Southern Water Gate 2 - Natural Capital component assessments

Water Recycling Option Components

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Hidden as no longer in use Hidden as no longer in use Havant_Thicket_to____Route_1_No_Sites_Habitat Element ID Havant_Thicket_to_ Route_1_No_Sites_Habitat Stocks and BNG Permanent habitat loss (ha) Crops, carbon sequestration, air quality management Water abstraction, recreation, flood regulation reshwater Carbon sequestration, air quality management, recreation Livestock, carbon sequestration, recreation Fisheries, recreation, water desalination Grassland Marine Shrub No environmental benefits Timber, carbon sequestration, air quality management, Woodland (coniferous) recreation Timber, carbon sequestration, air quality management, Woodland (deciduous) ecreation Carbon sequestration - temporary habitat loss during construction road habitat Cumulative area (ha) Low non-traded carbon (£2019) Medium non-traded carbon (£2019) High non-traded carbon (£2019) Arable land Grassland Heathland Shrub Woodland (deciduous) Carbon sequestration - permanent habitat loss mulative area (ha) Low non-traded carbon (£2019) Medium non-traded carbon (£2019) High non-traded carbon (£2019) Grassland Heathland Woodland (coniferous) Woodland (deciduous) Carbon sequestration - area planned for habitat creation Medium non-traded carbon (£2019) High non-traded carbon (£2019) Broad habitat Arable land Low non-traded carbon (£2019) reshwater Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Water purification services are currently provided by greenspace and urban habitats. Hermitage Stream WFD waterbody is currently achieving Moderate status. Qualitative assessment Therefore, the decrease in flow has a potential to decline water purification services as dilution of pollutants downstream will decline. Recreation Agricultural Permanent Loss Estimated agriculture value (£2019) Temporary Loss Estimated agriculture value (£2019) **Air Quality**Area not within Air Quality Management Area Natural hazard regulation
Temporary habitat lost during construction (Area within Zol) (ha)
Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Broad habitat type

Woodland Semi-natural grasslands Freshwater

Freshwater

Broad habitat type
Woodland
Semi-natural grasslands

Havant_Thicket_toRoute_2_No_Sites_Habitat					
	Element re	f Havant_Thicket_to_	Route_2_No_Sites_Habitat		
	Element Name	e			
	Zone of interest area (ha				
Stocks and BNG		Towns to be the board to a			
Broad habitat	Ecosystem services	Temporary habitat lost during construction (Area within Zol) (ha)		Area planned for habitat creation (ha)	Area planned for habitat improvement (ha)
Arable land	quality management Water abstraction, recreation,	(Area Within 201) (na)	remanent habitat 1055 (na)	Area planned for habitat creation (na)	(iia)
Freshwater	flood regulation				
	Carbon sequestration, air quality				
Grassland	management, recreation Livestock, carbon sequestration,				
Heathland	recreation				
Marine Shrub	Fisheries, recreation, water desalination				
Urban	No environmental benefits Timber, carbon sequestration, air				
Woodland (coniferous)	quality management, recreation Timber, carbon sequestration, air				
Woodland (deciduous)	quality management, recreation				
Carbon sequestration - temporary habitat loss during construct	tior				
B	Committee and that		Law you traded earlier (C2040)	Medium non traded carbon (C2040)	Link you traded carbon (C2040)
Broad habitat	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land					
Grassland Heathland					
Shrub Woodland (coniferous)					
Woodland (deciduous)					
Carbon sequestration - permanent habitat loss Broad habitat	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land Grassland					
Heathland Shrub					
Woodland (coniferous) Woodland (deciduous)					
woodana (decidadas)					
Carbon sequestration - area planned for habitat creation					
Broad habitat Arable land	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Grassland Heathland					
Shrub					
Woodland (coniferous) Woodland (deciduous)					
······································					
Water Purification	Assessment				
	Water purification services are currently provided by				
	greenspace and urban habitats Hermitage Stream WFD waterbody is currently	5.			
Qualitative assessment	achieving Moderate status. Therefore, the decrease in flow	v			
	has a potential to decline wate purification services as dilutior	r 1			
	of pollutants downstream will decline.	_			
Recreation Welfare Value (per year)	Estimated visits (per year)	•			
	, , ,				
Agricultural		_			
Permanent Loss Estimated agriculture value (£2019)	Temporary Loss Estimated agriculture value (£2019)				
Air Quality Area not within Air Quality Management Area					
Natural hazard regulation					
Temporary habitat lost during construction (Area within Zol) (ha)	Value of natural hazard				
Broad habitat type Woodland	regulation lost (£2019)				
Semi-natural grasslands Freshwater					
Permanent habitat loss (ha)	Value of natural hazard				
Broad habitat type Woodland	regulation lost (£2019)				
woodland Semi-natural grasslands Freshwater					
Area planned for habitat creation (ha)					
Broad habitat type	Value of natural hazard regulation gained (£2019)				
Woodland Semi-natural grasslands					
Freshwater					

Havant_Thicket_to_ Route_3_No_Sites_Habitat					
	Element re	f			
	Element II	Havant_Thicket_to_	Route_3_No_Sites_Habitat		
	Element Name	9			
	Description	1			
	Zone of interest area (ha				
Stocks and BNG					_
		Temporary habitat lost		Area planned for	Area planned for
		during construction		habitat creation	habitat
Broad habitat	Ecosystem services	(Area within Zol) (ha)	Permanent habitat loss (ha)	(ha)	improvement (ha)
Anable land	Crops, carbon sequestration, air				
Arable land Freshwater	quality management regulation				
riestiwatei	Carbon sequestration, air quality				
Grassland	management, recreation				
	Livestock, carbon sequestration,				
Heathland	recreation				
	Fisheries, recreation, water				
Marine	desalination				
O					
Shrub Urban	No environmental benefits				
Urban	Timber, carbon sequestration, air				
Woodland (coniferous)	quality management, recreation				
` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Timber, carbon sequestration, air				
Woodland (deciduous)	quality management, recreation				

Carbon sequestration - temporary habitat loss during construction

Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non- traded carbon (£2019)	High non-traded carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - permanent habitat loss

Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non- traded carbon (£2019)	High non-traded carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - area planned for habitat creation

			Medium non- traded carbon	High non-traded
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	(£2019)	carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Water Purification

	Assessment
	Water purification services are
	currently provided by
	greenspace and urban habitats.
	Hermitage Stream WFD
	waterbody is currently
Qualitative assessment	achieving Moderate status.
	Therefore, the decrease in flow
	has a potential to decline water
	purification services as dilution
	of pollutants downstream will
	decline.

Welfare Value (per year)	Estimated visits (per year)

Permanent Loss Estimated agriculture value (£2019)	Temporary Loss Estimated
r ermanent 2003 Estimated agriculture value (22013)	agriculturo valuo (£2010)

Air Quality
Area not within Air Quality Management Area

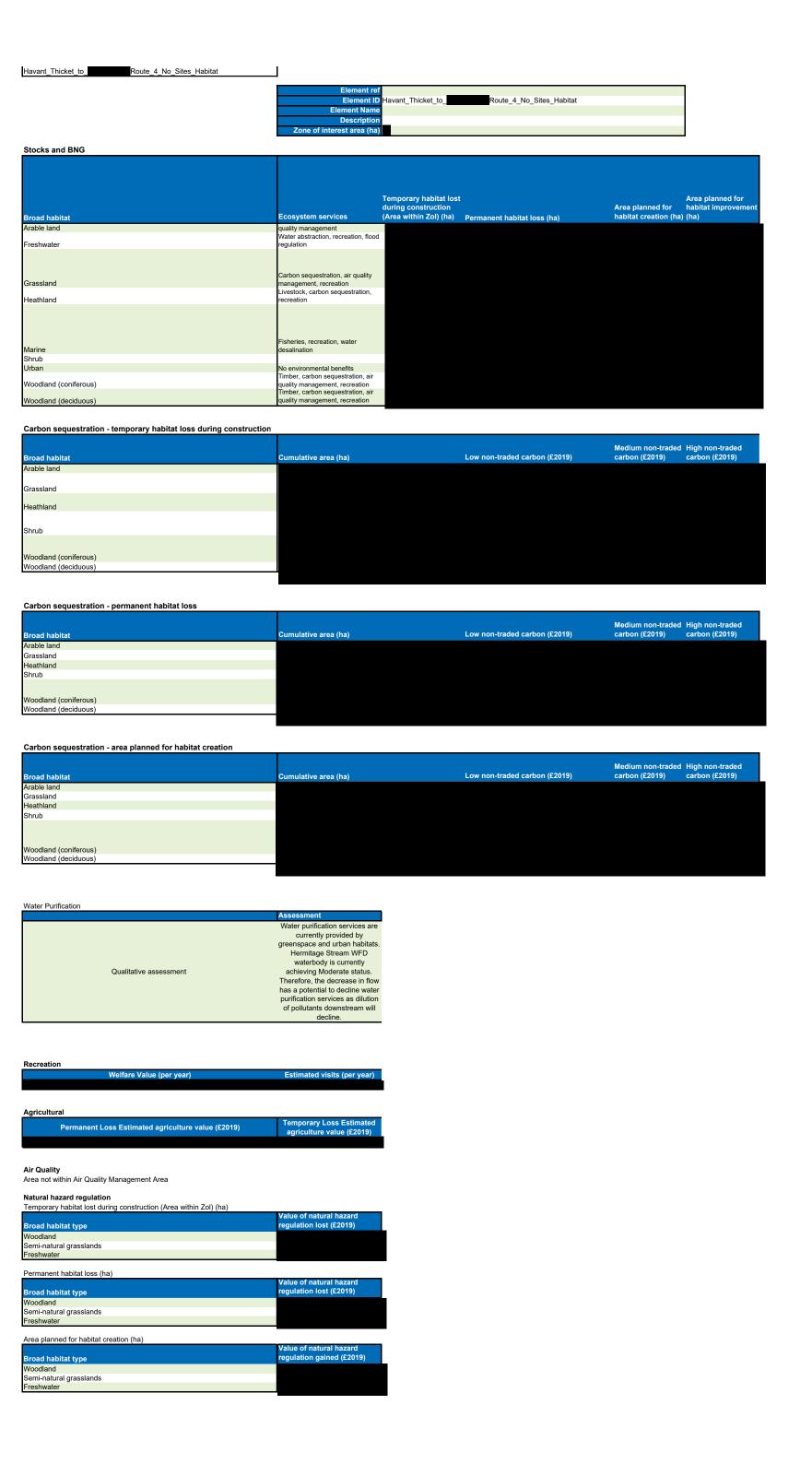
Natural hazard regulation
Temporary habitat lost during construction (Area within Zol) (ha)

remporary habitat lost during construction (Area with	111 ZOI) (11a)
Broad habitat type	Value of natural hazard regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Permanent habitat loss (ha)

Broad habitat type	Value of natural hazard regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

	Value of natural hazard
Broad habitat type	regulation gained (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	



_to_WRP_Route_1_No_Sites_Habitat

Element ID Element Name Description _to_WRP_Route_1_No_Sites_Habitat

Stocks and BNG

Stocks and BNG					
Broad habitat	Ecosystem services	Temporary habitat lost during construction (Area within Zol) (ha)	t Permanent habitat loss (ha)	Area planned for habitat creation (ha)	Area planned for habitat improvement (ha)
Arable land	quality management				
Freshwater	Water abstraction, recreation, flood regulation				
	Carbon sequestration, air quality				
Grassland	management, recreation				
Heathland	Livestock, carbon sequestration, recreation				
	Fisheries, recreation, water				
Marine	desalination				
Shrub					
Urban	No environmental benefits				
	Timber, carbon sequestration, air				
Woodland (coniferous)	quality management, recreation				
Mondland (desidueus)	Timber, carbon sequestration, air quality management, recreation				
Woodland (deciduous)	quality management, recreation				

Carbon sequestration - temporary habitat loss during construction

			Medium non-traded	High non-traded carbon
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	carbon (£2019)	(£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - permanent habitat loss

			Medium non-traded	High non-traded carbon
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	carbon (£2019)	(£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - area planned for habitat creation

Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Water Purification

The final effluent from WTW will be transferred to WRP. Therefore, there would be no change to water purification to the WRP as the water will be transferred via a pipeline from Qualitative assessment

Recreation

Agricultural

agriculture value (£2019)

Air Quality

Freshwater

Area not within Air Quality Management Area

Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha)

regulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands

Permanent habitat loss (ha)

Value of natural hazard regulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater

Area planned for habitat creation (ha)

Value of natural hazard regulation gained (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater

Element ID WRP_to_Havant_Thicket_Route_1_No_Sites_Habitat
Element Name
Description

Stocks and BNG

Broad habitat	Ecosystem services	Temporary habitat lost during construction (Area within Zol) (ha)	Permanent habitat loss (ha)	Area planned for habitat creation (ha)	Area planned for habitat improvement (ha)
Arable land	Crops, carbon sequestration, air quality management				
Freshwater	flood regulation				
riestiwatei	Carbon sequestration, air quality				
Grassland	management, recreation				
Heathland	Livestock, carbon sequestration, recreation Fisheries, recreation, water				
Marine	desalination				
Shrub					
Urban	No environmental benefits				
Woodland (coniferous)	Timber, carbon sequestration, air quality management, recreation Timber, carbon sequestration, air				
Woodland (deciduous)	quality management, recreation				

Carbon sequestration - temporary habitat loss during construction

			Medium non-traded carbon	High non-traded carbon
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	(£2019)	(£2019)
Arable land				
Grassland				
O. addition				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				
Trobalana (decidadas)				

Carbon sequestration - permanent habitat loss

			Medium non-traded carbon	High non-traded carbon
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	(£2019)	(£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - area planned for habitat creation

Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
· · · · · · · · · · · · · · · · · · ·				
Woodland (deciduous)				

Water Purification

	Assessment
	Water purification services are
	currently provided by
	greenspace and urban habitats.
Qualitative assessment	Hermitage Stream WFD
Qualitative assessment	waterbody is currently
	achieving Moderate status.
	There would be no change in
	water purification services.
	·

Agricultural

Air QualityArea not within Air Quality Management Area

Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha)

	Value of natural hazard
Broad habitat type	regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Permanent habitat loss (ha)

	Value of natural hazard
Broad habitat type	regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

	Value of natural hazard
Broad habitat type	regulation gained (£2019)
Woodland	İ
Semi-natural grasslands	
Freshwater	

Element ID WRP_to_Havant_Thicket_Route_2_No_Sites_Habitat
Element Name
Description

Stocks and BNG

Otobic una Bito					
Broad habitat	Ecosystem services	Temporary habitat lost during construction (Area within Zol) (ha)	Permanent habitat loss (ha)	Area planned for habitat creation (ha)	Area planned for habitat improvement (ha)
	Crops, carbon sequestration, air				
Arable land	quality management				
Freshwater	flood regulation				
	Carbon sequestration, air quality				
Grassland	management, recreation				
Heathland Marine	Livestock, carbon sequestration, recreation Fisheries, recreation, water desalination				
	uccamanon				
Shrub					
Urban	No environmental benefits				
Woodland (coniferous)	Timber, carbon sequestration, air quality management, recreation Timber, carbon sequestration, air				
Woodland (deciduous)	quality management, recreation				

Carbon sequestration - temporary habitat loss during construction

tomporary manual to				ed carbon High non-traded
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	(£2019)	carbon (£2019)
Arable land				
Grassland				
Heathland				
Ohmuh				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - permanent habitat loss

			Medium non-traded carbon	High non-traded
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	(£2019)	carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - area planned for habitat creation

			Medium non-traded carbon High non-traded	
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	(£2019)	carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				
·				

Water Purification

	Assessment
	Water purification services are
	currently provided by
	greenspace and urban habitats.
Qualitative assessment	Hermitage Stream WFD
Qualitative assessment	waterbody is currently
	achieving Moderate status.
	There would be no change in
	water purification services.

Recreation

Welfare Value (per year)	Estimated visits (per year)

Agricultu	ıral	
	Permanent Loss Estimated agriculture value (£2019)	Temporary Loss Estimated agriculture value (£2019)

Air Quality Area not within Air Quality Management Area

Natural hazard regulation
Temporary habitat lost during construction (Area within Zol) (ha)

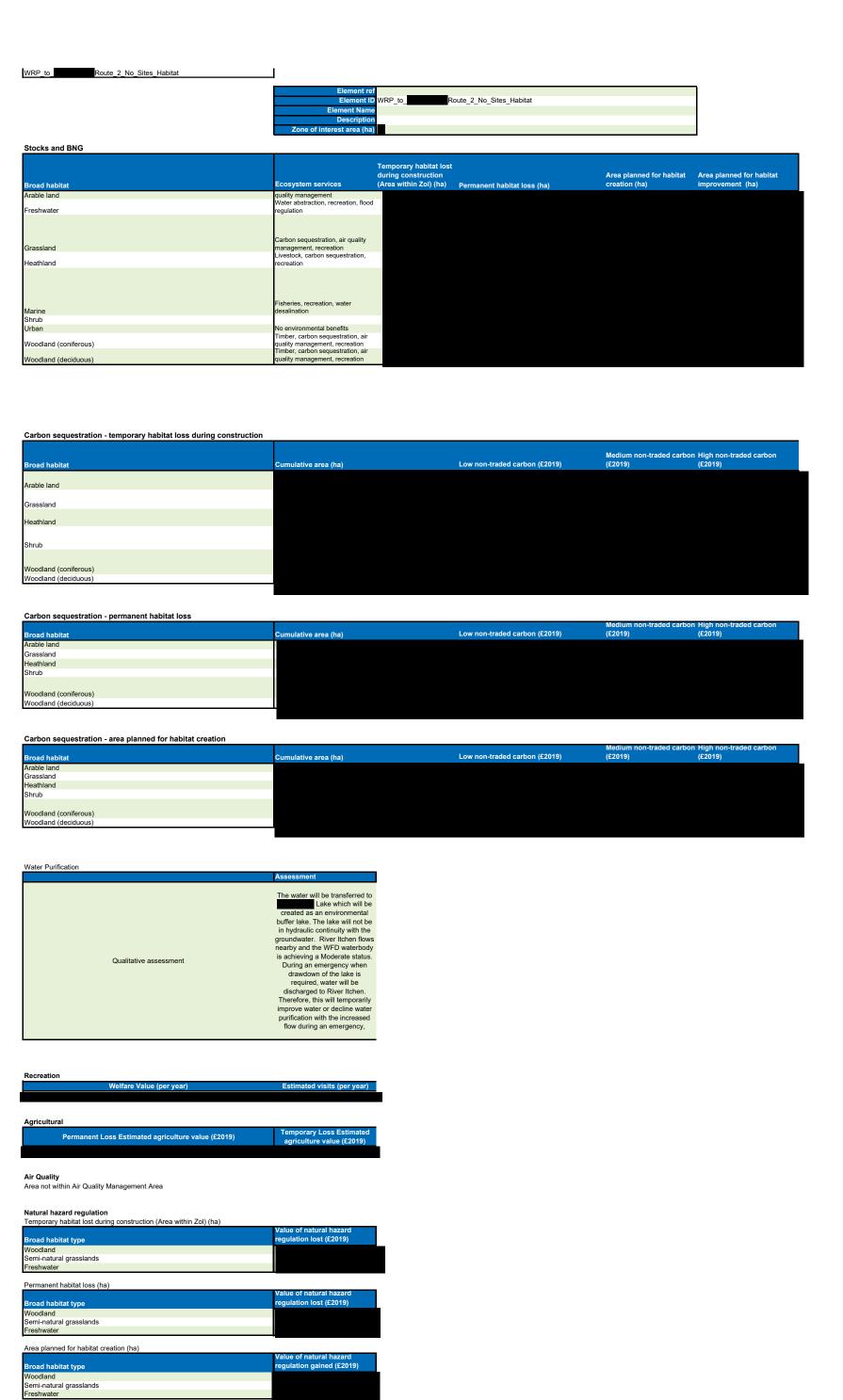
Broad habitat type	Value of natural hazard regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Permanent habitat loss (ha)

	Value of natural hazard
Broad habitat type	regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Broad habitat type	Value of natural hazard regulation gained (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

WRP_to_ Route_1_No_Sites_Habitat					
	Element ref				
	Element ID Element Name				
	Description Zone of interest area (ha)				
Stocks and BNG					
Broad habitat	Ecosystem services	Temporary habitat lost during construction (Area within Zol) (ha)	Permanent habitat loss (ha)	Area planned for habitat creati (ha)	on Area planned for habitat improvement (ha)
Arable land	Crops, carbon sequestration, air quality management		remanent napitatioss (na)	(III)	improvement (na)
Freshwater	Water abstraction, recreation, flood regulation				
Grassland Heathland	Carbon sequestration, air quality management, recreation Livestock, carbon sequestration, recreation				
Marine	Fisheries, recreation, water desalination				
Shrub Urban	No environmental benefits				
Woodland (coniferous)	Timber, carbon sequestration, air quality management, recreation				
Woodland (deciduous)	Timber, carbon sequestration, air quality management, recreation				
Carbon sequestration - temporary habitat loss during construction					
December 1	Consulation and the		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat	Cumulative area (ha)		Low Holl-traded Carboll (£2019)	(£2019)	riigii iloii-tiaded Carboii (£2019)
Arable land					
Grassland					
Heathland					
Shrub					
Woodland (coniferous)					
Woodland (deciduous)					
Carbon sequestration - permanent habitat loss					
Broad habitat	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land Grassland					
Heathland Shrub					
Gillab					
Woodland (coniferous)					
Woodland (deciduous)	_				
Carbon sequestration - area planned for habitat creation				Medium non-traded carbon	
Broad habitat	Cumulative area (ha)		Low non-traded carbon (£2019)	(£2019)	High non-traded carbon (£2019)
THE STORE LAND	- Camarativo aroa (na)				
Arable land Grassland Hostbland					
	(1.1)				
Grassland Heathland Shrub					
Grassland Heathland					
Grassland Heathland Shrub Woodland (coniferous)					
Grassland Heathland Shrub Woodland (coniferous)					
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous)	Assessment				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous)	Assessment The water will be transferred to Lake which will be created as an environmental buffer lake. The lake				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification	Assessment The water will be transferred to Lake which will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous)	Assessment The water will be transferred to Lake which will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged.				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake which will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment	Assessment The water will be transferred to Lake which will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency,				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment	Assessment The water will be transferred to Lake which will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency,				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year)	Assessment The water will be transferred to Lake which will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency,				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year)	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019)	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha)	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)				
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Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha)	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019)				
Crassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Broad habitat type	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019)				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019)				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Area planned for habitat creation (ha)	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019)				
Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater	Assessment The water will be transferred to will be created as an environmental buffer lake. The lake will not be in hydraulic continuity with the groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019) Value of natural hazard regulation lost (£2019)				



to_WRP_Route_1_No_Sites_Habitat					
	Element ref				
	Element ID Element Name	_to_WRP_R	oute_1_No_Sites_Habitat		
	Description Zone of interest area (ha)				
Stocks and BNG	Zone of Interest area (na)				
	Te	emporary habitat lost			
Droad habitat	dι	uring construction	Dermanant habitat laga (ba)	Area planned for habitat creation (ha)	Area planned for habitat improvement (ha)
Broad habitat	Crops, carbon sequestration, air	irea within 201) (IIa)	Permanent habitat loss (ha)	Habitat Creation (Ha)	(IIa)
Arable land Freshwater	quality management flood regulation				
Grassland	Carbon sequestration, air quality management, recreation				
Heathland	Livestock, carbon sequestration, recreation				
Marine	Fisheries, recreation, water desalination				
ivanii e	desamation				
Shrub Urban	No environmental benefits				
Woodland (coniferous)	Timber, carbon sequestration, air quality management, recreation				
Woodland (deciduous)	Timber, carbon sequestration, air quality management, recreation				
Carbon sequestration - temporary habitat loss during construct	ion				
Broad habitat	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land					
Grassland					
Heathland					
Shrub					
Woodland (coniferous)					
Woodland (deciduous)					
Cauban acquisition manning to be little land					
Carbon sequestration - permanent habitat loss				Medium non-traded	
Broad habitat Arable land	Cumulative area (ha)		Low non-traded carbon (£2019)	carbon (£2019)	High non-traded carbon (£2019)
Grassland					
Heathland Shrub					
Woodland (coniferous)					
Woodland (deciduous)					
Carbon sequestration - area planned for habitat creation				Medium non-traded	
Broad habitat	Cumulative area (ha)		Low non-traded carbon (£2019)	carbon (£2019)	High non-traded carbon (£2019)
Arable land Grassland					
Heathland Shrub					
Woodland (coniferous)					
Woodland (deciduous)					
Water Purification	Assessment				
	WTW currently discharges water via the LSO.				
	The WRP waste stream will be mixed with the remaining final effluent at				
Qualitative assessment	WTW before being transferred to Outfall.				
	Therefore, this could potentially decline				
	water purification of the receiving waterbody as dilution of pollutants				
	downstream will decline. No change to water purification to the WRP as the				
	water will be transferred via a pipeline from WTW.				
Pagastian					
Recreation Welfare Value (per year)	Estimated visits (per year)				
Amitoultium					
Agricultural Permanent Loss Estimated agriculture value (£2019)	remporary Loss Estimated				
Air Quality					
Air Quality Area not within Air Quality Management Area					
Natural hazard regulation					
Temporary habitat lost during construction (Area within Zol) (ha)	Value				
Broad habitat type	Value of natural hazard regulation lost (£2019)				
Woodland					
Semi-natural grasslands					
Freshwater					
Freshwater					
Freshwater Permanent habitat loss (ha)	Value of natural hazard				
Freshwater	Value of natural hazard regulation lost (£2019)				

Value of natural hazard regulation gained (£2019)

Area planned for habitat creation (ha)

Broad habitat type Woodland Semi-natural grasslands Freshwater

Element ref	
Element ID	_akeHabitats
Element Name	
Description	
Zone of interest area (ha)	

Stocks and BNG

otooko una Bito					
Broad habitat	Ecosystem services	Temporary habitat lost during construction (Area within Zol) (ha)	Permanent habitat loss (ha)	Area planned for habitat creation (ha)	Area planned for habitat
Arable land	quality management				
Freshwater	Water abstraction, recreation, flood regulation				
Grassland	Carbon sequestration, air quality management, recreation				
Grassiariu	Livestock, carbon sequestration,				
Heathland	recreation				
	Fisheries, recreation, water				
Marine	desalination				
Shrub					
Urban	No environmental benefits				
	Timber, carbon sequestration, air				
Woodland (coniferous)	quality management, recreation				
Woodland (deciduous)	Timber, carbon sequestration, air quality management, recreation				

Carbon sequestration - temporary habitat loss during construction

Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbo (£2019)
Arable land				
Grassland				
Heathland				
Ohh				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - permanent habitat loss

Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land	Jamaian Janua (na)			
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - area planned for habitat creation

Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Water Purification

	Assessment
Qualitative assessment	Lake will be an environmental buffer lake. The lake will be lined and will therefore have no effect on water purification services. There may be some vegetation planting around the lake but this is currently unknown therefore impacts on water regulation cannot be assessed.

Recreation

	Welfare Value (per year)	Estimated visits (per year)
ı		
•		

Permanent Loss Estimated agriculture value (£2019)	Temporary Loss Estimated agriculture value (£2019)

Air Quality Area not within Air Quality Management Area

Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha)

Broad habitat type	Value of natural hazard regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Permanent habitat loss	(ha)	

Broad habitat type	Value of natural hazard regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Broad habitat type	Value of natural hazard regulation gained (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Element ID Element Name HTPS 3 Description Zone of interest area (ha) Stocks and BNG Temporary habitat lost during construction
(Area within Zol) (ha) Permanent habitat loss (ha) Area planned for habitat improvemen Broad habitat Ecosystem services Area planned for habitat creation (ha) Crops, carbon sequestration, air Arable land flood regulation Carbon sequestration, air quality management, recreation Freshwater Grassland ivestock, carbon sequestration, Heathland ecreation isheries, recreation, water Marine esalination Shrub Urban No environmental benefits Timber, carbon sequestration, air quality management, Woodland (coniferous) recreation Timber, carbon sequestration, air quality management, recreation Woodland (deciduous) Carbon sequestration - temporary habitat loss during construction Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Carbon sequestration - permanent habitat loss Grassland Heathland Woodland (coniferous) Woodland (deciduous) Carbon sequestration - area planned for habitat creation Broad habitat Cumulative area (ha) Arable land Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Water purification services are currently provided by greenfield habitats. Hermitage Stream WFD waterbody is currently achieving Moderate status. A pumping station will be constructed. Therefore, Qualitative assessment the change in land cover has a potential to decline water purification services. Recreation Welfare Value (per year) Estimated visits (per year) Agricultural **Temporary Loss Estimated** Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Value of natural hazard regulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Value of natural hazard regulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater Area planned for habitat creation (ha) regulation gained (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater

Element ID **Element Name** HTPS 5 Description Zone of interest area (ha) Stocks and BNG Temporary habitat lost Area planned for habitat improvement during construction (Area within Zol) (ha) Broad habitat Permanent habitat loss (ha) Area planned for habitat creation (ha) Arable land quality management reshwater Carbon sequestration, air quality Grassland ivestock, carbon sequestration, Heathland recreation isheries, recreation, water Marine Shrub Urban No environmental benefits Timber, carbon sequestration, air Woodland (coniferous) quality management, recreation Timber, carbon sequestration, air Woodland (deciduous) quality management, recreation Carbon sequestration - temporary habitat loss during construction Arable land Grassland Heathland Woodland (coniferous) Woodland (deciduous) Carbon sequestration - permanent habitat loss Low non-traded carbon (£2019) Medium non-traded carbon (£2019) High non-traded carbon (£2019) **Broad habitat** Cumulative area (ha) Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Carbon sequestration - area planned for habitat creation Low non-traded carbon (£2019) Medium non-traded carbon (£2019) Broad habitat Cumulative area (ha) Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Water purification services are currently provided by greenfield and woodland habitats. Park Lane Stream has no WFD classification which flows into Hermitage Stream WFD waterbody is currently achieving Moderate status. A Qualitative assessment pumping station will be constructed. Therefore, the change in land cover has a potential to decline water purification services. Recreation Welfare Value (per year) Estimated visits (per year) Agricultural Temporary Loss Estimated agriculture value (£2019) Permanent Loss Estimated agriculture value (£2019) Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) /alue of natural hazard Broad habitat type regulation lost (£2019) Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) egulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater Area planned for habitat creation (ha) /alue of natural hazard Broad habitat type regulation gained (£2019) Woodland Semi-natural grasslands Freshwater

Element ID **Element Name** HTPS 8 Description Zone of interest area (ha) Stocks and BNG Temporary habitat lost during construction Area planned for habitat improvemen (Area within Zol) (ha) Permanent habitat loss (ha) Broad habitat Ecosystem services Area planned for habitat creation (ha) Crops, carbon sequestration, air Arable land flood regulation Carbon sequestration, air quality Freshwater Grassland nanagement, recreation Heathland ecreation isheries, recreation, water Marine Shrub Urban No environmental benefits Timber, carbon sequestration, air quality management, recreation Timber, carbon sequestration, air Woodland (coniferous) Woodland (deciduous) uality management, recreation Carbon sequestration - temporary habitat loss during construction Low non-traded carbon (£2019) Medium non-traded carbon (£2019) High non-traded carbon (£2019) mulative area (ha) **Broad habitat** Arable land Grassland Heathland Woodland (coniferous) Woodland (deciduous) Carbon sequestration - permanent habitat loss **Broad habitat** Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Carbon sequestration - area planned for habitat creation Low non-traded carbon (£2019) Broad habita Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Water purification services are currently provided by greenfield and woodland habitats. Park Lane Stream has no WFD classification which flows into Hermitage Stream WFD waterbody is currently Qualitative assessment achieving Moderate status. A pumping station will be constructed. Therefore, the change in land cover has a potential to decline water purification services. Recreation Welfare Value (per year) Estimated visits (per year) Agricultural Temporary Loss Estimated agriculture value (£2019) Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Value of natural hazard regulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Value of natural hazard Broad habitat type regulation lost (£2019) Woodland Freshwater Area planned for habitat creation (ha) Value of natural hazard regulation gained (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater

Element ID **Element Name** HTPS 9 Description Zone of interest area (ha) Stocks and BNG Temporary habitat lost during construction Area planned for habitat improvemen (Area within Zol) (ha) Permanent habitat loss (ha) Broad habitat Ecosystem services Area planned for habitat creation (ha) Props, carbon sequestration, air Arable land flood regulation Carbon sequestration, air quality Freshwater Grassland nanagement, recreation Heathland ecreation isheries, recreation, water Marine Shrub Urban No environmental benefits Timber, carbon sequestration, air quality management, recreation Timber, carbon sequestration, air Woodland (coniferous) Woodland (deciduous) uality management, recreation Carbon sequestration - temporary habitat loss during construction Low non-traded carbon (£2019) Medium non-traded carbon (£2019) High non-traded carbon (£2019) mulative area (ha) **Broad habitat** Arable land Grassland Heathland Woodland (coniferous) Woodland (deciduous) Carbon sequestration - permanent habitat loss Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Carbon sequestration - area planned for habitat creation Medium non-traded carbon (£2019) Low non-traded carbon (£2019) Broad habita High non-traded carbon (£2019) Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Water purification services are currently provided by greenfield habitats. Park Lane Stream has no WFD classification which flows into Hermitage Stream WFD waterbody is currently Qualitative assessment achieving Moderate status. A pumping station will be constructed. Therefore, the change in land cover has a potential to decline water purification services. Recreation Estimated visits (per year) Welfare Value (per year) Agricultural porary Loss Estim Permanent Loss Estimated agriculture value (£2019) agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Value of natural hazard regulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Value of natural hazard regulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater Area planned for habitat creation (ha) Value of natural hazard regulation gained (£2019) Broad habitat type Woodland Semi-natural grasslands Freshwater

	Element ID Element Name	WRP to SIA		
	Description Zone of interest area (ha)			
Stocks and BNG	Zone of mereor area (na)			'
		Temporary habitat lost during construction		Area planned for habitat improvement
Broad habitat		(Area within Zol) (ha) Permanent habitat loss (ha)		(ha)
Arable land Freshwater	quality management flood regulation			
Grassland	Carbon sequestration, air quality management, recreation			
Heathland	Livestock, carbon sequestration, recreation Fisheries, recreation, water			
Marine	desalination			
Shrub				
Urban	No environmental benefits			
Woodland (coniferous)	Timber, carbon sequestration, air quality management, recreation			
Woodland (deciduous)	Timber, carbon sequestration, air quality management, recreation			
Woodland (decidades)	quality management, reoreation			
Carbon sequestration - temporary habitat loss during construction Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Divad Habitat	Cumulative area (na)	Low Holl Made Carbon (22010)	iniculari non traded carbon (22010)	ingil non daded ourself (22010)
Arable land				
Grassland Heathland				
Shrub Woodland (coniferous)				
Woodland (deciduous)				
Carbon sequestration - permanent habitat loss	Commission	Laurent trade (AMA)	Modium non-traded contra (COCC)	High non traded souther (COO.40)
Broad habitat Arable land	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Grassland Heathland				
Shrub Woodland (coniferous)				
Woodland (deciduous)				
Carbon sequestration - area planned for habitat creation Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land Grassland				
Heathland Shrub				
Woodland (coniferous)				
Woodland (deciduous)				
Water Purification				
	Assessment			
	The water will be transferred to Lake which will be			
	created as an environmental buffer lake. The lake will not be			
	in hydraulic continuity with the			
	groundwater. River Itchen			
Qualitative assessment	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a			
Qualitative assessment	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of			
Qualitative assessment	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen.			
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Qualitative assessment	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased			
Recreation	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency,			
	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased			
Recreation Welfare Value (per year)	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency,			
Recreation	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)			
Recreation Welfare Value (per year) Agricultural	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency,			
Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019)	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)			
Recreation Welfare Value (per year) Agricultural	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)			
Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)			
Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year)			
Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019)			
Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019)			
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Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Broad habitat type Woodland Semi-natural grasslands	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019) Value of natural hazard regulation lost (£2019)			
Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Area planned for habitat creation (ha) Broad habitat type	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency. Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019) Value of natural hazard regulation lost (£2019)			
Recreation Welfare Value (per year) Agricultural Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Permanent habitat loss (ha) Broad habitat type Woodland Semi-natural grasslands Freshwater Area planned for habitat creation (ha)	groundwater. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to River Itchen. Therefore, this will temporarily improve water or decline water purification with the increased flow during an emergency, Estimated visits (per year) Temporary Loss Estimated agriculture value (£2019) Value of natural hazard regulation lost (£2019)			

WRP to SIA

WRP 68 Element ID **Element Name** WRP 68 Description Zone of interest area (ha) Stocks and BNG Temporary habitat lost Area planned for habitat improvement during construction (Area within Zol) (ha) Broad habitat Permanent habitat loss (ha) Area planned for habitat creation (ha) Arable land quality management reshwater Carbon sequestration, air quality Grassland management, recreation ivestock, carbon sequestration, Heathland recreation isheries, recreation, water Marine Shrub Urban No environmental benefits Timber, carbon sequestration, air Woodland (coniferous) quality management, recreation Timber, carbon sequestration, air Woodland (deciduous) quality management, recreation Carbon sequestration - temporary habitat loss during construction Low non-traded carbon (£2019) Arable land Grassland Heathland Woodland (coniferous) Woodland (deciduous) Carbon sequestration - permanent habitat loss Low non-traded carbon (£2019) Medium non-traded carbon (£2019) High non-traded carbon (£2019) Cumulative area (ha) Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Carbon sequestration - area planned for habitat creation Low non-traded carbon (£2019) Medium non-traded carbon (£2019) Broad habitat High non-traded carbon (£2019) Cumulative area (ha) Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Water purification services are currently provided by grassland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the Qualitative assessment change in land cover has a potential to decline water purification services. Recreation Estimated visits (per year) Welfare Value (per year) Agricultural Temporary Loss Estimated Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha)

regulation lost (£2019)

/alue of natural hazard

regulation lost (£2019)

regulation gained (£2019)

Broad habitat type

Broad habitat type

Broad habitat type

Semi-natural grasslands

Semi-natural grasslands

Area planned for habitat creation (ha)

Semi-natural grasslands

Permanent habitat loss (ha)

Woodland

Freshwater

Woodland

Freshwater

Woodland

Freshwater

Agricultural	
Permanent Loss Estimated agriculture value (£2019)	Temporary Loss Estimated agriculture value (£2019)

Air Quality	
Area not within Air Quality Management Area	

Natural hazard regulation
Temporary habitat lost during construction (Area within Zol) (ha)

Temporary habitat lost during construction (Area within Zol) (ha)	
	Value of natural hazard
Broad habitat type	regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Permanent habitat loss (ha)	
	Value of natural hazard
Broad habitat type	regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Area planned for habitat creation (ha)	Value of natural hazard
Broad habitat type	regulation gained (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

WRP 71 Element ID Element Name WRP 71
Description Stocks and BNG Temporary habitat lost during construction
(Area within Zol) (ha) Permanent habitat loss (ha) Area planned for habitat improvement (ha) Area planned for habitat creation (ha) Broad habitat Ecosystem services Arable land reshwater Grassland Heathland Marine Shrub Urban Woodland (coniferous) Woodland (deciduous) Carbon sequestration - temporary habitat loss during construction Arable land Grassland Heathland Woodland (coniferous) Woodland (deciduous) Carbon sequestration - permanent habitat loss Low non-traded carbon (£2019) Medium non-traded carbon (£2019) High non-traded carbon (£2019) Broad habi Arable land Heathland Shrub Woodland (coniferous) Woodland (deciduous) Carbon sequestration - area planned for habitat creation Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Water purification services are currently provided by greenspace and urban habitats.
Brockhampton Stream flows adjacent to the land parcel and has no WFD classification. Qualitative assessment However, the Stream flows into the Langstone Harbour and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water purification services. Recreation Welfare Value (per year) Estimated visits (per year) Temporary Loss Estimated Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) regulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands Permanent habitat loss (ha) Value of natural hazard regulation lost (£2019) Broad habitat type Woodland

Freshwater

Woodland Semi-natural grasslands

Freshwater

Broad habitat type

Area planned for habitat creation (ha)

/alue of natural hazard

regulation gained (£2019)

Temporary Loss Estimated agriculture value (£2019)

Value of natural hazard regulation lost (£2019)

Value of natural hazard

regulation lost (£2019)

Value of natural hazard regulation gained (£2019)

Agricultural

Air Quality

Natural hazard regulation

Broad habitat type Woodland

Broad habitat type

Broad habitat type
Woodland

Semi-natural grasslands

Woodland Semi-natural grasslands Freshwater

Freshwater

Semi-natural grasslands Freshwater

Permanent habitat loss (ha)

Area planned for habitat creation (ha)

Area not within Air Quality Management Area

Temporary habitat lost during construction (Area within Zol) (ha)

Permanent Loss Estimated agriculture value (£2019)

WRP 73 Element ID Element Name WRP 73 Stocks and BNG Temporary habitat lost during construction
(Area within Zol) (ha) Permanent habitat loss (ha) Area planned for habitat improvement Area planned for habitat creation (ha) Broad habitat Ecosystem services (ha) Crops, carbon sequestration, air Arable land flood regulation Carbon sequestration, air quality reshwater Grassland anagement, recreation _ivestock, carbon sequestration, Heathland ecreation Fisheries, recreation, water Marine Shrub No environmental benefits Timber, carbon sequestration, air Urban Woodland (coniferous) quality management, recreation Fimber, carbon sequestration, air Woodland (deciduous) uality management, recreation Carbon sequestration - temporary habitat loss during construction Arable land Grassland Heathland Woodland (coniferous) Woodland (deciduous) Carbon sequestration - permanent habitat loss Low non-traded carbon (£2019) High non-traded carbon (£2019) Medium non-traded carbon (£2019) Arable land Heathland Shrub Woodland (coniferous) Woodland (deciduous) Carbon sequestration - area planned for habitat creation Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Water purification services are currently provided by grassland and woodland habitats. Hermitage Stream flows adjacent to the land parcel and the WFD waterbody is currently Qualitative assessment achieving Moderate status. Langstone Harbour is nearby, and the construction of water recycling plant will change the land cover which could potentially decline water purification services. Recreation Welfare Value (per year) Estimated visits (per year) Agricultural Temporary Loss Estimated Permanent Loss Estimated agriculture value (£2019) Air Quality Area not within Air Quality Management Area Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha) regulation lost (£2019) Broad habitat type Woodland Semi-natural grasslands

Permanent habitat loss (ha)

Area planned for habitat creation (ha)

Broad habitat type Woodland Semi-natural grassla Freshwater

Broad habitat type Woodland Semi-natural grasslands Freshwater Value of natural hazard regulation lost (£2019)

Value of natural hazard regulation gained (£2019)

WRP 74

Element ref	
Element ID	
Element Name WRP 74	
Description	
Zone of interest area (ha)	

Stocks and BNG

Broad habitat		Temporary habitat lost during construction (Area within Zol) (ha)	Permanent habitat loss (ha)	Area planned for habitat creation (ha)	Area planned for habitat improvement (ha)
Arable land	Crops, carbon sequestration, air				
Freshwater	quality management regulation				
Grassland	Carbon sequestration, air quality management, recreation				
Heathland	Livestock, carbon sequestration, recreation				
Marine	Fisheries, recreation, water desalination				
Shrub					
Urban	No environmental benefits				
Woodland (coniferous)	Timber, carbon sequestration, air quality management, recreation				
Woodland (deciduous)	Timber, carbon sequestration, air quality management, recreation				

Carbon sequestration - temporary habitat loss during construction					
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)	
Arable land					
Grassland					
Heathland					
Shrub					
Woodland (coniferous)					
Woodland (deciduous)					
<u> </u>					

Carbon sequestration - permanent habitat loss

Carbon sequestration - permanent habitatioss				
Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Carbon sequestration - area planned for habitat creation

Broad habitat	Cumulative area (ha)	Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land				
Grassland				
Heathland				
Shrub				
Woodland (coniferous)				
Woodland (deciduous)				

Water Purification Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water purification services Qualitative assessment

Recreation

Welfare Value (per year)	Estimated visits (per year)

Agricultural

Permanent Loss Estimated agriculture value (£2019)	Temporary Loss Estimated agriculture value (£2019)	

Air QualityArea not within Air Quality Management Area

Natural hazard regulation

Temporary habitat lost during construction (Area within Zol) (ha)			
	Value of natural hazard		
Broad habitat type	regulation lost (£2019)		
Woodland	_		
Semi-natural grasslands			
Freshwater			

Permanent habitat loss (ha)

· omianom napitat 1966 (na)	
	Value of natural hazard
Broad habitat type	regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

	Value of natural hazard regulation gained (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

WRP 75	İ				
WIT 13					_
	Element ref Element ID				
	Element Name				
	Description				
Stocks and BNG	Zone of interest area (ha)				1
		Temporary habitat lost during construction			Area planned for habitat improvement
Broad habitat		(Area within Zol) (ha)	Permanent habitat loss (ha)	Area planned for habitat creation (ha)	(ha)
Arable land	Crops, carbon sequestration, air quality management				
Freshwater	regulation Carbon sequestration, air quality				
Grassland	management, recreation				
Heathland	Livestock, carbon sequestration, recreation				
Marine	Fisheries, recreation, water desalination				
Shrub	ucsamation				
Sparsely vegetated land Urban	No environmental benefits				
	Timber, carbon sequestration, air				
Woodland (coniferous)	quality management, recreation Timber, carbon sequestration, air				
Woodland (deciduous)	quality management, recreation				
Carbon sequestration - temporary habitat loss during construction					
Broad habitat	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land Grassland					
Heathland					
Shrub Woodland (coniferous)					
Woodland (deciduous)					
Carbon sequestration - permanent habitat loss Broad habitat	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Arable land	(11.)				
Grassland Heathland					
Shrub					
Woodland (coniferous)					
Woodland (deciduous)					
Carbon sequestration - area planned for habitat creation	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous)	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous)	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous)	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous)			Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous)	Assessment		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous)	Assessment Water purification services are		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous)	Assessment Water purification services are currently provided by grassland and woodland habitats. The		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby,		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous)	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water purification services.		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water purification services.		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year)	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water purification services.		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year)	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water purification services. Estimated visits (per year)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Broad habitat Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Water Purification Qualitative assessment Recreation Welfare Value (per year)	Assessment Water purification services are currently provided by grassland and woodland habitats. The Langstone Harbour is nearby, and a water recycling plant will be constructed. Therefore, the change in land cover has a potential to decline water purification services. Estimated visits (per year)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)

Air Quality

Broad habitat type Woodland Semi-natural grasslands Freshwater

Permanent habitat loss (ha)

Area planned for habitat creation (ha)

Broad habitat type Woodland Semi-natural grasslands Freshwater

Broad habitat type Woodland Semi-natural grasslands Freshwater

Area not within Air Quality Management Area

Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha)

Value of natural hazard regulation lost (£2019)

Value of natural hazard regulation lost (£2019)

Value of natural hazard regulation gained (£2019)

Overflow and drawdown to overland Element ID **Element Name** Overflow and drawdown to overland Description Zone of interest area (ha) Stocks and BNG Temporary habitat lost during construction Area planned for habitat improvement Broad habitat (Area within Zol) (ha) Permanent habitat loss (ha) Area planned for habitat creation (ha) Arable land quality management regulation
Carbon sequestration, air quality management, recreation
Livestock, carbon sequestration, Grassland Heathland recreation isheries, recreation, water Marine desalination No environmental benefits Urban Timber, carbon sequestration, air Woodland (coniferous) quality management, recreation Timber, carbon sequestration, air Woodland (deciduous) quality management, recreation Carbon sequestration - temporary habitat loss during construction Low non-traded carbon (£2019) Medium non-traded carbon (£2019) Arable land Grassland Heathland Shrub Woodland (coniferous) Woodland (deciduous) Carbon sequestration - permanent habitat loss Low non-traded carbon (£2019) Arable land Grassland Heathland Woodland (coniferous) Woodland (deciduous) Carbon sequestration - area planned for habitat creation Low non-traded carbon (£2019) Medium non-traded carbon (£2019) High non-traded carbon (£2019) Broad habita Arable land Grassland Heathland Woodland (coniferous) Woodland (deciduous)

Water Purification	
	Assessment
Qualitative assessment	Water purification services are currently provided by arable, pasture, and grassland habitats. River Itchen flows nearby and the WFD waterbody is achieving a Moderate status. During an emergency when drawdown of the lake is required, water will be discharged to the overflow land area. Therefore, this will temporarily improve water purification with the increased flow during an emergency. However, this impact will be negligible.

Recreation

Welfare Value (per year) Estimated visits (per year)

Agricultural

Temporary Loss Estimated agriculture value (£2019) Permanent Loss Estimated agriculture value (£2019)

Air Quality

Area not within Air Quality Management Area

Natural hazard regulation

Temporary habitat lost during construction (Area within Zol) (ha)

Value of natural hazard
regulation lost (£2019)

Permanent habitat loss (ha)

	Value of natural hazard
Broad habitat type	regulation lost (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

	Value of natural hazard
Broad habitat type	regulation gained (£2019)
Woodland	
Semi-natural grasslands	
Freshwater	

Overflow and drawdown to the River Itchen Tributary					
	Element ref				1
	Element ID		to the Diver Italian Tributary		
	Description		to the River Itchen Tributary		
Stocks and BNG	Zone of interest area (ha)				
Olocka and Divo					
		Temporary habitat los during construction			Area planned for habitat improvement
Broad habitat	Ecosystem services	(Area within Zol) (ha)	Permanent habitat loss (ha)	Area planned for habitat creation (ha)	(ha)
Arable land	Crops, carbon sequestration, air quality management				
Freshwater	Water abstraction, recreation, flood regulation Carbon sequestration, air quality management,				
Grassland Heathland	recreation Livestock, carbon sequestration, recreation				
Marine Shrub	Fisheries, recreation, water desalination				
Urban	No environmental benefits				
Woodland (coniferous)	Timber, carbon sequestration, air quality management, recreation				
Woodland (deciduous)	Timber, carbon sequestration, air quality management, recreation				
Carbon sequestration - temporary habitat loss during construc	tion				
Broad habitat Arable land	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Grassland					
Heathland Shrub					
Woodland (coniferous) Woodland (deciduous)					
Woodiana (doordaodo)					
Carbon sequestration - permanent habitat loss			(00040)	M - 1	11: 1 (00010)
Broad habitat Arable land	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Grassland Heathland					
Shrub					
Woodland (coniferous)					
Woodland (deciduous)					
Carbon sequestration - area planned for habitat creation					
Broad habitat Arable land	Cumulative area (ha)		Low non-traded carbon (£2019)	Medium non-traded carbon (£2019)	High non-traded carbon (£2019)
Grassland					
Heathland Shrub					
Woodland (coniferous)					
Woodland (deciduous)					
	<u>'</u>				
Water Purification					
	Assessment				
	Water purification services are currently				
	provided by arable, pasture, and grassland habitats. River Itchen flows nearby and the				
	WFD waterbody is achieving a Moderate status. During an emergency when				
Qualitative assessment	drawdown of the lake is required, water will				
	be discharged to River Itchen. Therefore, this will temporarily improve water				
	purification with the increased flow during an emergency.				
D					
Recreation Welfare Value (per year)	Estimated visits (per year)	Ī			
vveilale value (pei year)	Latinated visits (per year)				
		-			
Agricultural					
Permanent Loss Estimated agriculture value (£2019)	Temporary Loss Estimated agriculture value (£2019)				
	value (22010)				
Air Quality Area not within Air Quality Management Area					
Natural hazard regulation Temporary habitat lost during construction (Area within Zol) (ha)					
Broad habitat type	Value of natural hazard regulation lost (£2019)				
Woodland					
Semi-natural grasslands Freshwater					
Permanent habitat loss (ha)		_			
	Value of natural hazard regulation lost				
Broad habitat type Woodland	(£2019)				
Semi-natural grasslands					
Freshwater		-			
Area planned for habitat creation (ha)	Value of natural hazard regulation	1			
Broad habitat type	gained (£2019)				

Woodland

Semi-natural grasslands Freshwater