Kings Sombourne 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
Control/ Reduce surface water entering the sewers	New community developments	PO4 & PO7 Hydraulic Overload	KISO.SC01.1	SuDS	Study / Investigation:identify suitable location/s for separate foul and surface water systems within new community developments in the Kings Somborne catchment (update hydraulic model) Building SuDS within new catchment community development, to take away some of the flow.	Yes	Yes	Yes	Moderate Positive ++	£TBC - With Partners
Control / Reduce groundwater infiltration										
Improve quality of wastewater entering sewers (inc reducing FOG, RAG, pre-treatment, trade waste)										
Control / Reduce the quantity / flow of wastewater entering sewer system										
Network Improvements (eg increase capacity, storage, conveyance)	Catchment Wide	PO4 & PO7 Hydraulic Issues	KISO.PW01.1	Pipe Rehabilitation Programme	Study / Investigation: Identify suitable location/s to for sewer relining to prevent groundwater infiltration in the Kings Somborne catchment (update hydraulic model) Relining/improving structural grades of sewers across the catchment.	Yes	Yes	Yes	Minor Positive +	£TBC - With Partners
Improve treatment (capacity and quality at existing works or develop new WTWs)										
Wastewater Transfer										
Mitigate impacts on Air Quality (e.g. Carbon neutrality, noise, odour)										
Improve Land and Soils										
Mitigate impacts on Water Quality										
Reduce consequences Properties (e.g. Property Flood Resilience)										
Study/ investigation to gather more data	Solent Maritime Solent & Southampton Water Solent and Dorset Coast	PO11 - Nutrient Neutrality	KISO.OT01.1	Nutrient Budget	Study / Investigation: Develop a nutrient budget and investigate the risks and sources impacting these named Habitat sites Catchment is Hydraulically linked to; 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	Major Positive +++	£75K
Study/ investigation to gather more data	Catchment Wide	PO4, PO5, PO7 & PO10	KISO.OT01.2	Improve Hydraulic Model	Study / Investigation: Build and verify the Kings Somborne Hydraulic Model to improve model confidence.	Yes	Yes	Yes	Minor Positive +	£300K