

Harestock Wastewater System - Outline Options Appraisal												
Generic Option	Location of Risk	Planning Objective and Description of Risk	Option Reference	Description	Further Description	Unconstrained Option?	Constrained Option?	Feasible Option?	Net Benefits	Estimated Cost	Preferred Option	Best value / Least cost or Reasons for Rejection
Control/ Reduce surface water entering the sewers												
Control / Reduce groundwater infiltration												
Improve quality of wastewater entering sewers (inc reducing FOG, RAG, pre-treatment, trade waste)	HARESTOCK WTW	PO8 (2050)- Dry Weather Flow	HARE.SC03.1	Water Efficient Appliance / Measures	Southern Water aims to reduce water consumption to 100 l/h/d by 2040.	No						Deliver the required outcome
Improve quality of wastewater entering sewers (inc reducing FOG, RAG, pre-treatment, trade waste)	Catchment Wide	PO2- Pollution Risk	HARE.SC03.2	Customer Education Programme	Customer education programme.	Yes	Yes	Yes	Minor Positive +	£115K	Yes	Best Value
Control / Reduce the quantity / flow of wastewater entering sewer system												
Network Improvements (eg increase capacity, storage, conveyance)	Catchment Wide	PO8 (2050)- Dry Weather Flow	HARE.PW01.1	Pipe Rehabilitation Programme	Relining/improving structural grades of sewers across the catchment.	No						Risk and uncertainty - future resilience
Network Improvements (eg increase capacity, storage, conveyance)	Easton- Outer Zone TCZ Chilbolton- TCZ Otterbourne- TCZ	PO12- Ground Water Pollution	HARE.PW01.2	Pipe Rehabilitation Programme	Total length of sewer within protection zones- 36.	Yes	Yes	Yes	Minor Positive +	£5,285K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	Catchment Wide	PO2- Pollution Risk	HARE.PW01.3	Jetting Programme	Jetting Programme.	Yes	Yes	Yes	Minor Positive +	£10K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	Avington Park	PO8 - Nutrient Neutrality	HARE.PW01.4	First time sewerage	Avington Park to be connected to network – helping nutrient neutrality.	No						Deliver the required outcome
Improve treatment (capacity and quality at existing works or develop new WTWs)	HARESTOCK WTW	PO2- Pollution Risk	HARE.PW02.1	Maintenance Programme WTW	Improve resilience: An efficient maintenance programme for the treatment works to elimatate the risk of a pollution incident due to an operational failure.	Yes	Yes	Yes	Minor Positive +	£6,970K	Yes	Best Value
Improve treatment (capacity and quality at existing works or develop new WTWs)	HARESTOCK WTW	PO8 (2050)- Dry Weather Flow	HARE.PW02.2	Permit Review	Proposed permit-6851m3.	Yes	Yes	Yes	Minor Positive +	£1,505K	Yes	Best Value
Wastewater Transfer												
Mitigate impacts on Air Quality (e.g. Carbon neutrality, noise, odour)												Not included in the first round of DWMPs
Improve Land and Soils												Not included in the first round of DWMPs
Mitigate impacts on Water Quality												
Reduce consequences Properties (e.g. Property Flood Resilience)												
Study/ investigation to gather more data	Catchment Wide	PO2- Pollution Risk	HARE.OT01.1	Pollution Investigation	Further investigation to identify the cause of the pollution incident.	Yes	Yes	Yes	Minor Positive +	£230K	Yes	Best Value
Study/ investigation to gather more data	Catchment Wide	PO8 (2050)- Dry Weather Flow	HARE.OT01.2	Infiltration Reduction Plan	Relining/improving structural grades of sewers across the catchment.	No						Risk and uncertainty - future resilience
Study/ investigation to gather more data	River Itchen Solent Maritime Solent & Southampton Water Solent and Dorset Coast	PO11 - Nutrient Neutrality	HARE.OT01.3	Nutrient Budget	Catchment is Hydraulically linked to; River Itchen (Threat/Remedy Identified or Anticipated) Solent Maritime (Threat/Remedy Identified or Anticipated) Solent & Southampton Water (NO Threat/Remedy Identified or Anticipated) Solent and Dorset Coast (Threat/Remedy Identified or Anticipated).	Yes	Yes	Yes	Minor Positive +	£75K	Yes	Best Value
Study/ investigation to gather more data	Easton- Outer Zone TCZ Chilbolton- TCZ Otterbourne- TCZ	PO12- Ground Water Pollution	HARE.OT01.4	Study and Investigations	Total length of sewer within protection zones- 35.	No						Deliver the required outcome
Study/ investigation to gather more data	Catchment Wide	PO4- 1 in 50 year	HARE.OT01.5	Improve Hydraulic Model	Improve Hydraulic Model.	Yes	Yes	Yes	Minor Positive +	£325K	Yes	Best Value