Burnby Lane - scenarios

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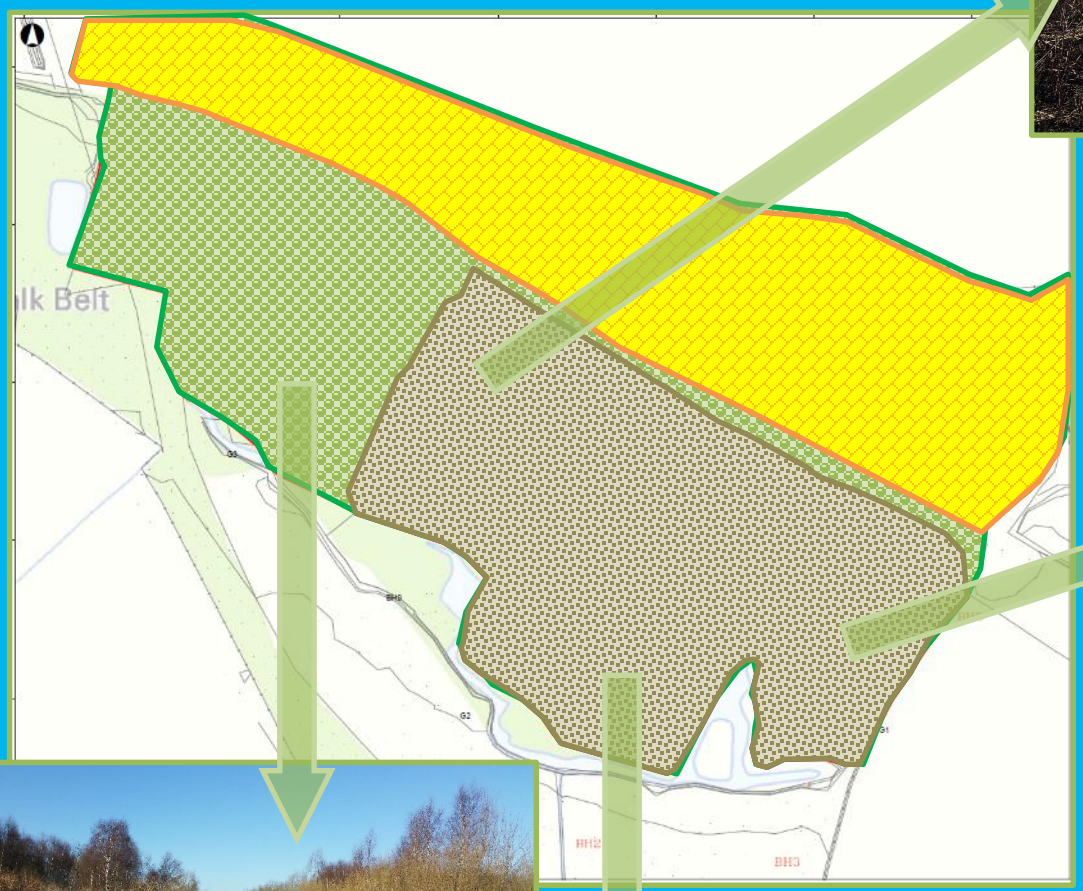
Option 1: Aquacritox + waste disposal



Option 3: Solar PV

ption 4: Biodiversity

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Burnby Lane - valuation

Ecosystem Service	Impact Type	Indicator	How to measure and source
Air quality	Pathway – removal of atmospheric pollutants	Area of different habitats with the capacity to remove pollutants	Phase 1 habitat survey (Arup) Published research on sequestration rates by habitat
Global climate regulation	Driver – energy use and transport (also including avoided energy use)	Energy or fuel use, converted to GHG emissions	Yorkshire Water's knowledge of site operations and published research.
	Driver – land disturbance	Area of soil disturbed annually during operation	Yorkshire Water's knowledge of site operations and published research.
	Pathway – carbon sequestration	Area of different habitats with the capacity to remove CO_2 from the atmosphere	Phase 1 habitat survey Natural England (2012) carbon storage by habitat
Regulation of water timing/flows	Pathway – flood plain	Area covered by flood plain and Number of nearby (existing and future) homes/businesses	Environment Agency flood map, OS mapping (locations, topo) and Streetmap
Pollination	Pathway – supporting pollinators	Area covered by the mosaic of habitats supporting refuge and foraging opportunities.	Phase 1 habitat survey (Arup)
Extractive resources (Al_2O_3)	Driver – avoided raw material consumption	Tonnes of material recovered	Yorkshire Water and Arup estimates of metal recovery
Recreation	Pathway – recreation space	Land dedicated to recreation (existing and planned)	Assumptions relating to number of visitors
Educational and inspirational values	Pathway	Number of visitors on educational events	Assumptions relating to number of visitors on educational visits

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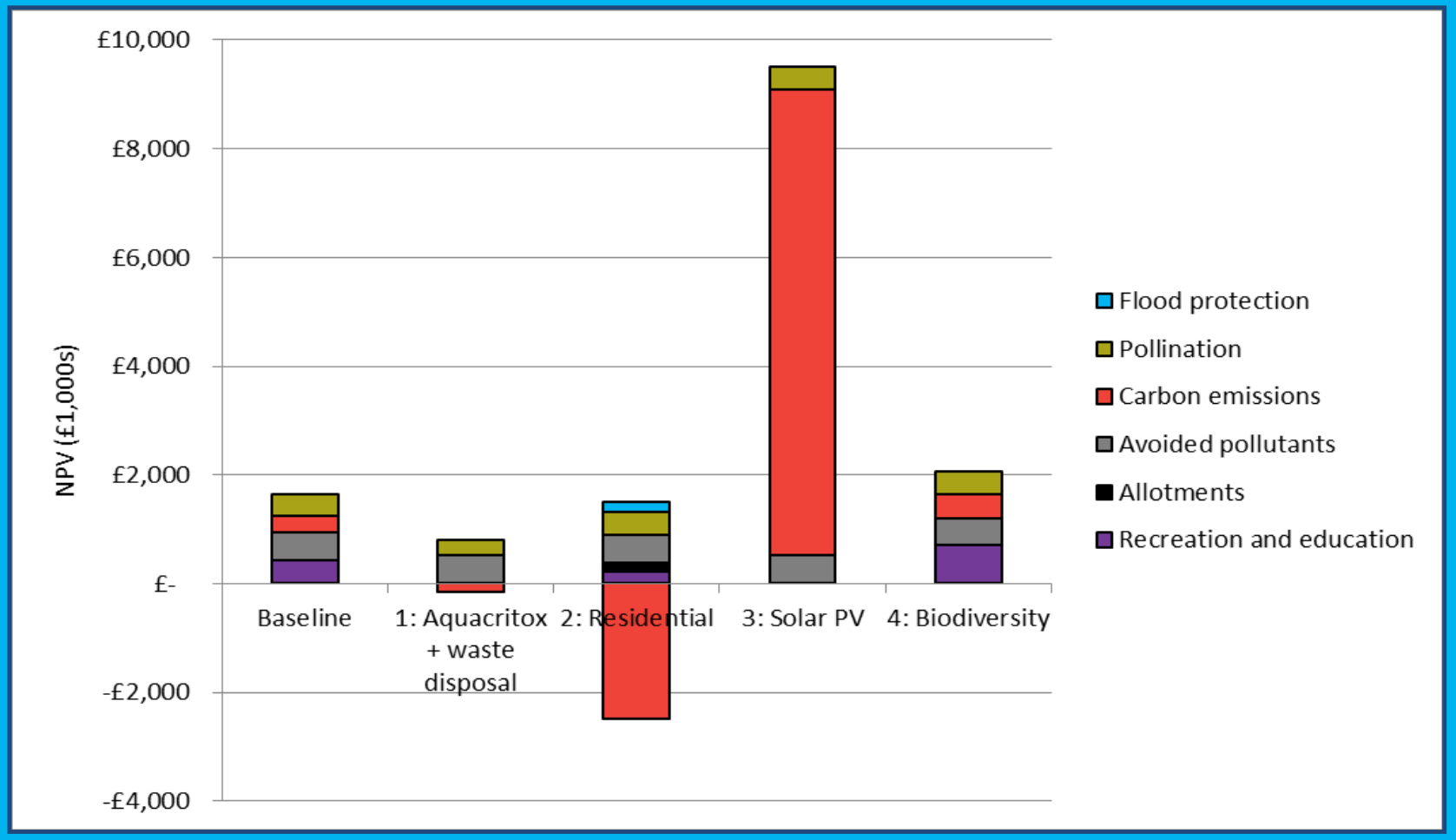
Burnby Lane - results



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