

Appendix 9-F Summary of Potential Impacts and Their Significance

9-F.1 Potential Impacts and their Significance

9-F.1.1 Table 9-F.1 assesses the potential impacts of the Scheme and their significance. Please refer to Volume 1 of the Environmental Statement for details of the study area and environmental baseline. Please note that impacts to fish and fisheries are considered in Chapter 12: Nature Conservation and Biodiversity.

Table 9-F.1 Potential Impacts and Their Significance

Phase	Summary of potential impacts	Feature	Attributes/ Services	Quality	Scale	Rarity	Substitutability	Importance	Magnitude (with mitigation)	Significance (with mitigation)
-	-	Water Supply	Minor Aquifer	Not known. Rural area could contain ammonia at elevated levels. Groundwater down gradient of landfills and waste transfer stations may be polluted to some degree. Vulnerability varies from High (undefined) to intermediate	No abstractions within 1.5 km of the scheme route	Moderately scarce	Surface run-off will be treated and returned to either groundwater or surface water	Medium	Negligible	Insignificant
-	-	Transport and dilution of waste products	To streams or flood plains	Water will be pre-treated using petrol interceptors in reach A and petrol interceptors and reed beds in reaches B to E	NA					
-	-	Value to Economy	NA Houses on mains, no groundwater abstractions in site vicinity.							
-	-	Biodiversity	Groundwater is close to surface in low lying areas and supports boggy ground in Combe Haven SSSI, Filsham	Sufficient to support SSSIs	High	Scarce	None	Very High	Negligible	Low Significance

Phase	Summary of potential impacts	Feature	Attributes/ Services	Quality	Scale	Rarity	Substitutability	Importance	Magnitude (with mitigation)	Significance (with mitigation)
			Reedbed Nature Reserve and Decoy Pond Wood SSSI							
-	-	Conveyance of flood flows	Flow routes	Groundwater fed pond links with surface water in times of flood	Local	Scarce	Not relevant	Low	Negligible	Insignificant
-	-		Groundwater levels	Often at ground level in low lying area	Local	Moderate	Not relevant	High	Negligible	Insignificant
Construction	Risk of spillage of hazardous chemicals and fuel (stored and/or used on site, or derived from plant and machinery) and discharge of silt rich runoff	All rivers, streams, and drainage ditches	Water Quality	RE2 to RE4 Chemical GQA Grade B (good) to Grade D (fair). Biological GQA Grade A (very good) to B (good) EC Designated Cyprinid Fishery, although some migratory fish types including sea trout and eels have also been observed in Combe Haven.	Local	Rare on a local scale	Not relevant	High	Negligible – appropriate mitigation will be put in place	Neutral
	Mobilisation of sediments resulting in elevated suspended sediments in water bodies	All rivers, streams, and drainage ditches	Water Quality	As above	Local	Rare on a local scale	Not relevant	High	Negligible – appropriate mitigation will be put in place	Neutral
	Morphological alteration and water quality impacts to Decoy Pond	Decoy Pond	Water quality and habitat	No information was available	Local	Rare on a local scale	Not relevant	Low	Negative – despite best practice mitigation the pond will be morphologically changed and temporary impacts to water quality may occur during the works	Low significance

Phase	Summary of potential impacts	Feature	Attributes/ Services	Quality	Scale	Rarity	Substitutability	Importance	Magnitude (with mitigation)	Significance (with mitigation)
Operation	Contamination from routine runoff	All rivers, streams, and drainage ditches	Water Quality	As above	Local	Rare on a local scale	Not relevant	High	Negligible – appropriate mitigation will be put in place	Neutral
	The risk of spillage	All rivers, streams, and drainage ditches	Water Quality	As above	Local	Rare on a local scale	Not relevant	High	Negligible – appropriate mitigation will be put in place	Neutral
	Impacts from regular maintenance activities (de-icant and herbicide use)	All rivers, streams, and drainage ditches	Water Quality	As above	Local	Rare on a local scale	Not relevant	High	Negligible – appropriate mitigation will be put in place	Neutral

9-F.1.2 The overall Assessment score is 'Neutral' with respect to surface water is slight adverse as a result of partial loss of Decoy Pond.

9-F.1.3 The overall Assessment score is 'Neutral' with respect to groundwater since the significance of the features are all insignificant.