

Morestead Road Winchester 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	Lower Catchment - grounds by River Itchen (Winchester College?)	PO1, PO2 - Customer PO4, PO7 - Hydraulic	MORE.SC01.2	Natural Flood Management	Study / Investigation: Identify suitable locations in the lower catchment for NFM's (update hydraulic model) NFM in lower part of catchment, on grounds by river.	Yes	Yes	Yes	Moderate Positive ++	£TBC - With Partners	No	Best Value
Control/ Reduce surface water entering the sewers	Catchment Wide/ North/North west/ South West (as detailed in Option Description)	PO1, PO2 - Customer PO4, PO7 - Hydraulic	MORE.SC01.3	Rain Water Harvesting	Study / Investigation: Identify suitable location/s in the Morestead Road Winchester Catchment for installation of green roofs on larger property (update hydraulic model).	Yes	Yes	Yes	Moderate Positive ++	£TBC - With Partners	No	Best Value
Control / Reduce groundwater infiltration												
Improve quality of wastewater entering sewers (inc reducing FOG, RAG, pre-treatment, trade waste)	St. Cross Road, Victoria Road, High Street, Great Minster Street, Eastgate Street	PO1- Internal Flooding	MORE.SC03.1	Customer Education Programme	Enhanced Customer Education Programme to prevent blockages Linking with the 'FOG' Team.	Yes	Yes	Yes	Minor Positive +	£115K	Yes	Best Value
Improve quality of wastewater entering sewers (inc reducing FOG, RAG, pre-treatment, trade waste)	River Park Leisure Centre, Gordon Road Catchment Wide	PO2- Pollution Risk	MORE.SC03.2	Customer Education Programme	Customer education programme River Park Leisure Centre, Gordon Road to reduce the risk from blockages.	No						Deliver the required outcome
Improve quality of wastewater entering sewers (inc reducing FOG, RAG, pre-treatment, trade waste)	South West of catchment - Badger Farm - Road leading down hill towards city centre	PO1, PO2 - Customer PO4, PO7 - Hydraulic	MORE.SC03.4	SuDS	Study / Investigation: Identify suitable locations for new road layouts to divert flow from the south west of the catchment away from the city centre (update hydraulic model).	Yes	Yes	Yes	Moderate Positive ++	£TBC - With Partners	No	Best Value
Control / Reduce the quantity / flow of wastewater entering sewer system	MORESTEAD ROAD WINCHESTER WTW	PO8 (2050)- Dry Weather Flow	MORE.SC04.1	Water Efficient Appliance / Measures	Southern Water aims to reduce water consumption to 100 l/h/d by 2040.	No						Deliver the required outcome
Network Improvements (eg increase capacity, storage, conveyance)	GARNIER ROAD WINCHESTER WPS	PO1- Internal Flooding	MORE.PW01.1	Maintenance Programme	An efficient maintenance programme for pumping stations and/Treatment works to eliminate the risk of a pollution incident due to an operational failure.	No						Deliver the required outcome and Do customer support it
Network Improvements (eg increase capacity, storage, conveyance)	Garnier Road Winchester Wps,	PO2- Pollution Risk	MORE.PW01.2	Maintenance Programme WPS	Improve resilience: Review operation and maintenance of Garnier Road Winchester WPS pumping station to improve resilience Linking with the 'Pollution Reduction Programme'.	Yes	Yes	Yes	Minor Positive +	£235K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	Hotspot 1 - St. Cross Hotspot 2 - City Centre	PO1- Internal Flooding	MORE.PW01.3	Jetting Programme	Enhanced Maintenance: Review and enhance jetting programme of the pipe network in this location to maximise the capacity of the network for rainfall.	Yes	Yes	Yes	Minor Positive +	£105K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	Hotspot 2 - City Centre Hotspot 3 - River Park Leisure	PO2- Pollution Risk	MORE.PW01.4	Jetting Programme	Improved Jetting Programme to clear blockages at L4 locations indicated in B1.	No						Do customer support it
Network Improvements (eg increase capacity, storage, conveyance)	MORE FC03, Middle Brook Street	PO4 and PO7 - Growth	MORE.PW01.5	Sewer upsize and reduce storm sewer size	DAP Option.	Yes	Yes	Yes	Major Positive +++	£TBC - With Partners	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	MORE FC04, The Broadway & Colebrook Street	PO4 and PO7 - Growth	MORE.PW01.6	Sewer upsize and reduce storm sewer size	DAP Option.	Yes	Yes	Yes	Major Positive +++	£TBC - With Partners	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	MORE FC05, Romsey Road	PO4 and PO7 - Growth	MORE.PW01.7	Sewer upsize and reduce storm sewer size	DAP Option.	Yes	Yes	Yes	Major Positive +++	£TBC - With Partners	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	MORE FC06, Airlie Road	PO4 and PO7 - Growth	MORE.PW01.8	Sewer upsize and reduce storm sewer size	DAP Option.	Yes	Yes	Yes	Major Positive +++	£TBC - With Partners	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	MORE FC07, Garnier Road WPS	PO4 and PO7 - Growth	MORE.PW01.9	New weir, new storm sewer, storage and pump return	DAP Option.	Yes	Yes	Yes	Major Positive +++	£1,155K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	MORE FC08, Upstream trunk sewer at Garnier Road WPS	PO4 and PO7 - Growth	MORE.PW01.10	Sewer upsize and reduce foul sewer size	DAP Option.	Yes	Yes	Yes	Major Positive +++	£230K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	MORE FC09, Pitt Manor, Romsey Road along Badger Farm Road to Garnier Road WPS	PO4 and PO7 - Growth	MORE.PW01.11	New PS at Pitt Manor and Bushfield Camp with new rising main, new foul sewer	DAP Option.	Yes	Yes	Yes	Major Positive +++	£975K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	MORE FC09, Morestead Road Winchester WTW	PO4 and PO7 - Growth	MORE.PW01.12	Storage of 1763m3	DAP Option.	Yes	Yes	Yes	Major Positive +++	£1,725K	Yes	Best Value
Improve treatment (capacity and quality at existing works or develop new WTWs)	MORESTEAD ROAD WINCHESTER WTW	PO8 (2050)- Dry Weather Flow	MORE.PW02.1	Permit Review	Increase capacity of the wastewater treatment Works (WTW).	Yes	Yes	Yes	Minor Positive +	£1,730K	Yes	Best Value
Wastewater Transfer	MORESTEAD ROAD WINCHESTER WTW	PO8 (2050)- Dry Weather Flow 884m3/day to achieve below 80% permit	MORE.PW03.1	Construct New WPS & Rising Main	Within 15km radius of MORE is POOD which in 2050 will have approximately 2690m3/day of headroom (until it is above 80% of its DWF permit).	Yes	No					Feasibility and Risk
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	High Street	PO1- Internal Flooding	MORE.OT01.1	Investigation into causes	Further investigation to identify the cause of the internal flooding incident.	No						Deliver the required outcome
Study/ investigation to gather more data	Catchment Wide	PO8 (2050)- Dry Weather Flow	MORE.OT01.2	Infiltration Reduction Plan	Relining/improving structural grades of sewers across the catchment.	No						Cost Effective

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Study/ investigation to gather more data	Solent Maritime Solent & Southampton Water Solent and Dorset Coast	PO11 - Nutrient Neutrality	MORE.OT01.3	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	Minor Positive +	£75K	Yes	Best Value
Study/ investigation to gather more data	Catchment Wide	PO4- 1 in 50 year PO7- Hydraulic Overload	MORE.OT01.4	Improve Hydraulic Model	Study / Investigation: Update and re-verify the Morestead Road Winchester Hydraulic Model to improve model confidence.	Yes	Yes	Yes	Minor Positive +	£200K	Yes	Best Value
Study/ investigation to gather more data	Catchment Wide	PO4, PO7 - Hydraulic	MORE.OT01.5	Study and Investigation - Illegal connections	Study / Investigation: Identify locations of misconnections, reducing the unknown sources of flow into the catchments sewer systems.	Yes	Yes	Yes	Minor Positive +	£230K	Yes	Best Value