any SV
	(10MI/d)	2010		LSE		NI-LOF VC	-
ъEVV	New Company Transfer: RZ2 to	2040	5.5 No	n/a - No	-	No LSE I/C	
	RZ7 Transfer - Cottage Hill to Bewl			LSE			
05.1	(5 MI/d)	0010	0.5.1	,		N1 105 115	-
sEW	New Bulk Supply: SESW Outwood	2049	8.5 No	n/a - No	-	No LSE I/C	
	to SEW Whitely Hill			LSE			

SW options so no i/c effects with SWS WRMP.

SW options so no i/c effects with SWS WRMP.

THA	Aston Rowant SAC				AA Summary 0		I/C Summary Not affected by any SW o
па	0	U	0.1	J	0	U INU LSE I/C	Not allected by any SVV of
	Benfleet and Southend Marshes Ramsar	Year [	Dist(km) Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Desalination (KME): Isle of Sheppey	2046	8.5 Uncertain*	No AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	Only exposed to SWS opt
SWS	Desalination (KME): Isle of Sheppey	2046	8.5 Uncertain*	No AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SWS	Desalination (KME): Isle of Sheppey	2046	8.5 Uncertain*	No AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SWS	Desalination (KME): Isle of Sheppey	2046	8.5 Uncertain*	No AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
	Benfleet and Southend Marshes SPA	Year [	Dist(km) Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Desalination (KME): Isle of Sheppey	2046	8.5 Uncertain*	No AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	Not affected by any SW op
SWS	Desalination (KME): Isle of Sheppey	2046	8.5 Uncertain*	No AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SWS	Desalination (KME): Isle of Sheppey	2046	8.5 Uncertain*	No AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SWS	Desalination (KME): Isle of Sheppey	2046	8.5 Uncertain*	No AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
	Blean Complex SAC	Year [	Dist(km) Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Desalination (KTZ): East Thanet	2041	7.5 No effect	n/a - No LSE	-		Not affected by any SW op
SWS	Desalination (KTZ): East Thanet	2041	7.5 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d)	2026	9.8 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	2040	0 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Bulk import (KTZ): SEW Canterbury to Near Canterbury (20MI/d)	2050	2.3 No effect	n/a - No LSE		No AE I/C	-
SWS	Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8MI/d)	- 2026	0 No effect	n/a - No LSE	-	No AE I/C	-
SEW	Broad Oak Reservoir - 36mAOD - 5,126 MI	2036	1.8 Effects Uncertain	No AE	Subject to site-specific investigation and measures to avoid /mitigate any potential hydrological efects identified.	No AE I/C	-
SEW	RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR	2036	0.3 Effects Uncertain	No AE	Subject to measures to avoid /mitigate any potential hydrological efects identified and construction best practice measures to control potential localised construction impacts due to proximity/presence of a potential hydrological link.	e No AE I/C	-
SEW	Reculver Desalination (30Ml/d Option)	2044	1.3 No	n/a - No LSE		No AE I/C	-

v options so no i/c effects with SWS WRMP.

options; i/c assessment as per SWS i/c (Appendix F)

V options so no i/c effects with SWS WRMP.

V options so no i/c effects with SWS WRMP.

							_
	RZ8 Zonal Scheme - Transfer of iter from Littlehampton WTW		2044	1.5 No	n/a - No LSE	- No AE I/C	_
	New Bulk Supply: SWS Wingham to SEW Canterbury (Broad Oak)	)	2051	2.4 No	n/a - No LSE	- No AE I/C	-
SEW	RZ8 Sub-Zonal Scheme - Thaningto to Godmersham	n	2038	3.9 No	n/a - No LSE	- No AE I/C	
SWS	Briddlesford Copses SAC Recycling (IOW): Sandown (8.5Ml/d	Yea )	ar Dist(k 2031	m) Scr. conc 3.6 Uncertain*		I. AA Summary I/C concl. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	· · · · · · · · · · · · · · · · · · ·
SWS	Groundwater (IOW): New boreholes at Newchurch (LGS)		2037	2.7 No effect	n/a - No LSE	- No AE I/C	-
SWS	Groundwater (IOW): New borehol at Eastern Yar3 (1.5MI/d)	e	2040	6 No effect	n/a - No LSE	- No AE I/C	-
PW	Farlington increased treatment capacity		2047	19 No effect	-	0 0 No AE I/C	-
PW	Farlington increased treatment capacity 2		2049	19 No effect		0 0 No AE I/C	_
	Burnham Beeches SAC	Yea	ar Dist(k	:m) Scr. conc	I. AA conc	I. AA Summary I/C concl.	I/C Summary
AFF		0	0	4.4	0	0 0 No AE I/C	Only potentially exposed to coincident; effects avoidable
AFF		0	0	7.6	0	0 0 No AE I/C	_
AFF		0	0	8.9	0	0 0 No AE I/C	_
	Butser Hill SAC	Yea	ar Dist(k	m) Scr. conc	I. AA conc	I. AA Summary I/C concl.	I/C Summary
SWS	Bulk import (SNZ): SEW RZ5 to Pulborough		2040	4.4 No effect	n/a - No LSE	- No AE I/C	Only potentially exposed to with established measures
SWS	Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d)		2040	8 No effect	n/a - No LSE	- No AE I/C	-
SWS	Bulk import (HSE): Havant Thicket Reservoir to Lower Itchen WSW (90MI/d)		2035	8.8 No effect	n/a - No LSE	- No AE I/C	_
SWS	Groundwater (SNZ): Petersfield refurbishment (1.6MI/d)		2029 DS	No effect	n/a - No LSE	- No AE I/C	-
SWS	Recycling (HSE): Recharge of Havan Thicket from recycled water from Portsmouth Water (60MI/d)	t	2035	8.9 No effect	n/a - No LSE	- No AE I/C	_
PW	HT to Lower Itchen Spur to Hoadshill (20 Ml/d)		2051	12.3 No effect		0 0 No AE I/C	-
THA	Cannock Chase SAC	Yea 0	ar Dist(k 0		I. AA conc 0		I/C Summary Not exposed to effects from
		0	0	7.4	0		Not exposed to cheets if on
THA	Cannock Extension Canal SAC	Yea 0	ar Dist(k 0		I. AA conc 0		I/C Summary Not exposed to effects from
S/ A/C	Castle Hill SAC	Yea	ar Dist(k 2041				I/C Summary No LSE alone; no risk of i/c
2002	Treatment capacity (SWZ): Pulborough winter transfer stage 1 (2MI/d)		2041	7.1 No effect	n/a - No LSE	- NO LSE I/C	NO LSE alone; no risk of I/C pathways for site-derived pc

to construction effects from one option; options not able with established measures

d to construction effects from one option; options not able with established measures

I to construction effects from one option; effects avoidable

rom any SW options

rom any SW options

i/c effects (construction only; site not exposed (distance, no d pollutants))

							_
SWS	Interzonal transfer (SWZ-SBZ):	2041	7.1 No effect	n/a - No	-	No LSE I/C	
	Pulborough winter transfer stage 2			LSE			
2///2	(4MI/d) Bulk import (SBZ): SEW to	2066	1.1 No effect	n/a - No		No LSE I/C	-
3003	Rottingdean (20MI/d)	2000	1.1 NO ellect	LSE		INU LUL I/C	
SWS	Groundwater (SBZ): Lewes Road	2031	4.2 No effect		-	No LSE I/C	-
	(3.5MI/d)			LSE			
SWS	Interzonal transfer (SBZ-SWZ):	2041	1.8 No effect	n/a - No	-	No LSE I/C	-
	Brighton to Worthing			LSE			
SEW	RZ2 Sub-Zonal Scheme - Poverty	2031	7.4 No	n/a - No	-	No LSE I/C	-
	Bottom & Underhills Deficits			LSE			
	Chichester and Langstone Harbours Ramsar	Year Dist(kn	n) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Bulk import (SNZ): Havant Thicket	2040 3.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	The European sites associa
	Reservoir to Pulborough (50MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		Harbours SPA / Ramsar, Sc
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		are close to the Portsmout
							Treatment Capacity at Farl
SWS	Bulk import (HSE): Havant Thicket	2035 0/DS	Uncertain*	No AE	This option has been subject to project level design and investigations through the SRO gated process, which	No AE I/C	LSE for the Farlington sche
	Reservoir to Lower Itchen				provides the best-available environmental data and assessment for the option (see		evidence for the Portsmou
	WSW (90MI/d)				https://www.southernwater.co.uk/media/5424/gate-2-annex-3-havant-thicket-technical-redacted.pdf). In		environmental change for t
					summary, these assessments have concluded that adverse effects will not occur as a result of the option,		(since the discharge is via t
					subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA of the WRMP processarily reflects this		therefore be expected.
2///2	Recycling (HSE): Recharge of Havant	2035 0/DS	Uncertain	No AE	of the WRMP necessarily reflects this. This option has been subject to project level design and investigations through the SRO gated process, which	No AE I/C	-
5005	Thicket from recycled water from	2000 0120	Officer turn	NOTIL	provides the best-available environmental data and assessment for the option (see	NO AL I/O	
	Portsmouth Water (60MI/d)				https://www.southernwater.co.uk/media/5424/gate-2-annex-3-havant-thicket-technical-redacted.pdf). In		
					summary, these assessments have concluded that adverse effects will not occur as a result of the option,		
					subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA		
					of the WRMP necessarily reflects this.		
PW	Farlington increased treatment	2047	0.9 No effect		0 (	) No AE I/C	-
	capacity						
PW	Farlington increased treatment	2049	0.9 No LSE		0 0	) No AE I/C	-
	capacity 2						
PW	Lavant Booster	2035	3 Yes	No AE	No changes in the groundwater table are expected as part of the option. There will be no increase in	No AE I/C	-
					abstraction.		
					Construction best practice measures to control localised impacts from dust, vehicle emissions and other		
					potential sources of pollution are required due to the hydrological connectivity to the European site.		_
PW	HT to Racton via Farlington 20MI/d	2046	0.9 No effect		0 0	) No AE I/C	
PW	HT to Lower Itchen Spur	2051	12 No effect		0 0	) No AE I/C	-
	to Hoadshill (20 MI/d)						
	Chichester and Langstone Harbours SPA	Year Dist(kn	n) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Bulk import (SNZ): Havant Thicket	2040 3.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	The European sites associa
1	Reservoir to Pulborough (50MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		Harbours SPA / Ramsar, So
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		are close to the Portsm
							Treatment

ciated with Langstone Harbour (i.e. Chichester and Langstone , Solent and Isle of Wight Lagoons SAC, Solent Maritime SAC) outh Water Recycling option (SWS) and the Increased arlington options (PW), although the PW HRA concludes no chemes and no AE for the Lavant booster. The available outh Water recycling scheme suggests that the zone of or the operational effects will not overlap with these sites a the Eastney LSO to the Solent). No AE in combination would

ciated with Langstone Harbour (i.e. Chichester and Langstone , Solent and Isle of Wight Lagoons SAC, Solent Maritime SAC) smouth Water Recycling option (SWS) and the Increased

Treatment

SWS	Recycling (HSE): Recharge of Havant Thicket from recycled water from Portsmouth Water (60Ml/d)	2035 0/DS	Uncertain	No AE	This option has been subject to project level design and investigations through the SRO gated process, which provides the best-available environmental data and assessment for the option (see https://www.southernwater.co.uk/media/5424/gate-2-annex-3-havant-thicket-technical-redacted.pdf). In summary, these assessments have concluded that adverse effects will not occur as a result of the option, subject to the implementation of mitigation measures identified through the SRO gated process, and the HR/ of the WRMP necessarily reflects this.		Capacity at Farlington opti Farlington schemes and no Portsmouth Water recycli for the operational effects the Eastney LSO to the So
PW	Farlington increased treatment capacity	2047	0.9 No effect		0	0 No AE I/C	-
PW	Farlington increased treatment capacity 2	2049	0.9 No LSE		0	0 No AE I/C	-
PW	Lavant Booster	2035	3 Yes	No AE	No changes in the groundwater table are expected as part of the option. There will be no increase in abstraction.	No AE I/C	-
PW	HT to Racton via Farlington 20MI/d	2046	0.9 No effect		Construction best practice measures to control localised impacts from dust, vehicle emissions and other 0	0 No AE I/C	-
	Chilterns Beechwoods SAC	Year Dist(	km) Scr. conc	cl. AA conc	I. AA Summary		I/C Summary
THA	0	0	2.1	0	0	0 No AE I/C	Not exposed to effects fro
THA	0	0	2.5	0	0	0 No AE I/C	-
AFF	0	0	0.6	0	0	0 No AE I/C	-
AFF	0	0	9.7	0	0	0 No AE I/C	-
	Cothill Fen SAC	Year Dist(	km) Scr. conc	cl. AA conc	I. AA Summary	I/C concl.	I/C Summary
SWS	Bulk import (HWZ): T2ST to Yew Hill (95Ml/d)	2040	6.1 No effect	n/a - No LSE		0 No LSE I/C	Not exposed to effects fro effects of TW options subj
THA	0	0	0.1	0	0	0 No LSE I/C	
THA	0		1.8	0	0	0 No LSE I/C	-
THA	0		5.4	0	0	0 No LSE I/C	
THA THA	0		9.4 1.8	0	0 0 0	0 No LSE I/C 0 No LSE I/C	-
	Dover to Kingsdown Cliffs SAC				I. AA Summary		I/C Summary
AFF	0	0	0.8	0	0	0 No AE I/C	Not exposed to effects fro
AFF	0	0	2.6	0	0	0 No AE I/C	-
	Duncton to Bignor Escarpment	Year Dist(	km) Scr. conc	cl. AA conc	il. AA Summary	I/C concl.	I/C Summary
	SAC						

options (PW), although the PW HRA concludes no LSE for the I no AE for the Lavant booster. The available evidence for the ycling scheme suggests that the zone of environmental change ects will not overlap with these sites (since the discharge is via solent). No AE in combination would therefore be expected.

from any SW options

from SW option so no LSE i/c with SWS options; NOTE: i/c subject to review, but TW HRA suggests no i/c effects on this

from any SW options

S i/c assessment; no additional effects from PW option.

	Groundwater (SNZ): New borehole at Petworth (4MI/d)	2031	3.6 No effect	n/a - No LSE	-	No AE I/C	_
	Recycling (SNZ): Littlehampton WTW with river discharge (15Ml/d)	2031	1.2 No effect	n/a - No LSE	-	No AE I/C	-
	Bulk import (SNZ): SEW RZ5 to Pulborough	2040	3.4 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d)	2040	0 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SWS	Desalination (SWZ): Tidal River Arun	2046	7.4 No effect	n/a - No LSE	-	No AE I/C	_
SWS	Desalination (SWZ): Tidal River Arun	2046	7.4 No effect	n/a - No LSE	-	No AE I/C	-
	Interzonal transfer (SNZ-SWZ): Pulborough to Worthing	2040	5.2 No effect	n/a - No LSE	-	No AE I/C	-
PW	Slindon drought permit	2026	4.7 No effect		0 0	No AE I/C	-
	Dungeness SAC Y	'ear Dist(km	n) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Groundwater (SHZ): Reconfigure Rye Wells (1.5MI/d)	2036 10.6/DS	No effect	n/a - No LSE	-	No AE I/C	Potentially exposed to potential effects may b
SWS	Bulk export (SHZ): Rye to SEW RZ8	2050 2.6/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	normal measures.
SWS	Recycling (SHZ): Hastings to Darwell (15.3MI/d)	2051 16.8/DS	No effect	n/a - No LSE		No AE I/C	-
SEW	New Bulk Supply: SWS Brede to SEW RZ8 (10 Ml/d)	2050	2.5 Effects Uncertain	No AE	Construction best practice measures due to the presence of a hydrological link.	No AE I/C	-
	Dungeness, Romney Marsh and Y Rye Bay Ramsar	'ear Dist(km	n) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Groundwater (SHZ): Reconfigure Rye Wells (1.5Ml/d)	2036 7.2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	Potentially exposed to potential effects may b normal measures.
SWS	Bulk export (SHZ): Rye to SEW RZ8	2050 2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SWS	Recycling (SHZ): Hastings to Darwell (15.3MI/d)	2051 12.4/DS	Uncertain*	No AE	Pipeline will cross Combe Haven watercourse upstream of Combe Haven SSSI. With regard to construction effects, the SSSI citation notes that "The whole site, but particularly the reed bed, is valuable for breeding, wintering and passage birds" and it is possible that some waterbirds associated with the Ramsar may periodically utilise this site also (although it seems unlikely to provide habitat etc. that is critical to the functional integrity of the Ramsar or the waterbird populations (given the widespread availability of similar wetland habitats within the Ramsar); however, potential effects on the SSSI can be avoided with normal measures. Residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SEW	New Bulk Supply: SWS Brede to SEW RZ8 (10 Ml/d)	2050	1.9 Effects Uncertain	No AE		No AE I/C	-

to construction effects only from options within catchment; y be temporally coincident but can be avoided in any case with

to construction effects only from options within catchment; y be temporally coincident but can be avoided in any case with

	Dungeness, Romney Marsh and	Year Dist(km	n) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Rye Bay SPA Groundwater (SHZ): Reconfigure Rye Wells (1.5Ml/d)	2036 7.2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/C	Potentially exposed to const potential effects may be tem
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		normal measures.
WS	Bulk export (SHZ): Rye to SEW RZ8	2050 2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
					with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		-
WS	Recycling (SHZ): Hastings to Darwell (15.3MI/d)	2051 1.4/DS	Uncertain*	No AE	Pipeline will cross Combe Haven watercourse upstream of Combe Haven SSSI; the watercourse then discharges to the marine / offshore component of this SPA, which covers foraging areas used by breeding tern species from the Dungeness Peninsula. The scheme will use water sourced from effluent otherwise discharged to sea via an LSO within the marine boundary of the SPA. With regard to construction effects, the SSSI citation notes that "The whole site, but particularly the reed bed, is valuable for breeding, wintering and passage birds" and it is possible that some waterbirds associated with the SPA may periodically utilise this site also (although it seems unlikely to provide habitat etc. that is critical to the functional integrity of the SPA or the waterbird populations (given the widespread availability of similar wetland habitats within the SPA); however, potential effects on the SSSI and the marine components of the SPA due to construction can be avoided with normal measures. With regard to operation, the option will use water sourced from effluent otherwise discharged to sea via an LSO within the marine boundary of the SPA. There will be no discharges of hypersaline brine or similar (in practice the recovery process results in a discharge that is slightly more saline (e.g. at Budd's Farm the saline concentration typically doubles from 3-5g/l to 6-10 g/l, but this is substantially below the salinity of seawater (-35g)); the total load of pollutants (e.g. nitrates) discharged through the LSO will remain the same, although concentrations may increase slightly; however, this will be inconsequential given the nature of the receiving waters (open sea) and the consequent dispersal (hence limited area affected). Furthermore, the seabird features of the SPA that will utilise this area will have a low sensitivity to the type and	No AE I/C	
					magnitude of change, given the area potentially impacted versus the total available habitat. Residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
EW	New Bulk Supply: SWS Brede to SEW RZ8 (10 Ml/d)	2050	1.9 Effects Uncertain	No AE		No AE I/C	-
	East Hampshire Hangers SAC	Year Dist(km	n) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
WS	Groundwater (SNZ): Petersfield refurbishment (1.6MI/d)	2029 DS	No effect	n/a - No LSE			No effects from SWS option
WS	Bulk import (SNZ): SEW RZ5 to	2040	2 No effect	n/a - No	·	No AE I/C	-
	Pulborough			LSE			
W	RZ4 Sub-Zonal Scheme - Greywell	2031	6.4 No	n/a - No	-	No AE I/C	-
	to Swaineshill			LSE			_
EW	RZ4 Sub-Zonal Scheme - Ewshot to Itchel	2031	9.4 No	n/a - No LSE	-	No AE I/C	_
EW	RZ5 Sub-Zonal Scheme - Oakhanger	2031	4.3 No	n/a - No	-	No AE I/C	_
	to Alton			LSE			
1015	Ebernoe Common SAC Recycling (SNZ): Horsham with	Year Dist(km 2058	n) Scr. concl 9.3 No effect	. AA concl. n/a - No	AA Summary	I/C concl. No AE I/C	I/C Summary Potentially exposed to const
103	storage at Pulborough (6.8MI/d)	2036		LSE			coincident but adverse effec
NS	Groundwater (SNZ): New borehole at Petworth (4MI/d)	2031	5.7 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	
WS	Recycling (SNZ): Littlehampton WTW with river discharge (15MI/d)	2031	7.7 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	
WS	Bulk import (SNZ): SEW RZ5 to Pulborough	2040	5.1 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/C	-

onstruction effects only from options within catchment; temporally coincident but can be avoided in any case with

tions therefore no i/c effects with SWS WRMP.

onstruction effects only; some construction may be temporally effects can self-evidently be avoided with normal best practice.

SWS	Bulk import (SNZ): Havant Thicket	2040	9 No effect	n/a - No	-	No AE I/C	-
	Reservoir to Pulborough (50MI/d)			LSE			_
SWS	Interzonal transfer (SNZ-SWZ): Pulborough to Worthing	2040	9.6 No effect	n/a - No LSE	-	No AE I/C	
EW	RZ4 Sub-Zonal Scheme - Ewshot to Itchel	2031	26.7 No	n/a - No LSE	-	No AE I/C	-
SEW	RZ5 Sub-Zonal Scheme - Oakhanger to Alton	2031	28.1 No	n/a - No LSE	-	No AE I/C	-
PW	Slindon drought permit	2026	16.6 No effect	-	0	0 No AE I/C	-
PW	Lavant Booster	2035	23.2 No effect		0	0 No AE I/C	-
	Emer Bog SAC	Year [	Dist(km) Scr. concl.	AA concl	. AA Summary	I/C concl.	I/C Summary
SWS	Bulk import (HSE): PWC Source A to Lower Itchen WSW (21MI/d)	2032	6.2 No effect	n/a - No LSE	-	No AE I/C	Only exposed to SWS option
SWS	Groundwater (HRZ): New boreholes at Romsey (4.8MI/d)	2031	5.7 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Groundwater (HRZ): Remove constraints at Kings Sombourne (2.5MI/d)	2031	9.9 No effect	n/a - No LSE		No AE I/C	-
SWS	Groundwater (HSW): Test MAR (5.5MI/d)	2036	6.9 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Interzonal transfer (HRZ-HSW): Romsey Town and Test valve (3.1MI/d)	2026	3.3 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Bulk import (HSE): Havant Thicket Reservoir to Lower Itchen WSW (90MI/d)	2035	6 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Interzonal transfer (HSE-HSW): Yew Hill WSW to River Test WSW bi- directional (60MI/d)	2031	9.7 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoida with scheme-level measures that are known to be available, achievable and likely to be effective; residual effe after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		-
SWS	Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d)	2031	6 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Interzonal transfer (HWZ-HAZ): Winchester to Andover bi- directional (15MI/d)	2031	9.3 No effect	n/a - No LSE	-	No AE I/C	-
SWS	Bulk import (HWZ): T2ST to Yew Hill (95Ml/d)	2040	5.7 No effect	n/a - No LSE		0 No AE I/C	-
	Ensor`s Pool SAC	Year I	Dist(km) Scr. concl.	AA concl	. AA Summary	I/C concl.	I/C Summary
THA	(	) 0	1.1 (	0	0	0 No AE I/C	Not exposed to effects from
	Epping Forest SAC				. AA Summary	I/C concl.	I/C Summary
THA	(	0 0	9.7	0	0	0 No AE I/C	Not exposed to effects from
	Essex Estuaries SAC				AA Summary		I/C Summary
2002	Desalination (KME): Isle of Sheppey	2046	8.6 Uncertain*	INO AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	This site is considered unlik of environmental change as saline plumes etc.) will not
SWS	Desalination (KME): Isle of Sheppey	2046	8.6 Uncertain*	No AE	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after	No AE I/C	site, and synergistic effects

options; i/c assessment as per SWS i/c (Appendix F)

from any SW options

from any SW options

Inlikely to be adversely affected by any option alone; the zones e associated with the operation of the desalination options (i.e. not coincide geographically for additive effects to occur at the cts will not occur.

	No AE I/C	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	8.6 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	SWS
	No AE I/C	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	8.6 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	SWS
/C Summary	I/C concl.	AA Summary	AA concl.	i) Scr. concl.	ar Dist(km)	Year		Fens Pools SAC	
Not exposed to effects fr			)		0	0			THA
/C Summary	I/C concl.	AA Summary	AA concl.	) Scr. concl.	ar Dist(km)	Year		Folkestone to Etchi Escarpment SAC	
Not exposed to effects fr	0 No AE I/C		)	6.9 (	0	0			AFF
	0 No AE I/C		)	8.2 (	0	0			AFF
	0 No AE I/C		)	9.6 (	0	0			AFF
/C Summary	I/C concl.	AA Summary	AA concl.	) Scr. conclu	ar Dist(km)	Year	sex Coast	Foulness (Mid-Essex	
, j								Phase 5) Ramsar	
his site is considered un of environmental change aline plumes etc.) will no	No AE I/C	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	8.8 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	SWS
ite, and synergistic effect	No AE I/C	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	8.8 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	SWS
	No AE I/C	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	8.8 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	SWS
	No AE I/C	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after	No AE	8.8 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	SWS
		mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.							
/C Summary	I/C concl.	AA Summary	AA concl.	) Scr. concl.	ar Dist(km)	Year	sex Coast	Foulness (Mid-Essex Phase 5) SPA	
This site is considered un of environmental change aline plumes etc.) will nc	No AE I/C	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	8.8 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	
ite, and synergistic effect	No AE I/C	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	8.8 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	SWS
	No AE I/C	Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after	No AE	8.8 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	SWS
	No AE I/C	mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (distance to site; construction effects avoidable with normal measures; environmental changes associated with operation very unlikely to extend to the site); residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	8.8 Uncertain*	2046	20	Isle of Sheppey	Desalination (KME): Isl	SWS
/C Summary	I/C concl.	AA Summary	AA concl.	i) Scr. concl.	ar Dist(km)	Year	2	Hackpen Hill SAC	
Not exposed to effects fr				9.2 (	0	0			THA

s from any SW options

from any SW options

unlikely to be adversely affected by any option alone; the zones ge associated with the operation of the desalination options (i.e. not coincide geographically for additive effects to occur at the ects will not occur.

unlikely to be adversely affected by any option alone; the zones ge associated with the operation of the desalination options (i.e. not coincide geographically for additive effects to occur at the ects will not occur.

from any SW options

	Hartslock Wood SAC	Year	Dist(km)			3		I/C Summary
ΓHΑ	0	C	)	2.8	0	0 0	NO AE I/C	Not exposed to effects from
	Hastings Cliffs SAC	Year	Dist(km)	) Scr. conc	I. AA concl	. AA Summary	I/C concl.	I/C Summary
WS	Groundwater (SHZ): Reconfigure Rye Wells (1.5Ml/d)	2036	)	7.5 No effect	n/a - No LSE	-	No AE I/C	Assessment as per SWS i/c
WS	Bulk export (SHZ): Rye to SEW RZ8	2050	)	5.9 No effect	n/a - No LSE	-	No AE I/C	-
WS	Recycling (SHZ): Hastings to Darwell (15.3MI/d)	2051		6.4 No effect	n/a - No LSE	-	No AE I/C	-
EW	New Bulk Supply: SWS Brede to SEW RZ8 (10 Ml/d)	2050	)	6 No	n/a - No LSE	-	No AE I/C	-
	Isle of Wight Downs SAC	Year	Dist(km)	) Scr. conc	I. AA concl.	. AA Summary	I/C concl.	I/C Summary
WS	Recycling (IOW): Sandown (8.5MI/d)	2031		4.3 No effect	n/a - No			Only exposed to SWS opti
WS	Groundwater (IOW): New	2037	,	7.6 No effect	LSE n/a - No	-	No LSE I/C	-
WS	boreholes at Newchurch (LGS) Groundwater (IOW): New borehole	2040	)	4.4 No effect	LSE n/a - No	-	No LSE I/C	-
	at Eastern Yar3 (1.5Ml/d)				LSE			
	Kennet and Lambourn Floodplain SAC	Year	Dist(km)	) Scr. conc	I. AA concl.	. AA Summary	I/C concl.	I/C Summary
WS	Groundwater (HKZ): Remove constraints at Newbury to increase yield (1.2MI/d)	2028	3	3.9 No effect	n/a - No LSE	-	No AE I/C	Potential effects from SWS effects of TW options subju- site
WS	Interzonal transfer (HAZ-HKZ): Andover to Kingsclere bi-directional (10MI/d)	2050	)	8.2 No effect	n/a - No LSE	-	No AE I/C	-
WS	Bulk import (HWZ): T2ST to Yew Hill (95Ml/d)	2040	)	0.2 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
ГНА	0	C	)	0.1	0		No AE I/C	-
	Kennet Valley Alderwoods SAC	Vear	Dist(km)	) Ser conc		. AA Summary	I/C concl.	I/C Summary
SWS	Groundwater (HKZ): Remove	2028	· · · ·	3.3 No effect	n/a - No			Potential effects from SWS
	constraints at Newbury to increase yield (1.2MI/d)				LSE			effects of TW options subje
SWS	Bulk import (HWZ): T2ST to Yew Hill (95Ml/d)	2040	)	0.3 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	- 111
ГНА	0	C	)	0.6	0		No AE I/C	-
	Kingley Vale SAC	Year	Dist(km)	) Scr. conc	I. AA concl	. AA Summary	I/C concl.	I/C Summary
SWS	Bulk import (SNZ): SEW RZ5 to Pulborough	2040	)	9.7 No effect	n/a - No LSE	-	No AE I/C	Assessment as per SWS i/c
WS	Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50MI/d)	2040	)	0.1 Uncertain*		Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SWS	Bulk import (HSE): Havant Thicket Reservoir to Lower Itchen WSW (90MI/d)	2035	5	8.6 No effect	n/a - No LSE		No AE I/C	-

from any SW options

i/c assessment; no additional effects from PW option.

options; i/c assessment as per SWS i/c (Appendix F)

WS option avoidable with established measures; NOTE: i/c ubject to review, but TW HRA suggests no i/c effects on this

WS option avoidable with established measures; NOTE: i/c ubject to review, but TW HRA suggests no i/c effects on this

i/c assessment; no additional effects from PW option.

	No AE I/C	-		8.6 No effect	2035	ling (HSE): Recharge of Havant	
			LSE			et from recycled water from mouth Water (60MI/d)	
	0 No AE I/C	0		13 No effect	2026	n drought permit	
	0 No AE I/C	0		2.4 No LSE	2035	t Booster	
I/C Summary	I/C concl.	AA Summary	cl. AA concl.	Dist(km) Scr. concl	Year D	/alley Ramsar Y	
Not exposed to effects fro		0			0	0	THA
	0 No AE I/C	0	0	1.1	0	0	AFF
	0 No AE I/C	0	0	5.4	0	0	AFF
	0 No AE I/C	0	0	6.5	0	0	AFF
	0 No AE I/C	0	0	9.6	0	0	AFF
I/C Summary	I/C concl.	AA Summary	cl. AA concl.	Dist(km) Scr. concl	Year D	/alley SPA Y	
Not exposed to effects fro		0			0	0	THA
	0 No AE I/C 0 No AE I/C	0			0	0	AFF AFF
	0 NO AE I/C	0 0			0	0	AFF AFF
	0 No AE I/C	0			0	0	AFF
I/C Summary	I/C concl.	AA Summary	cl. AA concl.	Dist(km) Scr. concl	Year E	es Downs SAC Y	
Assessment as per SWS i/		-		0.2 No effect	2066	mport (SBZ): SEW to Igdean (20MI/d)	SWS
	No LSE I/C	-		5.1 No effect	2041	onal transfer (SBZ-SWZ): on to Worthing	
	No LSE I/C	-		0.4 No	2031	ub-Zonal Scheme - Poverty m & Underhills Deficits	SEW
I/C Summary	I/C concl.	AA Summary	cl. AA concl.	Dist(km) Scr. concl	Year D	e Wittenham SAC Y	
Not exposed to effects fro		0			0	0	THA
	0 No AE I/C	0	0	7.1	0	0	THA
	0 No AE I/C	0	0	7	0	0	THA
I/C Summary	I/C concl.	AA Summary	cl. AA concl.	Dist(km) Scr. concl	Year D		
			n/a - No	6.9 No effect	2026	ns SAC mport (KTZ): SEW Kingston to	SWS
		-	LSE			Canterbury (2MI/d)	
		-	LSE	9.4 No effect	2050	Canterbury (2MI/d) mport (KTZ): SEW Canterbury ar Canterbury (20MI/d)	SWS
No effects from SWS opti HRA subject to review ho			LSE n/a - No LSE	9.4 No effect 9.3 No	2050	mport (KTZ): SEW Canterbury	SEW

from any SW options

from any SW options

S i/c assessment; no additional effects from SEW option.

from any SW options

ptions therefore no i/c effects with SWS WRMP; NOTE, AFW however HRA indicates no AEIC on this site.

0 No LSE I/C
0 No LSE I/C

	Margate and Long Sands SAC	Year	Dist(km) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Desalination (KTZ): East Thanet	2041	1.3 LSE	No AE*	Adverse effects almost certainly avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. In summary, the outfall for the plant is likely to be located in or close to this site (although location outside the site will be possible). The interest features of the site are likely to have a low sensitivity to both construction and operation, being essentially low-diversity highly-mobile sandbank habitats that will be resilient to short-term perturbance associated with construction; the environmental changes associated with operation effects are likely to be limited in spatial extent (based on other desalination schemes), and the features will have a low sensitivity to this. There are inevitably some uncertainties due that can only be resolved with detailed design (e.g. sediment deposition and hydrodynamics may be affected if the pipeline is not buried), but these appear avoidable or mitigatable, such that adverse effects on integrity do not appear to be an unavoidable outcome of the option.	No AE I/C*	Construction within site in Reculver. Outfalls and pile etc dynamics locally), and likely be measurable with will have a low sensitivity adverse effects in combin- uncertainties due to the pil combination effects that combination
SWS	Desalination (KTZ): East Thanet	2041	1.3 LSE	No AE*	Adverse effects almost certainly avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. In summary, the outfall for the plant is likely to be located in or close to this site (although location outside the site will be possible) although construction of this will have been completed under option THA20. The environmental changes associated with operation effects are likely to be limited in spatial extent (based on other desalination schemes), and the features will have a low sensitivity to this. There are inevitably some uncertainties due that can only be resolved with detailed design (e.g. sediment deposition and hydrodynamics may be affected if the pipeline is not buried), but these appear avoidable or mitigatable, such that adverse effects on integrity do not appear to be an unavoidable outcome of the option.	No AE I/C*	-
SWS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	2040	4.7 No effect	n/a - No LSE	-	No AE I/C*	_
SWS	Bulk import (KTZ): SEW Canterbury to Near Canterbury (20MI/d)	y 2050	8.5 No effect	n/a - No LSE	-	No AE I/C*	-
SWS	Interzonal transfer (KME-KTZ): KME KTZ bi-directional (15.8MI/d)	- 2026	4.7 No effect	n/a - No LSE	-	No AE I/C*	-
SEW	RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR	2036	o 6.4 No	n/a - No LSE	-	No AE I/C*	-
	Medway Estuary and Marshes Ramsar	Year	Dist(km) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
C) A /C	Champers (CLIZ), Delaine Devul	00/4		/ .			According to the CIAIC :

	Ramsar						
SWS	Storage (SHZ): Raising Bewl Reservoir 0.4m (3MI/d)	2061 DS/DS	No effect	n/a - No LSE	-	No AE I/C*	Assessment as per SWS
SWS	Desalination (KME): Isle of Sheppey	2046 0/DS	LSE	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.	9	_
SWS	Desalination (KME): Isle of Sheppey	2046 0/DS	LSE	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.	9	_

ite is likely for the East Thanet scheme, and possible for d pipelines may be located in the site (which may affect sediment and operational discharges from both desalination options will vithin the site and may overlap. However, the site and features vity to environmental changes associated with these aspects, and abination would not be expected; however, there are residual he proximity of these options hence risk of spatially coincident in nat cannot be resolved with the available data.

WS i/c assessment; no additional effects from SEW options.

2002	Desalination (KME): Isle of Sheppey	2046 0/DS	LSE	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the		
					supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of		
					environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice.		
C/ 1/C	Decycling (KMM), Medway M/TM/ to	2021 10 4/DS	Upportain		Construction effects are avoidable with normal measures.		_
2002	Recycling (KMW): Medway WTW to	2031 10.4/DS	Uncertain	No AE	Adverse construction effects alone will not occur (clearly avoidable with scheme-level measures that are known to be available application (cto.) likely to be all as your	NO AE I/C	
	lake (14MI/d)				to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very		
					small, so low risk of i/c effects). With regard to operation, the scheme will reduce non-saline inputs from the		
					River Medway into the Medway estuary; the impact of a 12.8 MI/d reduction on Q95 flows (i.e. the impact		
					when flows in the river are near their lowest) to the the estuary (based on flows at Allington Locks plus DWF		
					inputs from Medway WTW and other inputs) will be no greater than 7.2%. The change in flows, and some		
					aspects of the operational discharges, has the potential to alter water quality and salinity in the tidal sections of		
					the River Medway (although there will be a reduced WwTW loading to the estuary due to the removal of		
					12.8MI/d of DWF discharge). However, the location of this 'maximum' impact is approximately 20km upstream	1	
					of the closest point of the Medway Estuary and Marshes SPA/Ramsar, which will be overwhelmingly influenced		
					by tidal dynamics and local non-saline inputs from the local catchment, rather than non-saline inputs from the		
					River Medway. As a result the magnitude of the environmental change is expected to be too small to adversely		
					affect the SPA/Ramsar site or its qualifying features.		_
SWS	Recycling (KME): Sittingbourne	2031 2.8/DS	Uncertain*	No AE	This option was assessed as having No Adverse Effects at WRMP19 and there have been no substantive	No AE I/C*	
	industrial water reuse (7.5MI/d)				amendments in either the scheme or the environmental baseline to alter this conclusion. In summary, the net		
					effect of the scheme operation would be to reduce non-saline inputs to Milton Creek from Sittingbourne		
					WwTW by ~7.5Mld; discharges from the WwTW are likely to form a significant component of the non-saline		
					flows in this creek (the permitted discharge of recycled water is ~118MI/d) and the volumes recovered through		
					recycling will typically be a small proportion of this (note, a proportion of this water would still enter the Swale		
					and hence potentially the Medway via the paper mill post-process discharge, although the paper-making process		
					will to some extent be consumptive). The principal issues for the Medway Estuary and Marshes SPA/Ramsar		
					are the potential effects on Milton Creek as 'functional habitat'; however, Milton Creek will be of low value in		
					this regard as (a) it is a constrained creek / channel in a high-disturbance urban / industrial area that will		
					inherently have a low attractiveness for the qualifying features (assuming there are no dominating non-natural		
					attractants) and (b) is substantially lower value than the extensive areas of equivalent mud-flat and creek habitat		
					available in the SPA/Ramsar; it is therefore very unlikely that the creek is critical to the functional integrity of		
					the site, and environmental changes in this location would not be expected to adversely affect these sites.		_
SWS	Asset enhancement (KMW): Remove	2026 7.1/DS	No effect	n/a - No	-	No AE I/C*	
	network constraint at Longfield			LSE			
	(13MI/d)						_
SWS	Desalination (KME): Isle of Sheppey	2046 0/DS	LSE	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there		
					are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the		
					supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of		
					environmental change will be small (a would be expected to extend to the site), and could be minimised further		
					by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice.		
					Construction effects are avoidable with normal measures.		_
SEW	Groundwater Licence Trade -	2040	9.1 No	n/a - No	-	No AE I/C*	
	Folkestone Beds Abstraction, Halling			LSE			
SEW	RZ8 Sub-Zonal Scheme -	2039	9.1 No	n/a - No		No AE I/C*	
	Hollingbourne to Warren Street			LSE			
	reinforcement						
SWS	Recycling (SHZ): Tonbridge to Bewl	2036 DS/DS	No effect	n/a - No	-	No AE I/C*	_
	(5.7MI/d)			LSE			
	Medway Estuary and Marshes	Year Dist(km	n) Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
	SPA						
SWS	Storage (SHZ): Raising Bewl Reservoir 0.4m (3MI/d)	2061 DS/DS	No effect	n/a - No	-	No AE I/C*	Assessment as pe
				LSE			

s per SWS i/c assessment; no additional effects from SEW options.

SWS	Desalination (KME): Isle of Sheppey	2046 0/DS	LSE	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.	No AE I/C*
SWS	Desalination (KME): Isle of Sheppey	2046 0/DS	LSE	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.	No AE I/C*
SWS	Desalination (KME): Isle of Sheppey	2046 0/DS	LSE	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.	No AE I/C*
SWS	Recycling (KMW): Medway WTW to lake (14MI/d)	2031 10.4/DS	Uncertain	No AE	Adverse construction effects alone will not occur (clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects). With regard to operation, the scheme will reduce non-saline inputs from the River Medway into the Medway estuary; the impact of a 12.8 Ml/d reduction on Q95 flows (i.e. the impact when flows in the river are near their lowest) to the the estuary (based on flows at Allington Locks plus DWF inputs from Medway WTW and other inputs) will be no greater than 7.2%. The change in flows, and some aspects of the operational discharges, has the potential to alter water quality and salinity in the tidal sections of the River Medway (although there will be a reduced WwTW loading to the estuary due to the removal of 12.8Ml/d of DWF discharge). However, the location of this 'maximum' impact is approximately 20km upstream of the closest point of the Medway Estuary and Marshes SPA/Ramsar, which will be overwhelmingly influenced by tidal dynamics and local non-saline inputs from the local catchment, rather than non-saline inputs from the River Medway. As a result the magnitude of the environmental change is expected to be too small to adversely affect the SPA/Ramsar site or its qualifying features.	
SWS	Recycling (KME): Sittingbourne industrial water reuse (7.5MI/d)	2031 2.8/DS	Uncertain*	No AE	This option was assessed as having No Adverse Effects at WRMP19 and there have been no substantive amendments in either the scheme or the environmental baseline to alter this conclusion. In summary, the net effect of the scheme operation would be to reduce non-saline inputs to Milton Creek from Sittingbourne WwTW by ~7.5Mld; discharges from the WwTW are likely to form a significant component of the non-saline flows in this creek (the permitted discharge of recycled water is ~118Ml/d) and the volumes recovered through recycling will typically be a small proportion of this (note, a proportion of this water would still enter the Swale and hence potentially the Medway via the paper mill post-process discharge, although the paper-making process will to some extent be consumptive). The principal issues for the Medway Estuary and Marshes SPA/Ramsar are the potential effects on Milton Creek as 'functional habitat'; however, Milton Creek will be of low value in this regard as (a) it is a constrained creek / channel in a high-disturbance urban / industrial area that will inherently have a low attractiveness for the qualifying features (assuming there are no dominating non-natural attractants) and (b) is substantially lower value than the extensive areas of equivalent mud-flat and creek habitat available in the SPA/Ramsar; it is therefore very unlikely that the creek is critical to the functional integrity of the site, and environmental changes in this location would not be expected to adversely affect these sites.	No AE I/C*
SWS	Asset enhancement (KMW): Remove network constraint at Longfield (13MI/d)	2026 7.1/DS	No effect	n/a - No LSE	-	No AE I/C*
		2046 0/DS	LSE	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the	No AE I/C*
SWS	Desalination (KME): Isle of Sheppey				supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.	

SEW	RZ8 Sub-Zonal Scheme -	2039	9.1 No	n/a - No	-	No AE I/C*	
	Hollingbourne to Warren Street			LSE			
214/5	reinforcement Recycling (SHZ): Tonbridge to Bewl	2036 DS/DS	No effect	n/a - No	-	No AE I/C*	-
3003	(5.7MI/d)	2030 D3/D3	NO Ellect	LSE	-	NU AE I/C	
	(0) (0)			202			
		Year Dist(kr	m) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
	Escarpment SAC	2024					No. offerste farmer CNA/C auti
2000	Bulk import (SNZ): SES to SNZ (10MI/d)	2034	9.6 No effect	n/a - No LSE	-	INO LSE I/C	No effects from SWS option
	(TOIVII/Q)			LJE			
SEW	New Bulk Supply: SESW to SEW	2039	24.5 No	n/a - No	-	No LSE I/C	-
	RZ1 Transfer - Bough Beech to			LSE			
	Riverhill SR (10 MI/d)						_
SEW	New Bulk Supply: SESW Outwood	2049	9.5 No	n/a - No	-	No LSE I/C	
	to SEW Whitely Hill			LSE			
0) 6 (2		Year Dist(kr		. AA concl.			I/C Summary
SWS	Groundwater (HRZ): New	2031	2.9 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	Only exposed to SWS opt
	boreholes at Romsey (4.8MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
2/1/2	Groundwater (HRZ): Remove	2031	1.9 Uncertain*	Νο ΔΕ	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AF I/C	-
5005	constraints at Kings Sombourne	2031	1.7 Oneer tain	NO AL	with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	NO AL I/C	
	(2.5MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
SWS	Interzonal transfer (HRZ-HSW):	2026	7.1 No effect	n/a - No		No AE I/C	-
	Romsey Town and Test valve			LSE			
	(3.1MI/d)						_
SWS	Interzonal transfer (HSE-HSW): Yew	2031	8 Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
	Hill WSW to River Test WSW bi-				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
	directional (60MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
	New Forest SPA	Year Dist(kr	m) Scr. concl	. AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Groundwater (HRZ): New	2031	8.5 No effect	n/a - No	-	No LSE I/C	Not affected by SWS optic
	boreholes at Romsey (4.8MI/d)			LSE			effects with SW WRMP.
SWS	Groundwater (HSW): Test MAR	2036	4.9 No effect	n/a - No	-	No LSE I/C	-
	(5.5MI/d)			LSE			
SWS	Interzonal transfer (HRZ-HSW):	2026	6.2 No effect		-	No LSE I/C	
	Romsey Town and Test valve			LSE			
2///2	(3.1MI/d) Interzonal transfer (HSE-HSW): Yew	2031	7.9 No effect	n/a - No	-	No LSE I/C	-
3003	Hill WSW to River Test WSW bi-	2031	7.7 NO ellect	LSE		NU LJL I/C	
	directional (60MI/d)			LUL			
	uli ectional (ouivii/u)						
	North Downs Woodlands SAC						I/C Summary
SWS		Year Dist(kr 2046	m) Scr. concl 7.2 No effect	n/a - No			
	North Downs Woodlands SAC Desalination (KME): Isle of Sheppey	2046	7.2 No effect	n/a - No LSE		No LSE I/C	
	North Downs Woodlands SAC			n/a - No LSE n/a - No			
SWS	North Downs Woodlands SAC Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey	2046 2046	7.2 No effect 7.2 No effect	n/a - No LSE n/a - No LSE	· · · · · · · · · · · · · · · · · · ·	No LSE I/C No LSE I/C	
SWS	North Downs Woodlands SAC Desalination (KME): Isle of Sheppey	2046	7.2 No effect	n/a - No LSE n/a - No LSE	· · · · · · · · · · · · · · · · · · ·	No LSE I/C	
sws sws	North Downs Woodlands SAC Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey	2046 2046	7.2 No effect 7.2 No effect	n/a - No LSE n/a - No LSE n/a - No	- · · · · · · · · · · · · · · · · · · ·	No LSE I/C No LSE I/C	
sws sws	North Downs Woodlands SAC Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey	2046 2046 2046	<ul><li>7.2 No effect</li><li>7.2 No effect</li><li>7.2 No effect</li></ul>	n/a - No LSE n/a - No LSE n/a - No LSE	- · · · · · · · · · · · · · · · · · · ·	No LSE I/C No LSE I/C No LSE I/C	I/C Summary No effects from SWS optio
SWS SWS SWS	North Downs Woodlands SAC Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey Desalination (KMW): Thames	2046 2046 2046	<ul><li>7.2 No effect</li><li>7.2 No effect</li><li>7.2 No effect</li></ul>	n/a - No LSE n/a - No LSE n/a - No LSE n/a - No	- - -	No LSE I/C No LSE I/C No LSE I/C	
sws sws sws	North Downs Woodlands SAC Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey Desalination (KMW): Thames Estuary Desalination (KMW): Thames Estuary	2046 2046 2046 2040	<ul><li>7.2 No effect</li><li>7.2 No effect</li><li>7.2 No effect</li><li>5.3 No effect</li></ul>	n/a - No LSE n/a - No LSE n/a - No LSE n/a - No LSE n/a - No LSE		No LSE I/C No LSE I/C No LSE I/C No LSE I/C No LSE I/C	
sws sws sws	North Downs Woodlands SAC Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey Desalination (KME): Isle of Sheppey Desalination (KMW): Thames Estuary Desalination (KMW): Thames	2046 2046 2046 2040	<ul><li>7.2 No effect</li><li>7.2 No effect</li><li>7.2 No effect</li><li>5.3 No effect</li></ul>	n/a - No LSE n/a - No LSE n/a - No LSE n/a - No LSE n/a - No LSE		No LSE I/C No LSE I/C No LSE I/C No LSE I/C	

pptions therefore no i/c effects with SWS WRMP

options; i/c assessment as per SWS i/c (Appendix F)

ptions; note, may be exposed to BW options but no risk of i/c

pptions therefore no i/c effects with SWS WRMP

_							
SWS	Asset enhancement (KMW): Remove	2026	3.9 No effect	n/a - No	-	No LSE I/C	-
	network constraint at Longfield			LSE			
	(13MI/d)						_
SWS	Groundwater (KME): Recommission Gravesend (2.7MI/d)	2031	7.9 No effect	n/a - No LSE	-	No LSE I/C	
SWS	Desalination (KME): Isle of Sheppey	2046	7.2 No effect	n/a - No	-	No LSE I/C	-
SEW	Groundwater Licence Trade -	2040	1.3 No	LSE n/a - No	-	No LSE I/C	-
	Folkestone Beds Abstraction, Halling			LSE			_
SEW	RZ6 Zonal Scheme - Reinforcement to Halling Reservoir	2040	0.3 No	n/a - No LSE	-	No LSE I/C	
SEW	New Company Transfer: RZ1 to	2040	4.9 No	n/a - No	-	No LSE I/C	_
	RZ6 Transfer - Blackhurst to Medway (4 MI/d)			LSE			
SEW	RZ6 Sub-Zonal Scheme -	2038	8.1 No	n/a - No	-	No LSE I/C	-
SE/V/	Reconfigure Southern Maidstone RZ6 Sub-Zonal Scheme - Hermitage	2039	8.1 No	LSE n/a - No	-	No LSE I/C	_
JLVV	to Linton ring main	2037	0.1 100	LSE		NO LJL I/C	
SEW	RZ7 Sub-Zonal Scheme - Paddock	2040	8.3 No	n/a - No	-	No LSE I/C	_
	Wood to Beech			LSE			
SEW	RZ8 Sub-Zonal Scheme -	2039	7.6 No	n/a - No	-	No LSE I/C	_
	Hollingbourne to Warren Street			LSE			
	reinforcement						
	, ,	ear Dist(ki 2041 0/DS	m) Scr. concl LSE		AA Summary	I/C concl. No AE I/C*	I/C Summary Construction within th
	Desalination (KTZ): East Thanet	2011 0.20		No AE*	Adverse effects almost certainly avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. In summary, the outfall for the plant will be located in this site. The qualifying features of the site may be vulnerable to construction disturbance (although this is clearly avoidable with normal measures) or through impacts on the supporting habitats (i.e. sandbanks over which they forage). However, the sandbank supporting habitats are likely to have a low sensitivity to both construction and operation, being essentially low-diversity highly-mobile sandbank habitats that will be resilient to short-term perturbance associated with construction; the environmental changes associated with operation effects are likely to be limited in spatial extent (based on other desalination schemes), and the features will have a low sensitivity to this. The extent of any effects will also be very small (arguably inconsequential) in relation to the size of the site. There are inevitably some uncertainties due to the long timescales that can only be resolved with detailed design (e.g. sediment deposition and hydrodynamics may be affected if the pipeline is not buried), but these appear avoidable or mitigatable, such that adverse effects on integrity do not appear to be an unavoidable outcome of the option.		Outfalls and pipelines of dynamics locally), and be measurable within to option are very unlikel the site. However, the changes associated with be expected; however, options hence risk of so resolved with the avail
SWS	Desalination (KTZ): East Thanet	2041 0/DS	LSE	No AE	Adverse effects almost certainly avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. In summary, the outfall for the plant will be located in this site, although construction of this will have been completed under option THA20. The qualifying features of the site will not be particularly exposed or sensitive to construction noise (etc) in the terrestrial environment. The sandbank supporting habitats are likely to have a low sensitivity to operation, being essentially low-diversity highly-mobile sandbank habitats; the environmental changes associated with operation effects are likely to be limited in spatial extent (based on other desalination schemes), and the features will have a low sensitivity to this. The extent of any effects will also be very small (arguably inconsequential) in relation to the size of the site. There are inevitably some uncertainties due to the long timescales that can only be resolved with detailed design (e.g. sediment deposition and hydrodynamics may be affected if the pipeline is not buried), but these appear avoidable or mitigatable, such that adverse effects on integrity do not appear to be an unavoidable outcome of the option.	No AE I/C*	
SWS	Desalination (KME): Isle of Sheppey	2046	2.5 Uncertain	No AE	Adverse effects almost certainly avoidable based on proxy data and evidence from similar sites / schemes; site interest features likely to have a low sensitivity and exposure to the anticipated magnitude of environmental change associated with operation, assuming appropriate siting of outfall and operational parameters in relation to discharges. Construction effects unlikely and avoidable with established measures.	No AE I/C*	-
SWS	Desalination (KME): Isle of Sheppey	2046	2.5 Uncertain	No AE		No AE I/C*	_

In this site is likely for the East Thanet scheme and Reculver. Thes will be located in the site (which may affect sediment etc and operational discharges from both desalination options will likely and the site and may overlap. The effects of the IoS desalination likely to overlap with the other options and will not directly affect the SPA and its features will have a low sensitivity to environmental with these aspects, and adverse effects in combination would not ver, there are residual uncertainties due to the proximity of these of spatially coincident in combination effects that cannot be vailable data.

SWS	Desalination (KME): Isle of Sheppey	2046	2.5 Uncertain	No AE	Adverse effects almost certainly avoidable based on proxy data and evidence from similar sites / schemes; site	No AE I/C*	
					interest features likely to have a low sensitivity and exposure to the anticipated magnitude of environmental		
					change associated with operation, assuming appropriate siting of outfall and operational parameters in relation to discharges. Construction effects unlikely and avoidable with established measures.		_
SWS	Recycling (KME): Sittingbourne industrial water reuse (7.5MI/d)	2031	8.9 No effect	n/a - No LSE	-	No AE I/C*	
SWS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity	2040 3.6/DS	No effect	n/a - No LSE	-	No AE I/C*	-
SWS	(9MI/d) Bulk import (KTZ): SEW Canterbury	2050	6.1 No effect	n/a - No	-	No AE I/C*	-
SWS	to Near Canterbury (20MI/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8MI/d)	2026 3.6/DS	No effect	LSE n/a - No LSE	-	No AE I/C*	-
SWS	Desalination (KME): Isle of Sheppey	2046	2.5 Uncertain		Adverse effects almost certainly avoidable based on proxy data and evidence from similar sites / schemes; site interest features likely to have a low sensitivity and exposure to the anticipated magnitude of environmental change associated with operation, assuming appropriate siting of outfall and operational parameters in relation to discharges. Construction effects unlikely and avoidable with established measures.	No AE I/C*	-
SEW	RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR	2036	4.9 No	n/a - No LSE	-	No AE I/C*	-
	Reculver Desalination (30MI/d Option)	2044	0 Yes	No AE	Subject to further assessment/modelling to consider extent of physical hydrodynamic impacts, e.g. scour, and affects on prey species of qualifying features of brine discharge. Sensitive design, avoidance, mitigation and construction best practice also required to minimise impacts to an acceptable level.	No AE I/C*	_
	RZ8 Zonal Scheme - Transfer of ater from Littlehampton WTW	2044	0.6 Effects Uncertain	No AE	Subject to further assessment/survey to determine whether any land within the footprint of the pipeline works could be functionally linked to the SPA and mitigation measures put in place to minimise impacts to an acceptable level.	No AE I/C*	
тца		Year Dist(kn			AA Summary		I/C Summary
THA	Oxford Meadows SAC 0		n) Scr. conc 0.4				
THA THA		0	0.4	0	0		
	0	0	0.4	0	0	0 No AE I/C	
THA	0	0 0 0 0	0.4 0.9 4.7	0	0	0 No AE I/C 0 No AE I/C 0 No AE I/C	I/C Summary Not exposed to effects
THA THA	0	0 0 0 0	0.4 0.9 4.7	0	0	0 No AE I/C 0 No AE I/C 0 No AE I/C I/C concl.	Not exposed to effects I/C Summary No LSE alone; no risk o (distance, no pathways
THA THA	0 Pagham Harbour Ramsar Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d)	0 0 0 Year Dist(kn	0.4 0.9 4.7 n) <u>Scr. conc</u> 9.4 No effect	0 0 1. AA concl. n/a - No LSE	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No AE I/C 0 No AE I/C 0 No AE I/C <u>I/C concl.</u> No LSE I/C	Not exposed to effects
THA THA SWS	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 Year Dist(kn 2040	0.4 0.9 4.7 n) <u>Scr. conc</u> 9.4 No effect	0 0 1. AA concl. n/a - No LSE	0 C C C C C C C C C C C C C C C C C C C	0 No AE I/C 0 No AE I/C 0 No AE I/C 1/C concl. No LSE I/C	Not exposed to effects I/C Summary No LSE alone; no risk o (distance, no pathways be functionally reliant o I/C Summary
THA THA SWS	0 Pagham Harbour Ramsar Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Pagham Harbour SPA Bulk import (SNZ): Havant Thicket	0 0 Vear Dist(kn 2040 Year Dist(kn	0.4 0.9 4.7 n) Scr. conc 9.4 No effect n) Scr. conc	0 . AA concl. n/a - No LSE . AA concl. n/a - No LSE	0 AA Summary - AA Summary	0 No AE I/C 0 No AE I/C 0 No AE I/C 1/C concl. No LSE I/C	Not exposed to effects I/C Summary No LSE alone; no risk o (distance, no pathways be functionally reliant o I/C Summary
THA THA SWS	0 Pagham Harbour Ramsar Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Pagham Harbour SPA Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Lavant Booster	0 0 0 Vear Dist(kn 2040 Year Dist(kn 2040	0.4 0.9 4.7 n) Scr. conc 9.4 No effect n) Scr. conc 9.4 No effect 10 No effect	0 0 1. AA concl. n/a - No LSE 1. AA concl. n/a - No LSE	0 AA Summary - AA Summary - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	0 No AE I/C 0 No AE I/C 0 No AE I/C 1/C concl. No LSE I/C 1/C concl. No LSE I/C 0 No LSE I/C	Not exposed to effects I/C Summary No LSE alone; no risk o (distance, no pathways be functionally reliant o I/C Summary
THA THA SWS SWS	0 Pagham Harbour Ramsar Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Pagham Harbour SPA Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Lavant Booster	0 0 0 Vear Dist(kn 2040 Vear Dist(kn 2040 2035	0.4 0.9 4.7 n) Scr. conc 9.4 No effect n) Scr. conc 9.4 No effect 10 No effect	0 0 1. AA concl. n/a - No LSE 1. AA concl. n/a - No LSE	0 AA Summary - AA Summary	0 No AE I/C 0 No AE I/C 0 No AE I/C 1/C concl. No LSE I/C 0 No LSE I/C 0 No LSE I/C	Not exposed to effects  I/C Summary No LSE alone; no risk c (distance, no pathways be functionally reliant c I/C Summary No effects from SWS o
THA THA SWS SWS	0 Pagham Harbour Ramsar Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Pagham Harbour SPA Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Lavant Booster Parkgate Down SAC Bulk import (KTZ): SEW Kingston to	0       0       0       0       Vear     Dist(kn       2040       Year       2035       Year       2026	0.4 0.9 4.7 n) Scr. conc 9.4 No effect n) Scr. conc 9.4 No effect 10 No effect 10 No effect	0 . AA concl. n/a - No LSE .	0 AA Summary - AA Summary - AA Summary - AA Summary - AA Summary	0 No AE I/C 0 No AE I/C 0 No AE I/C 1/C concl. No LSE I/C 0 No LSE I/C 0 No LSE I/C	Not exposed to effects
THA THA SWS SWS PW	0 Pagham Harbour Ramsar Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Pagham Harbour SPA Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Lavant Booster Parkgate Down SAC Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d)	0       0       0       0       Year     Dist(kn       2040       Year       2035       Year       2026       0	0.4 0.9 4.7 n) Scr. conc 9.4 No effect n) Scr. conc 9.4 No effect 10 No effect 10 No effect 10 No effect 3.9	0  0  1. AA concl. n/a - No LSE  1. AA concl. n/a - No LSE  1. AA concl. n/a - No LSE  0	0 AA Summary - AA Summary - AA Summary - AA Summary - 0 AA Summary - 0 0	0 No AE I/C 0 No AE I/C 0 No AE I/C 1/C concl. No LSE I/C 0 No LSE I/C 1/C concl. No LSE I/C	Not exposed to effects
THA THA SWS SWS PW SWS AFF	0 Pagham Harbour Ramsar Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Pagham Harbour SPA Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Lavant Booster Parkgate Down SAC Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) 0	0 0 0 10 10 10 10 10 10 10 10 10 10 10 1	0.4 0.9 4.7 n) <u>Scr. conc</u> 9.4 No effect 10 No effect 10 No effect 10 No effect 3.9 5.8	0  0  1. AA concl. n/a - No LSE  1. AA concl. n/a - No LSE  1. AA concl. n/a - No LSE  0  0	0       1         0       1         0       1         AA Summary       1         0       1         AA Summary       1         0       1         0       1         0       1         0       1         0       1         0       1         0       1         0       1	0 No AE I/C 0 No AE I/C 0 No AE I/C 1/C concl. No LSE I/C 0 No LSE I/C 0 No LSE I/C 0 No LSE I/C 0 No LSE I/C	Not exposed to effects  I/C Summary No LSE alone; no risk of (distance, no pathways) be functionally reliant of I/C Summary No effects from SWS of HRA subject to review
THA THA SWS SWS PW SWS AFF AFF	0 Pagham Harbour Ramsar Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Pagham Harbour SPA Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d) Lavant Booster Parkgate Down SAC Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) 0	0 0 0 10 10 10 10 10 10 10 10 10 10 10 1	0.4 0.9 4.7 n) <u>Scr. conc</u> 9.4 No effect 10 No effect 10 No effect 10 No effect 3.9 5.8	0  0  1. AA concl. n/a - No LSE  1. AA concl. n/a - No LSE  1. AA concl. n/a - No LSE  0  0	0 AA Summary - AA Summary - AA Summary - AA Summary - 0 AA Summary - 0 0	0 No AE I/C 0 No AE I/C 0 No AE I/C 1/C concl. No LSE I/C 0 No LSE I/C 1/C concl. No LSE I/C 0 No LSE I/C 0 No LSE I/C 0 No LSE I/C	Not exposed to effects

cts from any SW options

sk of i/c effects (site / feature not exposed to construction effects ays for site-derived pollutants, mobile feature population will not at on habitats affected option); no additive effects from options.

S options therefore no i/c effects with SWS WRMP

S options therefore no i/c effects with SWS WRMP; NOTE, AFW w however HRA indicates no AEIC on this site.

S options therefore no i/c effects with SWS WRMP

SWS	Recycling (KMW): Medway WTW to lake (14MI/d)	2031	1.4 No effect	n/a - No LSE	-	No LSE I/C	-
	Asset enhancement (KMW): Remove network constraint at Longfield (13MI/d)	2026	6.6 No effect	n/a - No LSE	-	No LSE I/C	
SEW	Groundwater Licence Trade - Folkestone Beds Abstraction, Halling	2040	2 No	n/a - No LSE	-	No LSE I/C	-
SEW	RZ6 Zonal Scheme - Reinforcement to Halling Reservoir	2040	2.4 No	n/a - No LSE	-	No LSE I/C	-
	New Company Transfer: RZ1 to RZ6 Transfer - Blackhurst to Medway (4 Ml/d)	2040	6.9 No	n/a - No LSE	-	No LSE I/C	-
	RZ6 Sub-Zonal Scheme - Hermitage to Linton ring main	2039	6.3 No	n/a - No LSE	-	No LSE I/C	-
SWS	Pevensey Levels Ramsar Recycling (SHZ): Hastings to Darwell	Year Dist(kn 2051 4.7/DS	n) Scr. concl Uncertain*		AA Summary Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable		I/C Summary Only exposed to SWS opt
	(15.3MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
	Pevensey Levels SAC	Year Dist(kn	n) Scr. concl	. AA concl.	. AA Summary	I/C concl.	I/C Summary
SWS	Recycling (SHZ): Hastings to Darwell (15.3MI/d)	2051 4.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	Only exposed to SWS opt
	Portsmouth Harbour Ramsar	Year Dist(kn	n) Scr. concl	. AA concl.	. AA Summary	I/C concl.	I/C Summary
SWS	Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d)	2040	8.8 No effect	n/a - No LSE		No AE I/C	The operation of these op distance and small-scale of
SWS	Bulk import (HSE): Havant Thicket Reservoir to Lower Itchen WSW (90MI/d)	2035 1.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	that adverse effects on mo
SWS	Recycling (HSE): Recharge of Havant Thicket from recycled water from Portsmouth Water (60MI/d)	2035	5.4 Uncertain	No AE	This option has been subject to project level design and investigations through the SRO gated process, which provides the best-available environmental data and assessment for the option (see https://www.southernwater.co.uk/media/5424/gate-2-annex-3-havant-thicket-technical-redacted.pdf). In summary, these assessments have concluded that adverse effects will not occur as a result of the option, subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA of the WRMP necessarily reflects this.	No AE I/C	-
PW	Farlington increased treatment capacity	2047	3.5 No effect		5	No AE I/C	-
PW	Farlington increased treatment capacity 2	2049	3.5 No LSE		0 0	No AE I/C	_
PW	Lavant Booster	2035	10 No effect		0 0	No AE I/C	_
PW	HT to Lower Itchen Spur to Hoadshill (20 MI/d)	2051	3.9 No effect		0 0	No AE I/C	
	Portsmouth Harbour SPA	Year Dist(kn	n) Scr. concl	. AA concl.	. AA Summary	I/C concl.	I/C Summary
	Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50MI/d)	2040	8.8 No effect	n/a - No LSE		No AE I/C	The operation of these op distance and small-scale of
SWS	Bulk import (HSE): Havant Thicket Reservoir to Lower Itchen WSW (90MI/d)	2035 1.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	that adverse effects on mo

options; i/c assessment as per SWS i/c (Appendix F)

options; i/c assessment as per SWS i/c (Appendix F)

options will not coincide spatially to affect these sites; the e of any 'alone' effects (relatively to the site size) also ensures mobile features using different areas of the site will not occur.

options will not coincide spatially to affect these sites; the e of any 'alone' effects (relatively to the site size) also ensures mobile features using different areas of the site will not occur.

SWS	Recycling (HSE): Recharge of Havant Thicket from recycled water from Portsmouth Water (60Ml/d)	2035	5.4 Uncertain	No AE	This option has been subject to project level design and investigations through the SRO gated process, which provides the best-available environmental data and assessment for the option (see https://www.southernwater.co.uk/media/5424/gate-2-annex-3-havant-thicket-technical-redacted.pdf). In summary, these assessments have concluded that adverse effects will not occur as a result of the option, subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA of the WRMP necessarily reflects this.		-
PW	Farlington increased treatment capacity	2047	3.5 No effect		0	0 No AE I/C	-
PW	Farlington increased treatment capacity 2	2049	3.5 No LSE		0	0 No AE I/C	-
PW	HT to Lower Itchen Spur to Hoadshill (20 MI/d)	2051	3.9 No effect		0	0 No AE I/C	-
	Queendown Warren SAC	Year Di	ist(km) Scr. concl	. AA concl	I. AA Summary	I/C concl.	I/C Summary
SWS	Desalination (KME): Isle of Sheppey	2046	4.2 No effect	n/a - No LSE	-	No LSE I/C	No effects from SWS option
SWS	Desalination (KME): Isle of Sheppey	2046	4.2 No effect	n/a - No LSE	-	No LSE I/C	-
SWS	Desalination (KME): Isle of Sheppey	2046	4.2 No effect		-	No LSE I/C	-
SWS	Recycling (KMW): Medway WTW to lake (14MI/d)	2031	10 No effect	n/a - No LSE	-	No LSE I/C	-
SWS	Recycling (KME): Sittingbourne industrial water reuse (7.5MI/d)	2031	4.9 No effect	n/a - No LSE	-	No LSE I/C	
	Desalination (KME): Isle of Sheppey	2046	4.2 No effect	n/a - No LSE	-	No LSE I/C	
SEW	RZ8 Sub-Zonal Scheme - Hollingbourne to Warren Street reinforcement	2039	7.5 No	n/a - No LSE	-	No LSE I/C	
	Richmond Park SAC	Year Di	ist(km) Scr. concl	. AA concl	. AA Summary	I/C concl.	I/C Summary
THA	0	0	1.2	0	0	0 No AE I/C	Not exposed to effects fro
THA	0	0	1.4	0	0	0 No AE I/C	-
THA	0	0	3	0	0	0 No AE I/C	-
THA	0	0	7	0	0	0 No AE I/C	-
AFF	0	0	7.4	0	0	0 No AE I/C	-
AFF	0	0	8.3	0	0	0 No AE I/C	-
AFF	0	0	9.1	0	0	0 No AE I/C	-
	River Itchen SAC	Year Di	ist(km) Scr. concl	. AA concl	I. AA Summary	I/C concl.	I/C Summary
SWS	Bulk import (HSE): PWC Source A to Lower Itchen WSW (21MI/d)	2032 0/1	DS LSE	No AE	Pipeline will cross site but effects avoidable with established measures	No AE I/C	Only exposed to SWS opt
SWS	Groundwater (HSW): Test MAR (5.5MI/d)	2036	8.4 No effect	n/a - No LSE	-	No AE I/C	_
SWS	Interzonal transfer (HRZ-HSW): Romsey Town and <b>Test valve</b> (3.1MI/d)	2026	9.9 No effect	n/a - No LSE	-	No AE I/C	-

pptions therefore no i/c effects with SWS WRMP

from any SW options

options; i/c assessment as per SWS i/c (Appendix F)

SWS	Bulk import (HSE): Havant Thicket	2035 0/DS	Uncertain*	No AE	This option has been subject to project level design and investigations through the SRO gated process, which No	AE I/C	
	Reservoir to Lower Itchen WSW (90MI/d)				provides the best-available environmental data and assessment for the option (see https://www.southernwater.co.uk/media/5424/gate-2-annex-3-havant-thicket-technical-redacted.pdf). In summary, these assessments have concluded that adverse effects will not occur as a result of the option, subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA of the WRMP necessarily reflects this.		
	Interzonal transfer (HSE-HSW): Yew Hill WSW to River Test WSW bi- directional (60Ml/d)	2031 0.4/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No <i>i</i> with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	ae I/C	
SWS	Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d)	2031 0.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable. No <i>i</i> with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
	Interzonal transfer (HWZ-HAZ): Winchester to Andover bi- directional (15Ml/d)	2031 3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No A with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	AE I/C	
	Bulk import (HWZ): T2ST to Yew Hill (95Ml/d)	2040 0.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No <i>i</i> with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	AE I/C	-
	River Lambourn SAC	Year Dist(kn	n) Scr. concl	I. AA concl	. AA Summary I/C (	concl.	I/C Summary
	Groundwater (HKZ): Remove constraints at Newbury to increase yield (1.2Ml/d)	2028	5.4 No effect	n/a - No LSE	- No /	AE I/C	Effects from one SWS option effects with SWS WRMP like indicates no AEIC on this site
	Interzonal transfer (HAZ-HKZ): Andover to Kingsclere bi-directional (10MI/d)	2050	9.9 No effect	n/a - No LSE	- No /	ae I/C	
SWS	Bulk import (HWZ): T2ST to Yew Hill (95MI/d)	2040 DS/DS	LSE	No AE	Pipeline will cross site but effects avoidable with established measures No A	AE I/C	
THA	0	0	1	0	0 0 No /	AE I/C	-
	River Mease SAC	Year Dist(kn	n) Scr. concl	I. AA concl	. AA Summary I/C (	concl.	I/C Summary
THA	0	0		0			Not exposed to effects from
	Rook Clift SAC	Year Dist(kn	n) Scr. concl	I. AA concl	. AA Summary I/C o	concl.	I/C Summary
	Groundwater (SNZ): Petersfield refurbishment (1.6MI/d)	2029 DS	No effect	n/a - No LSE			No effects from SWS option effects from PW option.
	Bulk import (SNZ): SEW RZ5 to Pulborough	2040	5.1 No effect	n/a - No LSE	- No /	AE I/C	
	Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d)	2040	8 No effect	n/a - No LSE	- No /	AE I/C	
PW	Lavant Booster	2035	10 No effect		0 0 No /	AE I/C	-
-	Sandwich Bay SAC	Year Dist(kn					I/C Summary
	Desalination (KTZ): East Thanet	2041	2.9 No effect	n/a - No LSE			No LSE from any SWS optio
SWS	Desalination (KTZ): East Thanet	2041	2.9 No effect	n/a - No LSE	- No I	lse I/C	
	Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d)	2026 9.5/DS	No effect	n/a - No LSE	- No I	lse I/C	-
SWS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	2040 2.9/DS	No effect	n/a - No LSE	- No I	lse I/C	
	Bulk import (KTZ): SEW Canterbury to Near Canterbury (20MI/d)	2050 9.7/DS	No effect	n/a - No LSE	- No I	lse I/C	

option avoidable with established measures therefore no i/c MP likely; NOTE, TW HRA subject to review however HRA this site.

from any SW options

options therefore no i/c effects with SWS WRMP. No additional

S options alone so i/c effects with the SWS WRMP cannot occur; o effects on site, therefore no in combination effects.

IC .								
-	- No LSE I/C	No	No effect	2.9/DS	2026	er (KME-KTZ): KME-	Interzonal transfer	SWS
						al (15.8MI/d)	KTZ bi-directional	
/C	- No LSE I/C	No	No	7.2	2036	voir - 36mAOD -	Broad Oak Reserv	SEW
							5,126 MI	
/C	- No LSE I/C	No	No	9.7	2051	: SWS Wingham to	New Bulk Supply:	SEW
						(Broad Oak)	SEW Canterbury	
/C	0 No LSE I/C	0	0	1.9	0	0		AFF
I. I/C Summary							Shortheath Con	
C No effects from SWS optio	- No LSE I/C	No		9	2031	cheme - Greywell	RZ4 Sub-Zonal Sc	SEW
							to Swaineshill	
/C	- No LSE I/C	No	No	6.7	2031	cheme - Oakhanger	RZ5 Sub-Zonal Sc to Alton	SEW
I. I/C Summary	AA Summary I/C concl.	oncl.	Scr. concl.	Dist(km)	Year	Cocking Tunnels	Singleton and C SAC	
C Potentially exposed to cons case with normal measures;	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		Uncertain*	5.6	2040	Z): SEW RZ5 to	Bulk import (SNZ) Pulborough	SWS
C	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		Uncertain*	4.5	2040		Bulk import (SNZ) Reservoir to Pulbo	SWS
C	- No AE I/C	No	No	27.4	2031	cheme - Oakhanger	RZ5 Sub-Zonal Sc to Alton	SEW
c	0 No AE I/C	0	No effect	20	2047	sed treatment	Farlington increase capacity	PW
C	0 No AE I/C	0	No effect	20	2049	sed treatment	Farlington increase capacity 2	PW
C	0 No AE I/C	0	No effect	9.8	2026	permit	Slindon drought pe	PW

	Solent and Dorset Coast SPA	Year	Dist(km)	Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Bulk import (HSE): PWC Source A	203	32 1.5/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	This site is an ultimate do
	to Lower Itchen WSW (21MI/d)					with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		the interest and qualifying
						after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		most terrestrial habitats, a
SWS	Recycling (IOW): Sandown (8.5MI/d)	203	31 0.8/DS	Uncertain*	No AE	This site will have a low exposure to potential environmental changes in the Yar due to its location and the	No AE I/C	avoided with normal proje
						dominance of marine influences. Construction effects can be avoided with established measures; environmental		options (NOTE: BW option
						changes associated with operational are expected to be effectively nil as (a) recycled water in the Yar will be		
						treated to an approriate standard and used on a put and take basis, and (b) discharges from the outfall (the		
						existing Sandown WwTW LSO) into the English Channel will have a marginally higher salinity (only relative to		
						existing discharges; salinity will be substantiall less than seawater) and higher concentrations of some nutrient		
						(etc.) determinands as a result of reduced discharge volumes (total nutrient load will not change), although this		
						discharge will be to a high dispersal environment and so quickly attenuated (far-field effects from a large 'plume'	,	
						would not therefore be anticipated).		
SWS	Groundwater (HRZ): New	203	31 11.9/DS	No effect	n/a - No	-	No AE I/C	-
	boreholes at Romsey (4.8MI/d)				LSE			
-								

otions therefore no i/c effects with SWS WRMP

construction effects only; effects alone can be avoided in any arres; no additional effects from SEW options based on HRA.

down-catchment receptor for a number of options, although ing features of the site have a low sensitivity to construction in is, and construction-related in combination effects can be roject-level measures. No additional effects from PW or BW ptions not available for listing in this table).

SWS	Groundwater (HAZ): Recommission	2073 DS/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	Chilbolton (0.5MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
2///	Groundwater (HRZ): Remove	2031 DS/DS	Uncertain*	No AE	after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AF I/C
	constraints at Kings Sombourne	2031 03/03	Officer tain	NO AL	with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	(2.5MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Groundwater (HSW): Test MAR	2036 2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	(5.5MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Interzonal transfer (HRZ-HSW):	2026 7.1/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	Romsey Town and Test valve				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	(3.1MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Groundwater (IOW): New	2037 3.8/DS	No effect	n/a - No	-	No AE I/C
	boreholes at Newchurch (LGS)			LSE		
	(1.9MI/d)					
SWS	Groundwater (IOW): New borehole	2040 5.1/DS	No effect	n/a - No	-	No AE I/C
	at Eastern Yar3 (1.5MI/d)			LSE		
SWS	Recycling (SNZ): Littlehampton	2031	3.2 No effect	n/a - No	-	No AE I/C
	WTW with river discharge (15MI/d)			LSE		
SWS	Bulk import (SNZ): Havant Thicket	2040 7.9/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	Reservoir to Pulborough (50MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Desalination (SWZ): Tidal River	2046	1.2 Uncertain	No AE		No AE I/C
	Arun				4km from the boundary of the site; as the site was recently designated to cover those foraging areas critical for	
					breeding terns associated with the Solent harbour sites, it is reasonable to conclude that (a) the boundary of	
					the site accurately reflects the core areas of functional habitat associated with the breeding sites and (b) that	
					areas outside this boundary do not provide core areas of feeding habitat. As a result adverse effects from	
					operation would not be expected. Construction effects are avoidable with normal measures.	
SWS	Desalination (SWZ): Tidal River	2046	1.2 Uncertain	No AE	, , , , , , , , , , , , , , , , , , ,	No AE I/C
	Arun				4km from the boundary of the site; as the site was recently designated to cover those foraging areas critical for	
					breeding terns associated with the Solent harbour sites, it is reasonable to conclude that (a) the boundary of	
					the site accurately reflects the core areas of functional habitat associated with the breeding sites and (b) that	
					areas outside this boundary do not provide core areas of feeding habitat. As a result adverse effects from	
214/6	Dulk import (USE), Lloyant Thicket	2025 1 7/05	Lincortain*		operation would not be expected. Construction effects are avoidable with normal measures.	
2002	Bulk import (HSE): Havant Thicket	2035 1.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme level measures that are known to be available achievable and likely to be effective, residual effects	NO AE I/C
	Reservoir to Lower Itchen WSW (90MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
2/1/2	Interzonal transfer (HSE-HSW): Yew	2031 4.5/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AF I/C
5005	Hill WSW to River Test WSW bi-	2031 4.3/03	Officer tain	NO AL	with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	NO AL I/C
	directional (60MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Interzonal transfer (HSE-HWZ):	2031 8.4/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	Lower Itchen WSW to Yew Hill				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	bi-directional (74MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Interzonal transfer (HWZ-HAZ):	2031 14.2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C
	Winchester to Andover bi-				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	directional (15MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Bulk import (HKZ): T2ST to HKZ	2049 DS	No effect	n/a - No	0	No AE I/C
	(5MI/d)			LSE		
SWS	Interzonal transfer (HAZ-HKZ):	2050 DS	No effect	n/a - No	-	No AE I/C
	Andover to Kingsclere bi-directional			LSE		
	(10MI/d)					

SWS	Recycling (HSE): Recharge of Havant	2035	3.5 Uncertain	No AE	This option has been subject to project level design and investigations through the SRO gated process, which	No AE I/C
	Thicket from recycled water from				provides the best-available environmental data and assessment for the option (see	
	Portsmouth Water (60MI/d)				https://www.southernwater.co.uk/media/5424/gate-2-annex-3-havant-thicket-technical-redacted.pdf). In	
					summary, these assessments have concluded that adverse effects will not occur as a result of the option,	
					subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA	
					of the WRMP necessarily reflects this.	
SWS	Bulk import (HWZ): T2ST to Yew	2040 8.6/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidab	e No AE I/C
	Hill (95Ml/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effec	ts
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
PW	Farlington increased treatment	2047	2.5 No effect		0	0 No AE I/C
	capacity					
W	Farlington increased treatment	2049	2.5 No LSE		0	0 No AE I/C
	capacity 2					
	Slindon drought permit	2026	8.9 No effect		0	0 No AE I/C

	Solent and Isle of Wight Lagoons SAC	Year	Dist(km)	Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Recycling (IOW): Sandown (8.5MI/d)	2031	4/DS	Uncertain*	No AE	This site will have a low exposure to low magnitude environmental changes in the Yar. Construction effects can be avoided with established measures. Environmental changes associated with operational are expected to be negligible and not adverse as (a) recycled water in the Yar will be treated to an approriate standard and used on a put and take basis in the river above the boundary of this site; (b) the connectivity of the Yar with Brading Marshes SSSI (hence terrestrial components of Solent and Southampton Water SPA/Ramsar and Solent and Isle of Wight Lagoons SAC) is low, and evidence suggests that the interest features of the SPA/Ramsar and SAC associated with Brading Marshes are not fundamentally reliant on flows within the Yar due to the separation of the river from the marshes and the direct management of water levels across the marshes. (sluices etc.); and (c) the discharges from the outfall (the existing Sandown WwTW LSO) will be to a high dispersal environment and so quickly attenuated (far-field effects from a large 'plume' would not therefore be anticipated for this site).		The lagoon feature one water company with Bembridge Ha are address in the Farlington increase pathways for effect on this lagoon, base expected.
SWS	Groundwater (IOW): New boreholes at Newchurch (LGS) (1.9MI/d)	2037	<sup>7</sup> 6.5/DS	Uncertain	No AE	This option proposes replacing all three boreholes so that the site can operate to its licensed capacity (currently operating at 1.5Ml/d instead of 6Ml/d). The abstraction is from the Newchurch Lower Greensand boreholes and not from the existing Newchurch Chalk Well and Adit. Effects on flows in Yar due to GW drawdown cannot be accurately stated due to absence of detailed groundwater modelling for the source, but are likely to be small as much of the baseflow in the Yar is from the chalk rather than the Lower Greensand; there is an Non-Deterioration investigation timetabled to complete in 2027 that is likely to confirm this. Flows from the Yar into Bembridge harbour are managed by a sluice, and effects on the marine components of the SPA/Ramsar are expected to be nominal in relation to the dominance of tidal influence in the harbour. With regard to the Brading Marshes components of the SPA/Ramsar, these are below sea level so are protected from seawater inundation by the seawall and tidal gates at the end of the Yar; water levels in Brading Marshes are are largely controlled through direct management (sluices etc.) with some inundation occurring when the river is tidally locked, and are so not directly dependent on flows etc. within the Yar. Any effects of the option on water-supply to Brading Marshes will therefore be very small, and substantially moderated in any case by the interventionist water level management of the marshes and by other surface water and rainfall inputs to the marshes. As noted, there is likely to be little / no exposure to operational effects due to location / relationship of the lagoons are seawater-dominated, and essentially have salinities similar to seawater. The other two lagoons receive freshwater input from Brading Marshes and are hence brackish or low-salinity, but the water levels in Brading Marshes are largely controlled through direct management of lagoon network adjacent to Brading Marshes and Bembridge Harbour relative to Yar (in summary, two of the lagoon network adjacent t	No AE I/C	-
SWS	Groundwater (IOW): New borehole at Eastern Yar3 (1.5MI/d)	2040	10.1/DS	No effect	n/a - No LSE		No AE I/C	-
SWS	Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50MI/d)	2040	) 7	1 No effect	n/a - No LSE	-	No AE I/C	-

e that is theoretically exposed to options proposed by more than ny is the lagoon adjacent to Langstone harbour (those associated arbour (IoW) are only potentially affected by SWS options, which within-plan in combination section). However, the HRA of the ed treatment capacity options has concluded that there are no ts, and the Budd Farm recycling option will have no adverse effects sed on the Gate 2 data. No AE in combination would therefore be

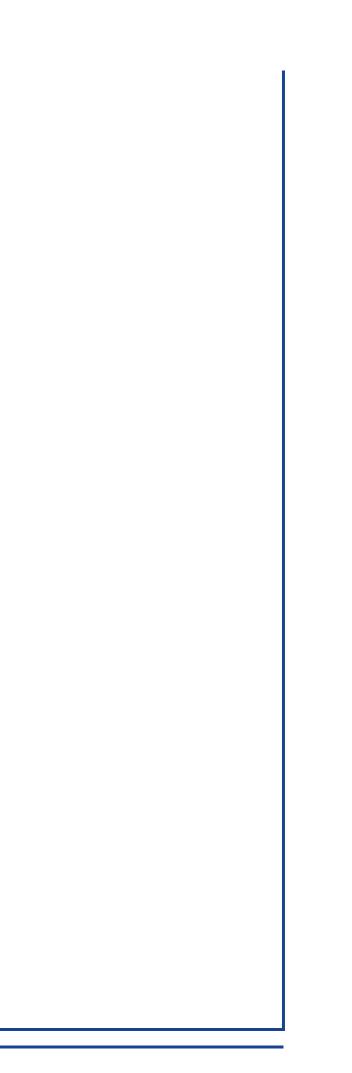
						_
-	No AE I/C	n/a - No LSE	2.2 No effect	2035	Bulk import (HSE): Havant Thicket Reservoir to Lower Itchen WSW (90MI/d)	SWS
-	No AE I/C	n/a - No LSE	3.1 Uncertain	2035	Recycling (HSE): Recharge of Havant Thicket from recycled water from Portsmouth Water (60Ml/d)	SWS
-	0 No AE I/C	0	2.1 No effect	2047	Farlington increased treatment capacity	PW
-	0 No AE I/C	0	2.1 No LSE	2049	Farlington increased treatment capacity 2	PW
-	0 No AE I/C	0	12 No effect	2051	HT to Lower Itchen Spur to Hoadshill (20 MI/d)	PW
I/C Summary	AA Summary I/C concl.	AA concl.	Scr. concl.	Year Dist(km)	Solent and Southampton Water Ramsar	
This site is the downstr environmental changes schemes are unlikely to	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C vith scheme-level measures that are known to be available, achievable and likely to be effective; residual effects fter mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	Uncertain*	2032 3/DS	Bulk import (HSE): PWC Source A to Lower Itchen WSW (21MI/d)	SWS
avoided with establishe spatially to affect these (relatively to the site siz different areas of the si for listing in this table, I	This site will have a low exposure to low magnitude environmental changes in the Yar. Construction effects No AE I/C an be avoided with established measures. Environmental changes associated with operational are expected to be negligible and not adverse as (a) recycled water in the Yar will be treated to an approriate standard and used on a put and take basis in the river above the boundary of this site; (b) the connectivity of the Yar with Brading Marshes SSSI (hence terrestrial components of Solent and Southampton Water SPA/Ramsar and Solent and Isle of Wight Lagoons SAC) is low, and evidence suggests that the interest features of the SPA/Ramsar and SAC ssociated with Brading Marshes are not fundamentally reliant on flows within the Yar due to the separation of he river from the marshes and the direct management of water levels across the marshes. (sluices etc.); and (c) he discharges from the outfall (the existing Sandown WwTW LSO) will be to a high dispersal environment and o quickly attenuated (far-field effects from a large 'plume' would not therefore be anticipated for this site).	No AE	Uncertain*	2031 1.7/DS	Recycling (IOW): Sandown (8.5MI/d)	SWS
-	No AE I/C	n/a - No LSE	No effect	2031 10/DS	Groundwater (HRZ): New boreholes at Romsey (4.8MI/d)	SWS
-	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C vith scheme-level measures that are known to be available, achievable and likely to be effective; residual effects fter mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	Uncertain*	2073 DS/DS	Groundwater (HAZ): Recommission Chilbolton (0.5MI/d)	SWS
_	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C vith scheme-level measures that are known to be available, achievable and likely to be effective; residual effects fter mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	Uncertain*	2031 DS/DS	Groundwater (HRZ): Remove constraints at Kings Sombourne (2.5MI/d)	SWS
_	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C vith scheme-level measures that are known to be available, achievable and likely to be effective; residual effects fter mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	Uncertain*	2036 0.3/DS	Groundwater (HSW): Test MAR (5.5MI/d)	SWS
_	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects fter mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	Uncertain*	2026 5.1/DS	Interzonal transfer (HRZ-HSW): Romsey Town and <b>Test valve</b> (3.1MI/d)	SWS

tream receptor for a number of schemes that may result in s associated with construction; however, the majority of these to occur in the same timescale, and effects can be reliably ed measures. The operation of these options will not coincide e sites; the distance and small-scale of any 'alone' effects size) also ensures that adverse effects on mobile features using site will not occur. Note that the BW options are not available , but will not operate in combination.

SWS	Groundwater (IOW): New	2037 4.2/DS	Uncertain	No AE	This option proposes replacing all three boreholes so that the site can operate to its licensed capacity No AE I/C	
	boreholes at Newchurch (LGS) (1.9MI/d)				(currently operating at 1.5MI/d instead of 6MI/d). The abstraction is from the Newchurch Lower Greensand boreholes and not from the existing Newchurch Chalk Well and Adit. Effects on flows in Yar due to GW	
					drawdown cannot be accurately stated due to absence of detailed groundwater modelling for the source, but	
					are likely to be small as much of the baseflow in the Yar is from the chalk rather than the Lower Greensand;	
					there is an Non-Deterioration investigation timetabled to complete in 2027 that is likely to confirm this. Flows	
					from the Yar into Bembridge harbour are managed by a sluice, and effects on the marine components of the	
					SPA/Ramsar are expected to be nominal in relation to the dominance of tidal influence in the harbour. With	
					regard to the Brading Marshes components of the SPA/Ramsar, these are below sea level so are protected from	
					seawater inundation by the seawall and tidal gates at the end of the Yar; water levels in Brading Marshes are are largely controlled through direct management (sluices etc.) with some inundation occurring when the river	
					is tidally locked, and are so not directly dependent on flows etc. within the Yar. Any effects of the option on	
					water-supply to Brading Marshes will therefore be very small, and substantially moderated in any case by the	
					interventionist water level management of the marshes and by other surface water and rainfall inputs to the	
					marshes. As a result, adverse effects are not anticipated as a result of operation.	
SWS	Groundwater (IOW): New borehole	2040 7.8/DS	No effect	n/a - No	- No AE I/C	
	at Eastern Yar3 (1.5MI/d)			LSE		
SWS	Bulk import (HSE): Havant Thicket	2035 3.2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C	
	Reservoir to Lower Itchen				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	WSW (90MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	_
SWS	Interzonal transfer (HSE-HSW): Yew	2031 3.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C	
	Hill WSW to River Test WSW bi-				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	directional (60MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	_
	Interzonal transfer (HSE-HWZ):	2031 10.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C	
	Lower Itchen WSW to Yew Hill bi-directional (74MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Interzonal transfer (HWZ-HAZ):	2031 16.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C	
	Winchester to Andover bi-				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	directional (15MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
SWS	Bulk import (HKZ): T2ST to HKZ (5MI/d)	2049 DS	No effect	n/a - No LSE	0 No AE I/C	
SWS	Interzonal transfer (HAZ-HKZ):	2050 DS	No effect	n/a - No	- No AE I/C	
	Andover to Kingsclere bi-directional (10MI/d)			LSE		
SWS	Bulk import (HWZ): T2ST to Yew	2040 DS/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C	
	Hill (95Ml/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	_
PW	HT to Lower Itchen Spur to Hoadshill (20 Ml/d)	2051	5.5 No effect		0 0 No AE I/C	
	Solent and Southampton Water Y	′ear Dist(km)	Scr. concl.	AA concl	. AA Summary I/C concl.	. I/C Summary
	Bulk import (HSE): PWC Source A to Lower Itchen WSW (21MI/d)	2032 3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	This site is the down environmental chang
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	schemes are unlikely
SWS	Recycling (IOW): Sandown (8.5MI/d)	2031 1.7/DS	Uncertain*	No AE	This site will have a low exposure to low magnitude environmental changes in the Yar. Construction effects No AE I/C	avoided with establis
					can be avoided with established measures. Environmental changes associated with operational are expected to	spatially to affect the
					be negligible and not adverse as (a) recycled water in the Yar will be treated to an approriate standard and used	(relatively to the site
					on a put and take basis in the river above the boundary of this site; (b) the connectivity of the Yar with Brading	different areas of the
					Marshes SSSI (hence terrestrial components of Solent and Southampton Water SPA/Ramsar and Solent and Isle	for listing in this tabl
					of Wight Lagoons SAC) is low, and evidence suggests that the interest features of the SPA/Ramsar and SAC	
					associated with Brading Marshes are not fundamentally reliant on flows within the Yar due to the separation of	
					the river from the marshes and the direct management of water levels across the marshes. (sluices etc.); and (c)	
					the discharges from the outfall (the existing Sandown WwTW LSO) will be to a high dispersal environment and	
l –					so quickly attenuated (far-field effects from a large 'plume' would not therefore be anticipated for this site).	

ownstream receptor for a number of schemes that may result in anges associated with construction; however, the majority of these kely to occur in the same timescale, and effects can be reliably blished measures. The operation of these options will not coincide these sites; the distance and small-scale of any 'alone' effects site size) also ensures that adverse effects on mobile features using the site will not occur. Note that the BW options are not available table, but will not operate in combination.

2002	Groundwater (HRZ): New	2031 10/DS	No effect	n/a - No	-	No AE I/C
	boreholes at Romsey (4.8MI/d)			LSE		
SWS	Groundwater (HAZ): Recommission Chilbolton (0.5MI/d)	2073 DS/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
WS	Groundwater (HRZ): Remove	2031 DS/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/
	constraints at Kings Sombourne				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	(2.5MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
WS	Groundwater (HSW): Test MAR (5.5MI/d)	2036 0.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
WS	Interzonal transfer (HRZ-HSW):	2026 5.2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/
	Romsey Town and Test valve (3.1MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
WS	Groundwater (IOW): New	2037 4.2/DS	Uncertain	No AE	This option proposes replacing all three boreholes so that the site can operate to its licensed capacity	No AE I/
	boreholes at Newchurch (LGS)				(currently operating at 1.5MI/d instead of 6MI/d). The abstraction is from the Newchurch Lower Greensand	
	(1.9MI/d)				boreholes and not from the existing Newchurch Chalk Well and Adit. Effects on flows in Yar due to GW	
					drawdown cannot be accurately stated due to absence of detailed groundwater modelling for the source, but	
					are likely to be small as much of the baseflow in the Yar is from the chalk rather than the Lower Greensand;	
					there is an Non-Deterioration investigation timetabled to complete in 2027 that is likely to confirm this. Flows	
					from the Yar into Bembridge harbour are managed by a sluice, and effects on the marine components of the	
					SPA/Ramsar are expected to be nominal in relation to the dominance of tidal influence in the harbour. With	
					regard to the Brading Marshes components of the SPA/Ramsar, these are below sea level so are protected from	
					seawater inundation by the seawall and tidal gates at the end of the Yar; water levels in Brading Marshes are	
					are largely controlled through direct management (sluices etc.) with some inundation occurring when the river	
					is tidally locked, and are so not directly dependent on flows etc. within the Yar. Any effects of the option on	
					water-supply to Brading Marshes will therefore be very small, and substantially moderated in any case by the	
					interventionist water level management of the marshes and by other surface water and rainfall inputs to the	
					marshes. As a result, adverse effects are not anticipated as a result of operation.	
SWS	Groundwater (IOW): New borehole	2040 7.8/DS	No effect	n/a - No	-	No AE I/
	at Eastern Yar3 (1.5MI/d)			LSE		
WS	Bulk import (HSE): Havant Thicket	2035 3.2/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/
	Reservoir to Lower Itchen				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	WSW (90MI/d)					
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
WS	Interzonal transfer (HSE-HSW): Yew	2031 3.3/DS	Uncertain*	No AE	after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/
WS	Interzonal transfer (HSE-HSW): Yew Hill WSW to River Test WSW bi-	2031 3.3/DS	Uncertain*	No AE		No AE I/
SWS		2031 3.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/
	Hill WSW to River Test WSW bi-	2031 3.3/DS 2031 10.7/DS			Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable I with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	
	Hill WSW to River Test WSW bi- directional (60MI/d)				Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable I with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	
	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ):				Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if	
SWS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill		Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/
SWS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d)	2031 10.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/
SWS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d) Interzonal transfer (HWZ-HAZ):	2031 10.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if	No AE I/
SWS SWS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d) Interzonal transfer (HWZ-HAZ): Winchester to Andover bi-	2031 10.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/ No AE I/
SWS SWS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d) Interzonal transfer (HWZ-HAZ): Winchester to Andover bi- directional (15MI/d)	2031 10.7/DS 2031 16.3/DS	Uncertain* Uncertain*	No AE No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/ No AE I/
SWS SWS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d) Interzonal transfer (HWZ-HAZ): Winchester to Andover bi- directional (15MI/d) Bulk import (HKZ): T2ST to HKZ	2031 10.7/DS 2031 16.3/DS	Uncertain* Uncertain*	No AE No AE n/a - No LSE n/a - No	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable 1 with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. 0	No AE I/ No AE I/ No AE I/
SWS SWS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d) Interzonal transfer (HWZ-HAZ): Winchester to Andover bi- directional (15MI/d) Bulk import (HKZ): T2ST to HKZ (5MI/d) Interzonal transfer (HAZ-HKZ): Andover to Kingsclere bi-directional	2031 10.7/DS 2031 16.3/DS 2049 DS	Uncertain* Uncertain* No effect	No AE No AE n/a - No LSE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable 1 with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. 0	No AE I/ No AE I/ No AE I/
5WS 5WS 5WS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d) Interzonal transfer (HWZ-HAZ): Winchester to Andover bi- directional (15MI/d) Bulk import (HKZ): T2ST to HKZ (5MI/d) Interzonal transfer (HAZ-HKZ):	2031 10.7/DS 2031 16.3/DS 2049 DS	Uncertain* Uncertain* No effect	No AE No AE n/a - No LSE n/a - No	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable 1 with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. 0	No AE I/ No AE I/ No AE I/
SWS SWS SWS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d) Interzonal transfer (HWZ-HAZ): Winchester to Andover bi- directional (15MI/d) Bulk import (HKZ): T2ST to HKZ (5MI/d) Interzonal transfer (HAZ-HKZ): Andover to Kingsclere bi-directional (10MI/d) Bulk import (HWZ): T2ST to Yew	2031 10.7/DS 2031 16.3/DS 2049 DS 2050 DS	Uncertain* Uncertain* No effect No effect	No AE No AE n/a - No LSE n/a - No LSE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. O if Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if Adverse effects alone will not occur (no pathways, magnitude of change too small, et	No AE 1/0 No AE 1/0 No AE 1/0 No AE 1/0
5WS 5WS 5WS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d) Interzonal transfer (HWZ-HAZ): Winchester to Andover bi- directional (15MI/d) Bulk import (HKZ): T2ST to HKZ (5MI/d) Interzonal transfer (HAZ-HKZ): Andover to Kingsclere bi-directional (10MI/d)	2031 10.7/DS 2031 16.3/DS 2049 DS 2050 DS	Uncertain* Uncertain* No effect No effect	No AE No AE n/a - No LSE n/a - No LSE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable is with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable is with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable is with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable is after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable is after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable is after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/( No AE I/( No AE I/(
5WS 5WS 5WS	Hill WSW to River Test WSW bi- directional (60MI/d) Interzonal transfer (HSE-HWZ): Lower Itchen WSW to Yew Hill bi-directional (74MI/d) Interzonal transfer (HWZ-HAZ): Winchester to Andover bi- directional (15MI/d) Bulk import (HKZ): T2ST to HKZ (5MI/d) Interzonal transfer (HAZ-HKZ): Andover to Kingsclere bi-directional (10MI/d) Bulk import (HWZ): T2ST to Yew	2031 10.7/DS 2031 16.3/DS 2049 DS 2050 DS	Uncertain* Uncertain* No effect No effect	No AE No AE n/a - No LSE No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable if with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/ No AE I/ No AE I/



		Year Dist(kn	·		AA Summary		I/C Summary
WS	Bulk import (HSE): PWC Source A	2032 5.7/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	This site is the do
	to Lower Itchen WSW (21MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		environmental c
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		schemes are un
NS	Recycling (IOW): Sandown (8.5MI/d)	2031	6.4 No effect	n/a - No	-	No AE I/C	avoided with es
				LSE			spatially to affe
VS	Groundwater (HRZ): New	2031 10.6/DS	No effect	n/a - No	-	No AE I/C	(relatively to th
	boreholes at Romsey (4.8MI/d)	2001 10.0/20		LSE			different areas
A/C		2073 DS/DS	l la contoia *		Advance offects slave will not ecour (no nothing a memitude of shares too small sta) on ore slavely avoidable		_
VS	Groundwater (HAZ): Recommission	20/3 DS/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	INO AE I/C	for listing in th
	Chilbolton (0.5Ml/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
VS	Groundwater (HRZ): Remove	2031 DS/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
	constraints at Kings Sombourne				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
	(2.5MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
NS	Groundwater (HSW): Test MAR	2036 1/DS	Uncertain*	No AF	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AF I/C	_
•••	(5.5MI/d)	2000 1120	One of tall	NO ME	with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
	(3.3111/4)						
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
NS	Interzonal transfer (HRZ-HSW):	2026 5.8/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
	Romsey Town and Test valve				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
	(3.1MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
VS	Groundwater (IOW): New	2037	6.9 No effect	n/a - No	-	No AE I/C	-
	boreholes at Newchurch (LGS)			LSE			
٥/٧	Groundwater (IOW): New borehole	2040	8.4 No effect	n/a - No		No AE I/C	_
, v J		2040	J.T INU CIICUL	LSE		NU AL I/U	
	at Eastern Yar3 (1.5MI/d)	0010.00/00					_
NS	Bulk import (SNZ): Havant Thicket	2040 3.3/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
	Reservoir to Pulborough (50MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
NS	Bulk import (HSE): Havant Thicket	2035 0/DS	Uncertain*	No AE	This option has been subject to project level design and investigations through the SRO gated process, which	No AE I/C	
	Reservoir to Lower Itchen				provides the best-available environmental data and assessment for the option (see		
	WSW (90MI/d)				https://www.southernwater.co.uk/media/5424/gate-2-annex-3-havant-thicket-technical-redacted.pdf). In		
					summary, these assessments have concluded that adverse effects will not occur as a result of the option,		
					subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA		
					of the WRMP necessarily reflects this.		_
WS	Interzonal transfer (HSE-HSW): Yew	2031 3.4/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	
	Hill WSW to River Test WSW bi-				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
	directional (60MI/d)				after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		
NS	Interzonal transfer (HSE-HWZ):	2031 12/DS	Uncertain*	n/a - No	-	No AE I/C	-
	Lower Itchen WSW to Yew Hill			LSE			
	bi-directional (74MI/d)			LOL			
		2021 1/ 7/00	N	ula Nia			_
182	Interzonal transfer (HWZ-HAZ):	2031 16.7/DS	No effect	n/a - No	-	No AE I/C	
	Winchester to Andover bi-			LSE			
	directional (15MI/d)						_
NS	Bulk import (HKZ): T2ST to HKZ	2049 DS	No effect	n/a - No	0	No AE I/C	
	(5MI/d)			LSE			
NS	Interzonal transfer (HAZ-HKZ):	2050 DS	No effect	n/a - No	-	No AE I/C	_
-	Andover to Kingsclere bi-directional			LSE			
	-			LJL			
	(10MI/d)	0005 0/50					_
10	Recycling (HSE): Recharge of Havant	2035 0/DS	Uncertain	No AE		No AE I/C	
VS					provides the best-available environmental data and assessment for the option (see		
VS	Thicket from recycled water from				https://www.southernwater.co.uk/media/5424/gate-2-annex-3-havant-thicket-technical-redacted.pdf). In		
VS	Thicket from recycled water from Portsmouth Water (60MI/d)						
NS					summary, these assessments have concluded that adverse effects will not occur as a result of the option,		
NS							
NS					subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA		
	Portsmouth Water (60Ml/d)	2010 05/05	Incortain*		subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA of the WRMP necessarily reflects this.	No AE VO	_
	Portsmouth Water (60Ml/d) Bulk import (HWZ): T2ST to Yew	2040 DS/DS	Uncertain*	No AE	subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA of the WRMP necessarily reflects this. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	-
	Portsmouth Water (60Ml/d)	2040 DS/DS	Uncertain*	No AE	subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA of the WRMP necessarily reflects this. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/C	_
	Portsmouth Water (60Ml/d) Bulk import (HWZ): T2ST to Yew	2040 DS/DS 2047	Uncertain*		subject to the implementation of mitigation measures identified through the SRO gated process, and the HRA of the WRMP necessarily reflects this. Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	_

Instream receptor for a number of schemes that may result in ages associated with construction; however, the majority of these by to occur in the same timescale, and effects can be reliably ished measures. The operation of these options will not coincide uses sites; the distance and small-scale of any 'alone' effects the size) also ensures that adverse effects on mobile features using the site will not occur. Note that the BW options are not available oble, but will not operate in combination.

	Farlington increased treatment capacity 2		)49	1.1 No LSE		0	0 No AE I/C	_
PW	Lavant Booster	20	035	3 Yes	No AE	No changes in the groundwater table are expected as part of the option. There will be no increase in abstraction. Construction best practice measures to control localised impacts from dust, vehicle emissions and other	No AE I/C	_
PW	HT to Racton via Farlington 20MI/d	20	046	1.1 No effect		0	0 No AE I/C	-
PW	HT to Lower Itchen Spur to Hoadshill (20 MI/d)	20	051	5.5 No effect		0	0 No AE I/C	
	South West London Waterbodies Ramsar	Year	Dist(k	m) Scr. cond	cl. AA conc	I. AA Summary	I/C concl.	I/C Summary
THA		0	0	0	0	0	0 No AE I/C	Not exposed to effect
THA		0	0	4.7	0	0	0 No AE I/C	-
THA		0	0	5.2	0	0	0 No AE I/C	-
THA		0	0	5.4	0	0	0 No AE I/C	-
AFF		0	0	0.3	0	0	0 No AE I/C	-
AFF		0	0	1.4	0	0	0 No AE I/C	-
AFF		0	0	1.5	0	0	0 No AE I/C	-
AFF		0	0	4.3	0	0	0 No AE I/C	-
AFF		0	0	4.4	0	0	0 No AE I/C	-
AFF		0	0	4.6	0	0	0 No AE I/C	-
AFF		0	0	4.8	0	0	0 No AE I/C	-

fects from any SW options

South West London Waterbodies SPA	Yea	r Dist	t(km) Scr. (	concl. AA co	ncl. AA Summary	I/C	concl.	I/C Summary
THA	0	0	0	0	0	0 No	AE I/C	Not exposed to effects fr
ТНА	0	0	4.7	0	0	0 No	AE I/C	
ТНА	0	0	5.2	0	0	0 No	AE I/C	
ТНА	0	0	5.4	0	0	0 No	AE I/C	
AFF	0	0	0.3	0	0	0 No	AE I/C	
AFF	0	0	1.4	0	0	0 No	AE I/C	
AFF	0	0	1.5	0	0	0 No	AE I/C	
AFF	0	0	4.3	0	0	0 No	AE I/C	
AFF	0	0	4.3	0	0	0 No	AE I/C	
AFF	0	0	4.6	0	0	0 No	AE I/C	
AFF	0	0	4.8	0	0	0 No	AE I/C	
South Might Moritig		r Diet	t/km) Ser				concl	
South Wight Maritim SWS Recycling (IOW): Sando		2031	0.9 Uncer		dominance of marine influences. Constructi changes associated with operational are exp treated to an approriate standard and used existing Sandown WwTW LSO) into the En- existing discharges; salinity will be substantia (etc.) determinands as a result of reduced di			I/C Summary Only exposed to SWS op

s from any SW options

S options; i/c assessment as per SWS i/c (Appendix F)

							_
SWS	Groundwater (IOW): New	2037	3.9 No effect	n/a - No	-	No AE I/C	
	boreholes at Newchurch (LGS)			LSE			_
WS	Groundwater (IOW): New borehole	2040	4.4 No effect	n/a - No	-	No AE I/C	
	at Eastern Yar3 (1.5MI/d)			LSE			
	Stodmarsh Ramsar Y	′ear Dist(kr	m) Ser concl		. AA Summary	I/C concl	I/C Summary
2\\\/S	Desalination (KTZ): East Thanet	2041	5.7 No effect	n/a - No			This site or its features is
JVVJ	Desamation (KTZ). Last manet	2041	5.7 NO CILCCI	LSE		NO AL I/C	and SEW options; these e
SWS	Desalination (KTZ): East Thanet	2041	5.7 No effect	n/a - No	-	No AE I/C	unavoidable i/c effects wo
	,			LSE			
SWS	Bulk import (KTZ): SEW Kingston to	2026	5.9 No effect	n/a - No		No AE I/C	-
	Near Canterbury (2MI/d)			LSE			
SWS	Interzonal transfer (KTZ-KME):	2040	0.4 No effect	n/a - No		No AE I/C	-
	Utilise full existing transfer capacity			LSE			
	(9MI/d)						
SWS	Bulk import (KTZ): SEW Canterbury	2050 0.4/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C	-
	to Near Canterbury (20MI/d)				with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects		
					after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
SWS	Interzonal transfer (KME-KTZ): KME-	2026	0.4 No effect	n/a - No		No AE I/C	
	KTZ bi-directional (15.8MI/d)			LSE			_
SEW	Broad Oak Reservoir - 36mAOD -	2036	2.1 Effects	No AE	Subject to further assessment/survey to determine whether any land within the footprint of the pipeline works	No AE I/C	
	5,126 MI		Uncertain		could be functionally linked to the SPA and mitigation measures put in place to minimise impacts to an		
					acceptable level.		_
SEW	RZ8 Zonal Scheme - [RES-31] –	2036	1.5 Effects	No AE	Construction best practice measures to control potential localised construction impacts due to the presence of	No AE I/C	
	Distribute water from Broad Oak to		Uncertain		a potential hydrological link.		
	Blean SR						_
SEW	Reculver Desalination (30MI/d	2044	4 No	n/a - No		No AE I/C	
	Option)			LSE			_
	RZ8 Zonal Scheme - Transfer of	2044	4.1 No	n/a - No		No AE I/C	
	ater from Littlehampton WTW			LSE			_
SEW	New Bulk Supply: SWS near Canterbury	<b>y</b> to2051	0.3 Effects		0 This is a post-2050 option, so we have not taken it to AA in the report.	No AE I/C	
	SEW Canterbury (Broad Oak)		Uncertain				_
SEW	RZ8 Sub-Zonal Scheme - Thanington	2038	8.2 No	n/a - No	-	No AE I/C	
	to Godmersham			LSE			
	Stodmarsh SAC Y			AA conci.	. AA Summary		I/C Summary
		′ear Dist(kr		/ NI			
	Desalination (KTZ): East Thanet	2041	5.3 No effect	n/a - No	-	No AE I/C	This site or its features is
SWS	Desalination (KTZ): East Thanet	2041 2041	5.3 No effect 5.3 No effect	n/a - No	- -	No AE I/C No AE I/C	and SEW options; these e
SWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to	2041	5.3 No effect	n/a - No n/a - No	-	No AE I/C No AE I/C	This site or its features is and SEW options; these e unavoidable i/c effects wo
SWS SWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d)	2041 2041 2026	<ul><li>5.3 No effect</li><li>5.3 No effect</li><li>5.9 No effect</li></ul>	n/a - No n/a - No LSE	-	No AE I/C No AE I/C No AE I/C	and SEW options; these e
SWS SWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d) Interzonal transfer (KTZ-KME):	2041 2041	5.3 No effect 5.3 No effect	n/a - No n/a - No LSE n/a - No	- - - -	No AE I/C No AE I/C	and SEW options; these e
SWS SWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity	2041 2041 2026	<ul><li>5.3 No effect</li><li>5.3 No effect</li><li>5.9 No effect</li></ul>	n/a - No n/a - No LSE	-	No AE I/C No AE I/C No AE I/C	and SEW options; these e
SWS SWS SWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	2041 2041 2026 2040	<ul><li>5.3 No effect</li><li>5.3 No effect</li><li>5.9 No effect</li><li>0.3 No effect</li></ul>	n/a - No n/a - No LSE n/a - No LSE		No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
SWS SWS SWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury	2041 2041 2026	<ul><li>5.3 No effect</li><li>5.3 No effect</li><li>5.9 No effect</li></ul>	n/a - No n/a - No LSE n/a - No	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
SWS SWS SWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	2041 2041 2026 2040	<ul><li>5.3 No effect</li><li>5.3 No effect</li><li>5.9 No effect</li><li>0.3 No effect</li></ul>	n/a - No n/a - No LSE n/a - No LSE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
SWS SWS SWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d)	2041 2041 2026 2040 2050 0.4/DS	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain*	n/a - No n/a - No LSE n/a - No LSE No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable	No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
SWS SWS SWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d) Interzonal transfer (KME-KTZ): KME-	2041 2041 2026 2040	<ul><li>5.3 No effect</li><li>5.3 No effect</li><li>5.9 No effect</li><li>0.3 No effect</li></ul>	n/a - No n/a - No LSE n/a - No LSE No AE n/a - No	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
sws sws sws sws	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20MI/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8MI/d)	2041 2041 2026 2040 2050 0.4/DS 2026	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain* 0.3 No effect	n/a - No n/a - No LSE n/a - No LSE No AE n/a - No LSE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
5WS 5WS 5WS 5WS 5WS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8Ml/d) Broad Oak Reservoir - 36mAOD -	2041 2041 2026 2040 2050 0.4/DS	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain*	n/a - No n/a - No LSE n/a - No LSE No AE n/a - No LSE n/a - No	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects	No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
6WS 6WS 6WS 6WS 6WS 6EW	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8Ml/d) Broad Oak Reservoir - 36mAOD - 5,126 Ml	2041 2041 2026 2040 2050 0.4/DS 2026 2036	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain* 0.3 No effect 2.1 No	n/a - No LSE n/a - No LSE No AE No AE n/a - No LSE n/a - No LSE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
GWS GWS GWS GWS GWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8Ml/d) Broad Oak Reservoir - 36mAOD - 5,126 Ml RZ8 Zonal Scheme - [RES-31] –	2041 2041 2026 2040 2050 0.4/DS 2026	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain* 0.3 No effect 2.1 No 1.5 Effects	n/a - No n/a - No LSE n/a - No LSE No AE n/a - No LSE n/a - No	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. - Construction best practice measures to control potential localised construction impacts due to the presence of	No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
GWS GWS GWS GWS GWS	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20MI/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8MI/d) Broad Oak Reservoir - 36mAOD - 5,126 MI RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to	2041 2041 2026 2040 2050 0.4/DS 2026 2036	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain* 0.3 No effect 2.1 No	n/a - No LSE n/a - No LSE No AE No AE n/a - No LSE n/a - No LSE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
SWS SWS SWS SWS SWS SWS SEW	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8Ml/d) Broad Oak Reservoir - 36mAOD - 5,126 Ml RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR	2041 2026 2040 2050 0.4/DS 2026 2036 2036	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain* 0.3 No effect 2.1 No 1.5 Effects Uncertain	n/a - No LSE n/a - No LSE No AE No AE n/a - No LSE Na - No LSE No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. - Construction best practice measures to control potential localised construction impacts due to the presence of	No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
GWS GWS GWS GWS GWS GEW	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8Ml/d) Broad Oak Reservoir - 36mAOD - 5,126 Ml RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR Reculver Desalination (30Ml/d	2041 2041 2026 2040 2050 0.4/DS 2026 2036	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain* 0.3 No effect 2.1 No 1.5 Effects	n/a - No LSE n/a - No LSE No AE n/a - No LSE No AE No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. - Construction best practice measures to control potential localised construction impacts due to the presence of	No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
GWS GWS GWS GWS GWS GWS GEW GEW	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8Ml/d) Broad Oak Reservoir - 36mAOD - 5,126 Ml RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR Reculver Desalination (30Ml/d Option)	2041 2041 2026 2040 2050 0.4/DS 2026 2036 2036 2036	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain* 0.3 No effect 2.1 No 1.5 Effects Uncertain 4 No	n/a - No LSE n/a - No LSE No AE n/a - No LSE No AE No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. Construction best practice measures to control potential localised construction impacts due to the presence of a potential hydrological link.	No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e
SWS SWS SWS SWS SWS SSWS SEW SEW	Desalination (KTZ): East Thanet Bulk import (KTZ): SEW Kingston to Near Canterbury (2Ml/d) Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d) Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8Ml/d) Broad Oak Reservoir - 36mAOD - 5,126 Ml RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR Reculver Desalination (30Ml/d	2041 2026 2040 2050 0.4/DS 2026 2036 2036	5.3 No effect 5.3 No effect 5.9 No effect 0.3 No effect Uncertain* 0.3 No effect 2.1 No 1.5 Effects Uncertain	n/a - No LSE n/a - No LSE No AE n/a - No LSE No AE No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects. - Construction best practice measures to control potential localised construction impacts due to the presence of	No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C No AE I/C	and SEW options; these e

s is only potentially exposed to construction effects from SWS e effects can be avoided with established measures so would not be expected.

s is only potentially exposed to construction effects from SWS se effects can be avoided with established measures so would not be expected.

SEVV	New Bulk Supply: SWS near Canterbu SEW Canterbury (Broad Oak)	iry 102051	0.3 Effects Uncertain		0 This is a post-2050 option, so we have not taken it to AA in the report.	No AE I/C	
SEW	RZ8 Sub-Zonal Scheme - Thanington	2038	8.2 No		-	No AE I/C	-
	to Godmersham			LSE			
	Stodmarsh SPA	Year Dist(kr	n) Scr. concl	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Desalination (KTZ): East Thanet	2041	5.7 Uncertain	No AE	Adverse effects alone will not occur; qualifying features of the SPA will not make substantive use of the coastal habitats of the Thanet Coast and Sandwich Bay SPA/Ramsar based on typical habitat preferences; some of the terrestrial wetland habitats near Birchington (hence potentially affected by the transfer to Fleete) may be periodically used by species associated with Stodmarsh, but these areas are unlikely to be critical to the functional integrity of Stodmarsh SPA and effects will be temporary during construction and avoidable with established measures (e.g. timing works). Residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	This site or its features is or and SEW options; these effe unavoidable i/c effects would
SWS	Desalination (KTZ): East Thanet	2041	5.7 Uncertain	No AE	Adverse effects alone will not occur; qualifying features of the SPA will not make substantive use of the coastal habitats of the Thanet Coast and Sandwich Bay SPA/Ramsar based on typical habitat preferences; some of the terrestrial wetland habitats near Birchington (hence potentially affected by the transfer to Fleete) may be periodically used by species associated with Stodmarsh, but these areas are unlikely to be critical to the functional integrity of Stodmarsh SPA and effects will be temporary during construction and avoidable with established measures (e.g. timing works). Residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SWS	Bulk import (KTZ): SEW Kingston to	2026	5.9 No effect	n/a - No	-	No AE I/C	-
	Near Canterbury (2MI/d)			LSE			_
SWS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	2040	0.5 No effect	n/a - No LSE		No AE I/C	
SWS	Bulk import (KTZ): SEW Canterbury to Near Canterbury (20MI/d)	2050 0.5/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		-
SWS	Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8MI/d)	2026	0.5 No effect	n/a - No LSE	-	No AE I/C	-
SEW	Broad Oak Reservoir - 36mAOD - 5,126 MI	2036	2.1 Effects Uncertain	No AE	Subject to further assessment/survey to determine whether any land within the footprint of the pipeline works could be functionally linked to the SPA and mitigation measures put in place to minimise impacts to an acceptable level.	No AE I/C	-
SEW	RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR	2036	1.5 Effects Uncertain	No AE	Construction best practice measures to control potential localised construction impacts due to the presence of a potential hydrological link.	No AE I/C	-
SEW	Reculver Desalination (30MI/d Option)	2044	4 No	n/a - No LSE	-	No AE I/C	-
	RZ8 Zonal Scheme - Transfer of ater from Littlehampton WTW	2044	4.1 No	n/a - No LSE	-	No AE I/C	-
SEW	New Bulk Supply: SWS near Canterbu SEW Canterbury (Broad Oak)	ry to2051	0.3 Effects Uncertain		0 This is a post-2050 option, so we have not taken it to AA in the report.	No AE I/C	-
SEW	RZ8 Sub-Zonal Scheme - Thanington to Godmersham	2038	8.2 No	n/a - No LSE	-	No AE I/C	
	Tankerton Slopes and Swalecliffe SAC	Year Dist(kr	m) Scr. concl	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	2040	4.1 No effect	n/a - No LSE	-	No LSE I/C	No LSE alone; no risk of i/c (distance, no pathways for si to site) or effects from oper
SWS	Bulk import (KTZ): SEW Canterbury to Near Canterbury (20MI/d)	2050	5.8 No effect	n/a - No LSE	-	No LSE I/C	_
SWS	Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8MI/d)	2026	4.1 No effect	n/a - No LSE	-	No LSE I/C	-

s only potentially exposed to construction effects from SWS effects can be avoided with established measures so ould not be expected.

i/c effects (site / feature not exposed to construction effects or site-derived pollutants, mobile features sedentary / limited operation (distance, feature characteristics).

SEW	Broad Oak Reservoir - 36mAOD -	2036	5.2 No	n/a - No -	No LSE I/C
	5,126 MI			LSE	
SEW	RZ8 Zonal Scheme - [RES-31] –	2036	4.4 No	n/a - No -	No LSE I/C
	Distribute water from Broad Oak to			LSE	
	Blean SR				
SEW	Reculver Desalination (30MI/d	2044	6.7 No	n/a - No -	No LSE I/C
	Option)			LSE	
SEW	RZ8 Zonal Scheme - Transfer of	2044	6.9 No	n/a - No -	No LSE I/C
Wa	iter from Littlehampton WTW			LSE	
SEW	New Bulk Supply: SWS near Canterbur	<b>ry</b> to2051	6 No	n/a - No -	No LSE I/C
	SEW Canterbury (Broad Oak)			LSE	

	Thames Basin Heaths SPA	Year	Dist(km) Scr. cor	ncl. AA concl	I. AA Summary	I/C concl.	I/C Summary
SEW	RZ4 Sub-Zonal Scheme - Greywell	2031	1 7.1 No	n/a - No	-	No AE I/C	Not exposed to effects fr
	to Swaineshill			LSE			
SEW	RZ4 Sub-Zonal Scheme - Ewshot to	2031	0.5 Effects		0 This is a zonal scheme, so we have not taken it to AA in the report.	No AE I/C	-
	Itchel		Uncertai	in			
SEW	RZ4 Sub-Zonal Scheme - Greywell	2032	2 7 No	n/a - No	-	No AE I/C	_
	to Whitedown			LSE			
THA	(	) (	0 0	0	0	0 No AE I/C	_
THA	(	) (	0.3	0	0	0 No AE I/C	
THA	(	) (	) 7.2	0	0	0 No AE I/C	
AFF	(	) (	) 7.3	0	0	0 No AE I/C	_
AFF	(	) (	) 7.3	0	0	0 No AE I/C	_
AFF	(	) (	) 7.3	0	0	0 No AE I/C	-

	Thames Estuary and Marshes Ramsar	Year	Dist(km)	Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Desalination (KME): Isle of Sheppey	204	6 1.	8 Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.		Assessment as per SWS i/ additonal impact pathways
SWS	Desalination (KME): Isle of Sheppey	204	6 1.	8 Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.		-
SWS	Desalination (KME): Isle of Sheppey	2046	6 1.	8 Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.		-

s from any SW options

VS i/c assessment (Appendix F); SEW option will not introduce ways (licence trade only).

2/1/2	Desalination (KMW): Thames	2040 3.8/DS	Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there	No AF I/C*
	Estuary	2010 3.0/03		NU AL	are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the	
					supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of	
					environmental change will be small (a would be expected to extend to the site), and could be minimised further	
					by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice.	
					Construction effects are avoidable with normal measures.	
2/1/2	Desalination (KMW): Thames	2040 3.8/DS	Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there	No AF I/C*
5005	Estuary	2040 3.0/23	Oncertain	NOTIL	are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the	
	Lotadi y				supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of	·
					environmental change will be small (a would be expected to extend to the site), and could be minimised further	
					by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice.	
					Construction effects are avoidable with normal measures.	
SWS	Recycling (KME): Sittingbourne	2031	9.9 No effect	n/a - No	-	No AE I/C*
	industrial water reuse (7.5MI/d)			LSE		
SWS	Bulk import (SNZ): SES to SNZ	2034 DS/DS	No effect	n/a - No	-	No AE I/C*
	(10MI/d)			LSE		
SWS	Asset enhancement (KMW): Remove	2026 2.9/DS	No effect	n/a - No	-	No AE I/C*
	network constraint at Longfield			LSE		
	(13MI/d)					
SWS	Groundwater (KME): Recommission	2031	2.1 Uncertain	No AE*	Adverse effects alone are not expected as a result of the Groundwater (KME): Recommission Gravesend	No AE I/C*
	Gravesend (2.7MI/d)				(2.7MI/d) scheme given the small scale of the abstraction and the likely low exposure of estuarine habitats in	
					this area to alterations in flows of local streams, the North Kent Marshes are subject to WINEP investigations	
					that will provide an evidence base for assessment at the project level.	
SWS	Desalination (KME): Isle of Sheppey	2046	1.8 Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there	No AE I/C*
					are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the	•
					supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of	
					environmental change will be small (a would be expected to extend to the site), and could be minimised further	
					by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice.	
					Construction effects are avoidable with normal measures.	
SEW	Groundwater Licence Trade -	2040	8 No	n/a - No	-	No AE I/C*
	Folkestone Beds Abstraction, Halling			LSE		

	Thames Estuary and Marshes SPA	Year	Dist(km)	Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Desalination (KME): Isle of Sheppey	204	6 1.	9 Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the		Assessment as per SWS i additonal impact pathway
						supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.		
SWS	Desalination (KME): Isle of Sheppey	204	6 1.	9 Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.		-
SWS	Desalination (KME): Isle of Sheppey	204	6 1.	9 Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of environmental change will be small (a would be expected to extend to the site), and could be minimised further by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice. Construction effects are avoidable with normal measures.		-

VS i/c assessment (Appendix F); SEW option will not introduce ways (licence trade only).

SWS	Desalination (KMW): Thames	2040 5.2/DS	Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there	No AE I/C*	-
	Estuary				are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the	!	
					supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of		
					environmental change will be small (a would be expected to extend to the site), and could be minimised further		
					by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice.		
					Construction effects are avoidable with normal measures.		
SWS	Desalination (KMW): Thames	2040 5.2/DS	Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there	No AE I/C*	-
	Estuary				are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the	!	
					supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of		
					environmental change will be small (a would be expected to extend to the site), and could be minimised further		
					by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice.		
					Construction effects are avoidable with normal measures.		
SWS	Recycling (KME): Sittingbourne	2031	10 No effect	n/a - No	-	No AE I/C*	
	industrial water reuse (7.5MI/d)			LSE			
SWS	Bulk import (SNZ): SES to SNZ	2034 DS/DS	No effect	n/a - No	-	No AE I/C*	
	(10MI/d)			LSE			
SWS	Asset enhancement (KMW): Remove	2026 4.4/DS	No effect	n/a - No	-	No AE I/C*	
	network constraint at Longfield			LSE			
	(13MI/d)						_
SWS	Groundwater (KME): Recommission	2031	3.3 Uncertain	No AE*	Adverse effects alone are not expected as a result of the Groundwater (KME): Recommission Gravesend	No AE I/C*	
	Gravesend (2.7MI/d)				(2.7Ml/d) scheme given the small scale of the abstraction and the likely low exposure of estuarine habitats in		
					this area to alterations in flows of local streams, the North Kent Marshes are subject to WINEP investigations		
					that will provide an evidence base for assessment at the project level.		_
SWS	Desalination (KME): Isle of Sheppey	2046	1.9 Uncertain	No AE*	Adverse effects likely avoidable based on proxy data and evidence from similar sites / schemes, although there	No AE I/C*	
					are residual uncertainties that cannot be resolved at the plan level. The operation of the scheme may affect the	1	
					supporting habitats of the qualifying features, although evidence from elsewhere indicates that the zone of		
					environmental change will be small (a would be expected to extend to the site), and could be minimised further		
					by appropriate location of the outfall (taking account of local hydrodynamics) and operational practice.		
					Construction effects are avoidable with normal measures.		_
SEW	Groundwater Licence Trade -	2040	9.2 No	n/a - No	-	No AE I/C*	
	Folkestone Beds Abstraction, Halling			LSE			

	Thanet Coast and Sandwich Bay Ye Ramsar	ar Dist(km)	Scr. concl.	AA concl.	AA Summary	I/C concl.	I/C Summary
SWS	Desalination (KTZ): East Thanet	2041 0/DS	LSE	No AE	Adverse effects alone will not occur (construction effects clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective i.e. it will be possible to avoid direct effects on this site with directional drill or similar, and other construction effects can be managed/avoided)); operational effects will not occur, based on the likely distance to the outfall location and consequent low exposure / sensitivity of qualifying features or supporting habitats to the likely magnitude of environmental change; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	Two options (Thanet I cross the Thanet Coas (substantive direct effe impacts likely avoidable operation given the ou (compare with operati
SWS	Desalination (KTZ): East Thanet	2041 0/DS	LSE	No AE	Adverse effects alone will not occur (construction of outfall completed under Option THA20; effects from construction at the desal plant avoidable with normal measures e.g. timing works); operational effects will not occur, based on the likely distance to the outfall location and consequent low exposure / sensitivity of qualifying features or supporting habitats to the likely magnitude of environmental change; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		expected to be avodial
SWS	Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d)	2026 7.6/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
SWS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	2040 2.9/DS	No effect	n/a - No LSE	-	No AE I/C	_
SWS	Bulk import (KTZ): SEW Canterbury to Near Canterbury (20MI/d)	2050 5.6/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.		_
SWS	Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8MI/d)	2026 2.9/DS	No effect	n/a - No LSE	-	No AE I/C	_

et Desal and Reculver Desal) will require outfalls that will need to coast SAC and Thanet Coast and Sandwich Bay SPA / Ramsar effects therefore possible, hence identified here, but construction lable with engineering solutions). Unlikely to be affected by e outfall location offshore and nature / magnitude of the discharges rational effects from other LSO discharges). In combination effects diable therefore.

SEW	Broad Oak Reservoir - 36mAOD - 5,126 MI	2036	5 Effects Uncertain	No AE	Subject to further assessment/survey to determine whether any land within the footprint of the pipeline works could be functionally linked to the SPA and mitigation measures put in place to minimise impacts to an acceptable level.	No AE I/C	-
SEW	RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR	2036	4.4 No	n/a - No LSE	-	No AE I/C	-
	Reculver Desalination (30MI/d Option)	2044	0 Yes	No AE	Subject to further assessment/modelling to consider extent of physical hydrodynamic impacts, e.g. scour, and affects on prey species of qualifying features of brine discharge. Sensitive design, avoidance, mitigation and construciton best practice also required to minimise impacts to an acceptable level.	No AE I/C	_
	RZ8 Zonal Scheme - Transfer of ter from Littlehampton WTW	2044	0.3 Effects Uncertain	No AE	Subject to further assessment/survey to determine whether any land within the footprint of the pipeline works could be functionally linked to the SPA and mitigation measures put in place to minimise impacts to an acceptable level.	No AE I/C	
	New Bulk Supply: SWS near Canterbury SEW Canterbury (Broad Oak)	to2051	6 No	n/a - No LSE	-	No AE I/C	
AFF	0	0	1.6	0	0 0	No AE I/C	-
	Thanet Coast and Sandwich Bay Ye	ear Dist(kn	n) Scr. concl	. AA concl	I. AA Summary	I/C concl.	I/C Summary
	Desalination (KTZ): East Thanet	2041 0/DS	LSE	No AE	Adverse effects alone will not occur (construction effects clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective i.e. it will be possible to avoid direct effects on this site with directional drill or similar, and other construction effects can be managed/avoided)); operational effects will not occur, based on the likely distance to the outfall location and consequent low exposure / sensitivity of qualifying features or supporting habitats to the likely magnitude of environmental change; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	Two options (Thanet E cross the Thanet Coasi (substantive direct effect impacts likely avoidable operation given the out (compare with operation
SWS	Desalination (KTZ): East Thanet	2041 0/DS	LSE	No AE		No AE I/C	expected to be avodiab
SWS	Bulk import (KTZ): SEW Kingston to Near Canterbury (2MI/d)	2026 9.9/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	2040 2.9/DS	No effect	n/a - No LSE		No AE I/C	-
	Bulk import (KTZ): SEW Canterbury to Near Canterbury (20MI/d)	2050 5.6/DS	Uncertain*	No AE	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE I/C	-
SWS	Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8MI/d)	2026 2.9/DS	No effect	n/a - No LSE		No AE I/C	-
	Broad Oak Reservoir - 36mAOD - 5,126 MI	2036	5 Effects Uncertain	No AE	Subject to further assessment/survey to determine whether any land within the footprint of the pipeline works could be functionally linked to the SPA and mitigation measures put in place to minimise impacts to an acceptable level.	No AE I/C	-
SEW	RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR	2036	4.4 No	n/a - No LSE	•	No AE I/C	-
	Reculver Desalination (30Ml/d Option)	2044	0 Yes	No AE	Subject to further assessment/modelling to consider extent of physical hydrodynamic impacts, e.g. scour, and affects on prey species of qualifying features of brine discharge. Sensitive design, avoidance, mitigation and construciton best practice also required to minimise impacts to an acceptable level.	No AE I/C	-
	RZ8 Zonal Scheme - Transfer of ter from Littlehampton WTW	2044	0.3 Effects Uncertain	No AE	Subject to further assessment/survey to determine whether any land within the footprint of the pipeline works could be functionally linked to the SPA and mitigation measures put in place to minimise impacts to an acceptable level.	No AE I/C	-

et Desal and Reculver Desal) will require outfalls that will need to oast SAC and Thanet Coast and Sandwich Bay SPA / Ramsar effects therefore possible, hence identified here, but construction able with engineering solutions). Unlikely to be affected by outfall location offshore and nature / magnitude of the discharges rational effects from other LSO discharges). In combination effects diable therefore.

	- No AE I/C	n/a - No LSE	6 No	ury to2051	New Bulk Supply: SWS near Canterbu SEW Canterbury (Broad Oak)	
	0 0 No AE I/C	0	1.9	0	0	\FF
		0.0			Thursday 1000	
I/C Summary Two options (Thanet I cross the Thanet Coas (substantive direct effe impacts likely avoidable operation given the ou	AA Summary I/C concl. Adverse effects alone will not occur (construction effects clearly avoidable with scheme-level measures that are No AE I/C known to be available, achievable and likely to be effective i.e. it will be possible to avoid direct effects on this site with directional drill or similar, and other construction effects can be managed/avoided); operational effects will not occur, based on the likely distance to the outfall location; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	AA concl No AE	LSE	Year Dist(km) 2041 0.3/DS	Thanet Coast SAC Desalination (KTZ): East Thanet	
(compare with operati expected to be avodial	Adverse effects alone will not occur (construction completed under Option THA20); operational effects will No AE I/C not occur, based on the likely distance to the outfall location; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	LSE	2041 0.3/DS	Desalination (KTZ): East Thanet	SWS
	- No AE I/C	n/a - No LSE	No effect	2040 2.9/DS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	
	- No AE I/C	n/a - No LSE	No effect	2026 2.9/DS	Interzonal transfer (KME-KTZ): KME- KTZ bi-directional (15.8MI/d)	
	- No AE I/C	n/a - No LSE	9.3 No	2036	RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR	
	- No AE I/C	n/a - No LSE	3.6 No	2044	Reculver Desalination (30MI/d Option)	
	- No AE I/C	n/a - No LSE	4.6 No	2044	RZ8 Zonal Scheme - Transfer of ter from Littlehampton WTW	
I/C Summary	AA Summary I/C concl.	. AA concl	) Scr. concl	Year Dist(km)	The Mens SAC	
Potentially exposed to coincident and effects a additional effects from	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	3.7 Uncertain*	2058	Recycling (SNZ): Horsham with storage at Pulborough (6.8MI/d)	
	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	2.3 Uncertain*	2031	Groundwater (SNZ): New borehole at Petworth (4MI/d)	
	- No AE I/C	n/a - No LSE	8.3 No effect	2029	Groundwater (SNZ): Reinstate West Chiltington (3.1MI/d)	
	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	3.6 Uncertain*	2031	Recycling (SNZ): Littlehampton WTW with river discharge (15Ml/d)	
	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	3.6 Uncertain*	2040	Bulk import (SNZ): SEW RZ5 to Pulborough	
	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	3.9 Uncertain*	2040	Bulk import (SNZ): Havant Thicket Reservoir to Pulborough (50Ml/d)	
	Adverse effects alone will not occur (no pathways, magnitude of change too small, etc.) or are clearly avoidable No AE I/C with scheme-level measures that are known to be available, achievable and likely to be effective; residual effects after mitigation (etc.) likely to be nil or very small, so low risk of i/c effects.	No AE	4.3 No effect	2040	Interzonal transfer (SNZ-SWZ): Pulborough to Worthing	
	- No AE I/C	n/a - No LSE	28.5 No	2049 2	New Bulk Supply: SESW Outwood to SEW Whitely Hill	
	0 0 No AE I/C		14.6 No effect		Slindon drought permit	W
	0 0 No AE I/C		24.7 No effect	2035 2	Lavant Booster	w

Desal and Reculver Desal) will require outfalls that will need to t SAC and Thanet Coast and Sandwich Bay SPA / Ramsar cts therefore possible, hence identified here, but construction e with engineering solutions). Unlikely to be affected by tfall location offshore and nature / magnitude of the discharges onal effects from other LSO discharges). In combination effects ole therefore.

construction effects only; most schemes not temporally alone can be avoided in any case with normal measures. No PW or SEW optons, so no i/c effects expected.

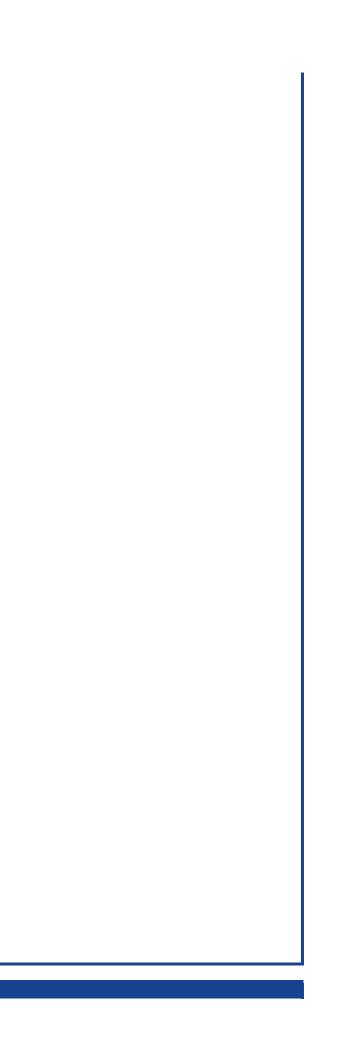
SWS	Groundwater (HRZ): New boreholes at Romsey (4.8MI/d)	2031	8.5 No effect	n/a - No LSE	-	No LSE I/C	Not affected by SWS option effects with SW WRMP.
SWS	Groundwater (HSW): Test MAR (5.5MI/d)	2036	4.9 No effect	n/a - No LSE	-	No LSE I/C	-
SWS	Interzonal transfer (HRZ-HSW): Romsey Town and Test valve (3.1MI/d)	2026	6.2 No effect	n/a - No LSE	-	No LSE I/C	-
SWS	Interzonal transfer (HSE-HSW): Yew Hill WSW to River Test WSW bi- directional (60MI/d)	2031	7.9 No effect	n/a - No LSE		No LSE I/C	-
	The New Forest SAC	Year Dist(k	m) Scr. concl	. AA concl.	. AA Summary	I/C concl.	I/C Summary
SWS	Bulk import (HSE): PWC Source A to Lower Itchen WSW (21MI/d)	2032	10 No effect	n/a - No LSE	-		Not affected by SWS option effects with SW WRMP.
SWS	Groundwater (HRZ): New boreholes at Romsey (4.8MI/d)	2031	8.2 No effect	n/a - No LSE	-	No LSE I/C	-
SWS	Groundwater (HSW): Test MAR (5.5MI/d)	2036	3.4 No effect	n/a - No LSE		No LSE I/C	-
SWS	Interzonal transfer (HRZ-HSW): Romsey Town and Test valve (3.1MI/d)	2026	5.7 No effect	n/a - No LSE		No LSE I/C	-
SWS	Interzonal transfer (HSE-HSW): Yew Hill WSW to River Test WSW bi- directional (60Ml/d)	2031	6.6 No effect	n/a - No LSE	-	No LSE I/C	-
<u> </u>							
	х <i>ў</i>	Year Dist(k	m) Scr. concl	. AA concl.	. AA Summary	I/C concl.	I/C Summary
SWS	х <i>У</i>	Year Dist(k 2046	m) Scr. concl 0 Uncertain	. AA concl. No AE	AA Summary The Swale will have a low exposure to operational effects due to its location relative to the outfall, and adverse effects on the site habitats would not be expected; the mobile features of the site may be exposed to operational effects when utilising the Medway Estuary and Marshes SPA/Ramsar, depending on the precise location and operational parameters of the outfall / intake; however, this can be located further from these sites if required, and operation of the desal plant would be intermittent and operational parameters could be defined to minimise environmental changes further. With regard to construction, adverse effects on the Swale habitats or species can be avoided with established measures.		I/C Summary The zones of environmenta due to the nature and locat effects will occur as the res avoidable with established r
	The Swale Ramsar	•			The Swale will have a low exposure to operational effects due to its location relative to the outfall, and adverse effects on the site habitats would not be expected; the mobile features of the site may be exposed to operational effects when utilising the Medway Estuary and Marshes SPA/Ramsar, depending on the precise location and operational parameters of the outfall / intake; however, this can be located further from these sites if required, and operation of the desal plant would be intermittent and operational parameters could be defined to minimise environmental changes further. With regard to construction, adverse effects on the Swale	No AE I/C	The zones of environmenta due to the nature and locat effects will occur as the res

tions; note, may be exposed to BW options but no risk of i/c

tions; note, may be exposed to BW options but no risk of i/c

ental change for the operation of these options will not overlap ocation of the Swale relative to the options. No coincident residual alone effects will not interact. Construction effects all ed measures so no i/c effects with SEW options.

	KME): Sittingbourne vater reuse (7.5MI/d)	2031 0.1/DS	LSE	No AE*	This option was assessed as having No Adverse Effects at WRMP19 and there have been no substantive amendments in either the scheme or the environmental baseline to alter this conclusion. In summary, the net	No AE I/C
	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				effect of the scheme operation would be to reduce non-saline inputs to Milton Creek from Sittingbourne	
					WwTW by ~7.5Mld; discharges from the WwTW are likely to form a significant component of the non-saline	
					flows in this creek (the permitted discharge of recycled water is ~118MI/d) and the volumes recovered through	
					recycling will typically be a small proportion of this (note, a proportion of this water would still enter the Swale	
					via the paper mill post-process discharge, although the paper-making process will to some extent be	
					consumptive). The principal issues for The Swale SPA/Ramsar are the potential effects on Milton Creek as	
					'functional habitat'; and the small reduction in non-saline inputs to The Swale via Milton Creek (note, all	
					potential construction effects can be avoided with established measures). With regard to functional habitat,	
					Milton Creek will be of low value in this regard as (a) it is a constrained creek / channel in a high-disturbance	
					urban / industrial area that will inherently have a low attractiveness for the qualifying features (assuming there	
					are no dominating non-natural attractants) and (b) is substantially lower value than the extensive areas of	
					equivalent mud-flat and creek habitat available in the SPA/Ramsar; it is therefore very unlikely that the creek is	
					critical to the functional integrity of the site, and environmental changes in this location would not be expected	
					to adversely affect these sites. With regard to effects on habitats in The Swale itself, the possibility of localised	
					and minor changes to the invertebrate fauna of The Swale as a result of reductions in non-saline inputs around	
					the confluence with Milton Creek cannot be excluded; however, the reduction of ~7.5MI/d will be small relative	
					to the inputs from the creek (from the WwTW and surface water catchment in Sittingbourne), and likely	
					inconsequential in relation to the tidal turnover and dominance of saline inputs; furthermore, any minor and	
					localised shifts in biotope would not fundamentally alter the value of the area to the qualifying features;	
					however, aspects of this can only be confirmed with the benefit of project-level survey and modelling, hence	
VS Interzonal	transfer (KTZ-KME):	2040 2.5/DS	No effect	n/a - No		No AE I/C
	existing transfer capacity			LSE		
(9MI/d)						
. ,	t (KTZ): SEW Canterbury	2050	7.5 No effect	n/a - No	-	No AE I/C
to Near Ca	anterbury (20MI/d)			LSE		
VS Interzonal	transfer (KME-KTZ): KME-	2026 2.5/DS	No effect	n/a - No	-	No AE I/C
KTZ bi-dir	ectional (15.8MI/d)			LSE		
VS Desalinatio	n (KME): Isle of Sheppey	2046	0 Uncertain	No AE	The Swale will have a low exposure to operational effects due to its location relative to the outfall, and adverse	No AE I/C
					effects on the site habitats would not be expected; the mobile features of the site may be exposed to	
					operational effects when utilising the Medway Estuary and Marshes SPA/Ramsar, depending on the precise	
					location and operational parameters of the outfall / intake; however, this can be located further from these	
					sites if required, and operation of the desal plant would be intermittent and operational parameters could be	
					defined to minimise environmental changes further. With regard to construction, adverse effects on the Swale	
					habitats or species can be avoided with established measures.	
W Broad Oak	Reservoir - 36mAOD -	2036	6.6 Effects	No AE	Subject to further assessment/survey to determine whether any land within the footprint of the pipeline works	No AE I/C
5,126 MI			Uncertain		could be functionally linked to the SPA and mitigation measures put in place to minimise impacts to an	
					acceptable level.	
	Scheme - [RES-31] -	2036	4.6 No	n/a - No	-	No AE I/C
	water from Broad Oak to			LSE		
Blean SR						
	esalination (30MI/d	2044	9.7 No		-	No AE I/C
Option)				LSE		
	Scheme - Transfer of	2044	9.6 No		-	No AE I/C
	tlehampton WTW			LSE		
	Supply: SWS near Canterbury	to2051	7.6 No			No AE I/C
	erbury (Broad Oak)			LSE		
W RZ8 Sub-Z		2039	6.7 No		-	No AE I/C
Hollingbou	rne to Warren Street			LSE		
reinforcem						
	onal Scheme - Thanington	2038	9.4 No			No AE I/C
to Godme	sham			LSE		
· · · · · · · · · · · · · · · · · · ·						



SWS	Desalination (KME): Isle of Sheppey	2046	0 Uncertain	No AE	The Swale will have a low exposure to operational effects due to its location relative to the outfall, and adverse	No AE I/C	The zones of environment
					effects on the site habitats would not be expected; the mobile features of the site may be exposed to		due to the nature and
					operational effects when utilising the Medway Estuary and Marshes SPA/Ramsar, depending on the precise		effects will occur as the
					location and operational parameters of the outfall / intake; however, this can be located further from these		avoidable with establish
					sites if required, and operation of the desal plant would be intermittent and operational parameters could be		
					defined to minimise environmental changes further. With regard to construction, adverse effects on the Swale		
					habitats or species can be avoided with established measures.		_
SWS	Desalination (KME): Isle of Sheppey	2046 0/DS	LSE	No AE	The Swale will have a low exposure to operational effects due to its location relative to the outfall, and adverse	No AE I/C	
					effects on the site habitats would not be expected; the mobile features of the site may be exposed to		
					operational effects when utilising the Medway Estuary and Marshes SPA/Ramsar, depending on the precise		
					location and operational parameters of the outfall / intake; however, this can be located further from these		
					sites if required, and operation of the desal plant would be intermittent and operational parameters could be		
					defined to minimise environmental changes further. With regard to construction, adverse effects on the Swale		
					habitats or species can be avoided with established measures.		_
SWS	Desalination (KME): Isle of Sheppey	2046	0 Uncertain	No AE	The Swale will have a low exposure to operational effects due to its location relative to the outfall, and adverse	No AE I/C	
					effects on the site habitats would not be expected; the mobile features of the site may be exposed to		
					operational effects when utilising the Medway Estuary and Marshes SPA/Ramsar, depending on the precise		
					location and operational parameters of the outfall / intake; however, this can be located further from these		
					sites if required, and operation of the desal plant would be intermittent and operational parameters could be		
					defined to minimise environmental changes further. With regard to construction, adverse effects on the Swale		
C) A /C		2021 0 1/DC	1.05	NI- AF*	habitats or species can be avoided with established measures.		-
2002	Recycling (KME): Sittingbourne	2031 0.1/DS	LSE	No AE*	1 5	No AE I/C	
	industrial water reuse (7.5MI/d)				amendments in either the scheme or the environmental baseline to alter this conclusion. In summary, the net		
					effect of the scheme operation would be to reduce non-saline inputs to Milton Creek from Sittingbourne		
					WwTW by ~7.5Mld; discharges from the WwTW are likely to form a significant component of the non-saline flows in this area (the normitted discharge of regulated water is _110Ml(d) and the volumes receivered through		
					flows in this creek (the permitted discharge of recycled water is ~118MI/d) and the volumes recovered through		
					recycling will typically be a small proportion of this (note, a proportion of this water would still enter the Swale		
					via the paper mill post-process discharge, although the paper-making process will to some extent be		
					consumptive). The principal issues for The Swale SPA/Ramsar are the potential effects on Milton Creek as		
					'functional habitat'; and the small reduction in non-saline inputs to The Swale via Milton Creek (note, all		
					potential construction effects can be avoided with established measures). With regard to functional habitat,		
					Milton Creek will be of low value in this regard as (a) it is a constrained creek / channel in a high-disturbance		
					urban / industrial area that will inherently have a low attractiveness for the qualifying features (assuming there		
					are no dominating non-natural attractants) and (b) is substantially lower value than the extensive areas of		
					equivalent mud-flat and creek habitat available in the SPA/Ramsar; it is therefore very unlikely that the creek is		
					critical to the functional integrity of the site, and environmental changes in this location would not be expected		
					to adversely affect these sites. With regard to effects on habitats in The Swale itself, the possibility of localised		
					and minor changes to the invertebrate fauna of The Swale as a result of reductions in non-saline inputs around		
					the confluence with Milton Creek cannot be excluded; however, the reduction of ~7.5MI/d will be small relative		
					to the inputs from the creek (from the WwTW and surface water catchment in Sittingbourne), and likely		
					inconsequential in relation to the tidal turnover and dominance of saline inputs; furthermore, any minor and		
					localised shifts in biotope would not fundamentally alter the value of the area to the qualifying features;		
2\\\/2	Interzonal transfer (KTZ-KME):	2040 2.5/DS	No effect	n/a - No	however, aspects of this can only be confirmed with the benefit of project-level survey and modelling, hence	No AE I/C	-
3003	Utilise full existing transfer capacity	2040 2.3/03	NO effect	LSE		NU AL I/C	
	(9MI/d)			LJL			
SWS	Bulk import (KTZ): SEW Canterbury	2050	7.5 No effect	n/a - No	-	No AE I/C	-
	to Near Canterbury (20MI/d)			LSE			
SWS	Interzonal transfer (KME-KTZ): KME-	2026 2.5/DS	No effect	n/a - No	-	No AE I/C	-
	KTZ bi-directional (15.8MI/d)			LSE			_
SWS	Desalination (KME): Isle of Sheppey	2046	0 Uncertain	No AE	The Swale will have a low exposure to operational effects due to its location relative to the outfall, and adverse	No AE I/C	-
					effects on the site habitats would not be expected; the mobile features of the site may be exposed to		
					operational effects when utilising the Medway Estuary and Marshes SPA/Ramsar, depending on the precise		
					location and operational parameters of the outfall / intake; however, this can be located further from these		
					sites if required, and operation of the desal plant would be intermittent and operational parameters could be		
					sites in required, and operation of the desar plant would be intermittent and operational parameters could be		
					defined to minimise environmental changes further. With regard to construction, adverse effects on the Swale		

ronmental change for the operation of these options will not overlap and location of the Swale relative to the options. No coincident as the residual alone effects will not interact. Construction effects all ablished measures so no i/c effects with SEW options.

	Broad Oak Reservoir - 36mAOD - 5,126 MI	2036	6.6 Effects Uncertain	No AE	Subject to further assessment/survey to determine whether any land within the footprint of the pipeline works could be functionally linked to the SPA and mitigation measures put in place to minimise impacts to an acceptable level.	s No AE I/C	_
SEW	RZ8 Zonal Scheme - [RES-31] – Distribute water from Broad Oak to Blean SR	2036	4.6 No	n/a - No LSE	-	No AE I/C	-
SEW	Reculver Desalination (30MI/d Option)	2044	9.7 No	n/a - No LSE	-	No AE I/C	-
	RZ8 Zonal Scheme - Transfer of ater from Littlehampton WTW	2044	9.6 No	n/a - No LSE	-	No AE I/C	_
SEW	New Bulk Supply: SWS near Canterbur SEW Canterbury (Broad Oak)		7.6 No	n/a - No LSE	-	No AE I/C	_
SEW	RZ8 Sub-Zonal Scheme - Hollingbourne to Warren Street reinforcement	2039	6.7 No	n/a - No LSE	-	No AE I/C	
SEW	RZ8 Sub-Zonal Scheme - Thanington to Godmersham	2038	8.4 No	n/a - No LSE	-	No AE I/C	
	Thursley and Ockley Bog Y	'ear I			I. AA Summary		I/C Summary
THA	0	0	6	0	0	0 No AE I/C	Only theoretically exposed level (WR-FARM); note TV not affect this site based on
	Thursley, Ash, Pirbright and Y Chobham SAC	'ear I	Dist(km) Scr. concl	. AA concl	I. AA Summary	I/C concl.	I/C Summary
SEW	RZ4 Sub-Zonal Scheme - Ewshot to Itchel	2031	7.6 No	n/a - No LSE	-	No AE I/C	Only theoretically exposed level (WR-FARM); note TW not affect this site based on
ТНА	0	0	0.1	0	0	0 No AE I/C	_
THA	0	0	1.2	0	0	0 No AE I/C	-
AFF	0	0	7.3	0	0	0 No AE I/C	_
AFF	0	0	7.3	0	0	0 No AE I/C	-
AFF	0	0	7.3	0	0	0 No AE I/C	-
	Thursley, Hankley and Y	'ear l	Dist(km) Scr. concl	. AA concl	I. AA Summary	I/C concl.	I/C Summary
	Frensham Commons (Wealden Heaths Phase 1) SPA						
SEW	RZ4 Sub-Zonal Scheme - Ewshot to Itchel	2031	9.1 No	n/a - No LSE	-	No AE I/C	Only theoretically exposed level (WR-FARM); note TM not affect this site based on

sed to one SWS option that cannot be assessed at the plan TW data not currently included in this table but options will on HRA.

sed to one SWS option that cannot be assessed at the plan TW data not currently included in this table but options will on HRA.

sed to one SWS option that cannot be assessed at the plan TW data not currently included in this table but options will on HRA.

-									_
THA	(	)	0	4.9	0	0	0	No AE I/C	
<u> </u>									
	Upper Nene Valley Gravel Pits Ramsar	Year	Dist(kn	n) Scr. cor	ncl. AA con	cl. AA Summary		I/C concl.	I/C Summary
AFF	(	)	0	7.8	0	0	0	No AE I/C	Not exposed to effects from
	Upper Nene Valley Gravel Pits	Year	Dist(kn	n) Scr. cor	ncl. AA con	cl. AA Summary		I/C concl.	I/C Summary
A 55	SPA			7.0		<u>^</u>			
AFF	l	)	0	7.8	0	0	0	NO AE I/C	Not exposed to effects from
S/V/S	Wealden Heaths Phase 2 SPA	Year	Dist(kn )29 DS	n) Scr. cor No effec		cl. AA Summary			_I/C Summary Not affected by any SW opt
2002	Groundwater (SNZ): Petersfield refurbishment (1.6MI/d)	20	JZA D2	NO ellec	LSE	-		NU AE I/C	but options will not affect th
014/0				40.01 (					-
SWS	Bulk import (SNZ): SEW RZ5 to Pulborough	20	040	4.9 No effec	t n/a - No LSE	-		No AE I/C	
SEW	RZ4 Sub-Zonal Scheme - Greywell	20	)31	9 No	n/a - No	-		No AE I/C	-
	to Swaineshill				LSE				_
SEW	RZ5 Sub-Zonal Scheme - Oakhanger	20	)31	8.1 No	n/a - No	-		No AE I/C	
ТНА	to Alton	)	0	9.8	LSE 0	0	0	No AE I/C	-
	·	-	Ū.		Ū	c .			
THA	Wimbledon Common SAC	Year )	Dist(kn 0	n) Scr. cor 3.9	ncl. AA con	cl. AA Summary 0			I/C Summary Not exposed to effects from
ПА	(	J	0	3.9	U	0	0	NU AE I/C	Not exposed to ellects if of
THA	(	)	0	4.2	0	0	0	No AE I/C	-
									_
THA	(	)	0	6.6	0	0	0	No AE I/C	
THA	(	)	0	9.9	0	0	0	No AE I/C	-
	Windoon Forest and Crest Dark	Veen	Dist/lue					1/C annal	
	Windsor Forest and Great Park SAC	rear	Dist(Kn	n) Scr. cor	ICI. AA con	cl. AA Summary		The concl.	I/C Summary
THA		)	0	9	0	0	0	No AE I/C	Not exposed to effects from
ТНА		)	0	9	0	0	n	No AE I/C	-
шА	(	J	U	7	U	U	0	NU AL I/C	
S/V/S	Woolmer Forest SAC Groundwater (SNZ): Petersfield	Year 20	Dist(kn )29 DS	n) Scr. cor No effec		cl. AA Summary			I/C Summary Only exposed to SWS optic
5443	refurbishment (1.6MI/d)	20	, L / U J	IND EIIEC	LSE	-		NU AL I/U	Chry Copuscu to SVVS Optic

from any SW options

from any SW options

options. Note TW data not currently included in this table ct this site based on HRA.

from any SW options

from any SW options

ptions; i/c assessment as per SWS i/c (Appendix F)

	Bulk import (SNZ): SEW RZ5 to Pulborough	204	40 7	7.1 No effect	n/a - No LSE	- No AE I/C	
	Wormley Hoddesdonpark Woods SAC	Year	Dist(km)	Scr. concl	. AA conc	I/C concl.	I/C Summary
AFF	C	)	0	0	0	0 0 No AE I/C	Not exposed to effects from
AFF	C	)	0	8	0	0 0 No AE I/C	_
AFF	C	)	0 9	0.2	0	0 No AE I/C	-
AFF	C	)	0 9	9.5	0	0 0 No AE I/C	_
\$\\\/\$	Wye and Crundale Downs SAC						I/C Summary
SWS	Wye and Crundale Downs SAC Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	Year 204		Scr. concl 3.1 No effect	. AA conc n/a - No LSE		I/C Summary No effects from SWS optio
	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity	204	40 8		n/a - No	- No LSE I/C	No effects from SWS optio
SWS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d)	204	40 8 50 9	3.1 No effect	n/a - No LSE n/a - No	- No LSE I/C - No LSE I/C	No effects from SWS optio
SWS SWS	Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9MI/d) Bulk export (SHZ): Rye to SEW RZ8 Interzonal transfer (KME-KTZ): KME	204	40 8 50 9 26 8	8.1 No effect 9.6 No effect	n/a - No LSE n/a - No LSE n/a - No	- No LSE I/C - No LSE I/C - No LSE I/C - No LSE I/C	No effects from SWS optio

from any SW options

otions so no i/c risk with SWS WRMP.