

# BA06: Swale Mainland

## What is in the Benefit Area

Benefit Area 6 covers the Swale mainland from the east of Milton Creek, across the Conyer and Oare Creeks to the Sportsman Pub in Seasalter. The area is mainly a rural and agricultural area, with localised residential areas at Conyer and Uplees. The main risk in the area is from coastal flooding. The defences in the Benefit Area mainly consist of embankments and walls. The current minimum SoP of the defences is for a 50% AEP event, and the defences have an average residual life of 20 years. The main risk in the area is from coastal flooding.

## What is at risk?

- Residential and Commercial properties
- Roads – Deerton Street, Conyer Road, Seasalter Road
- Railway between Faversham and Whitstable
- Conyer Marina
- MoD land
- Natural England Coastal Path (Saxon Shore Way)
- Agricultural land

## Other Considerations

- The Swale SPA and SSSI (seaward and landward)
- Oare Marshes LNR (landward)
- Little Murston Nature Reserve
- South Bank of The Swale LNR (seaward and landward)

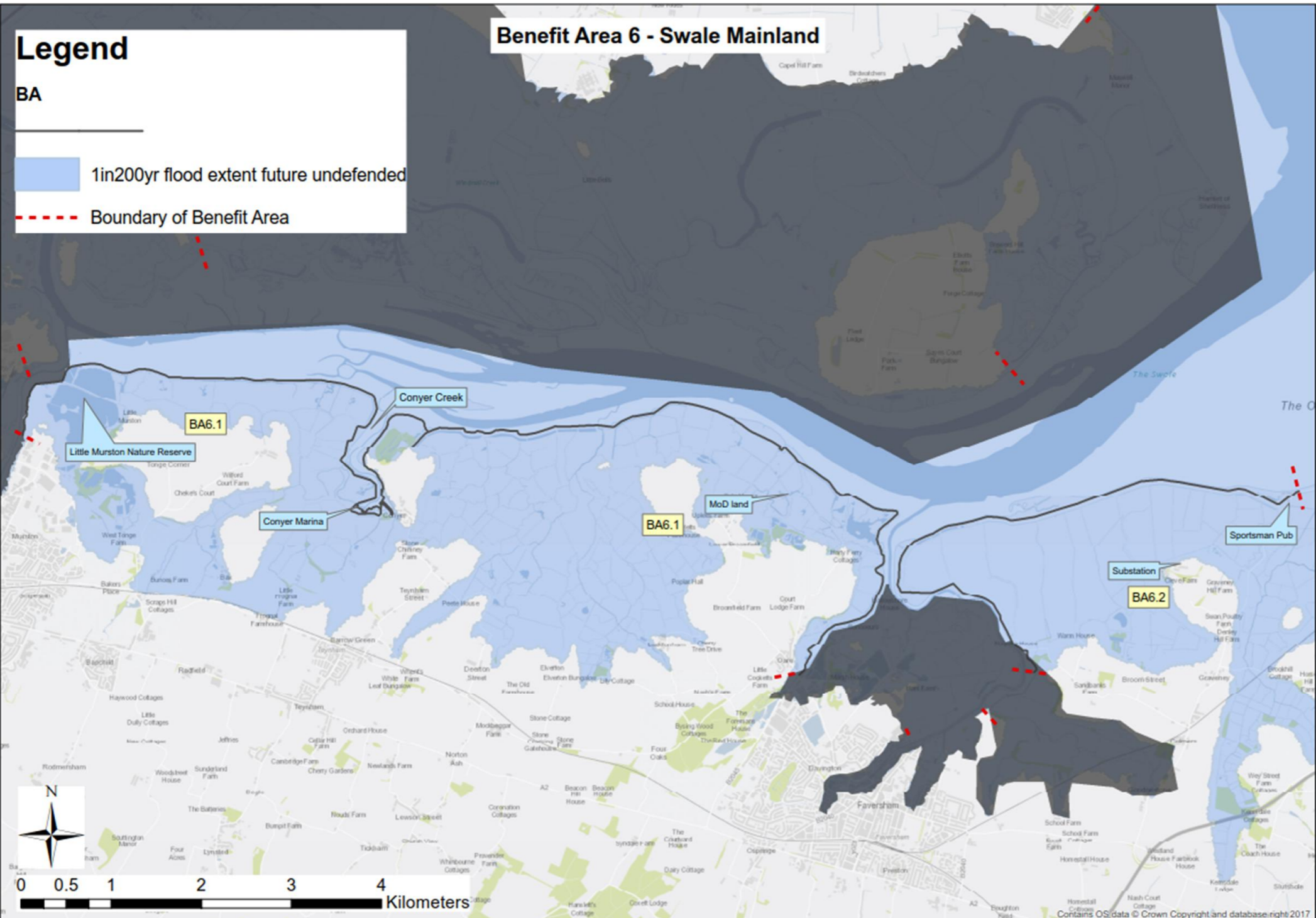


Figure 1: Oare Creek

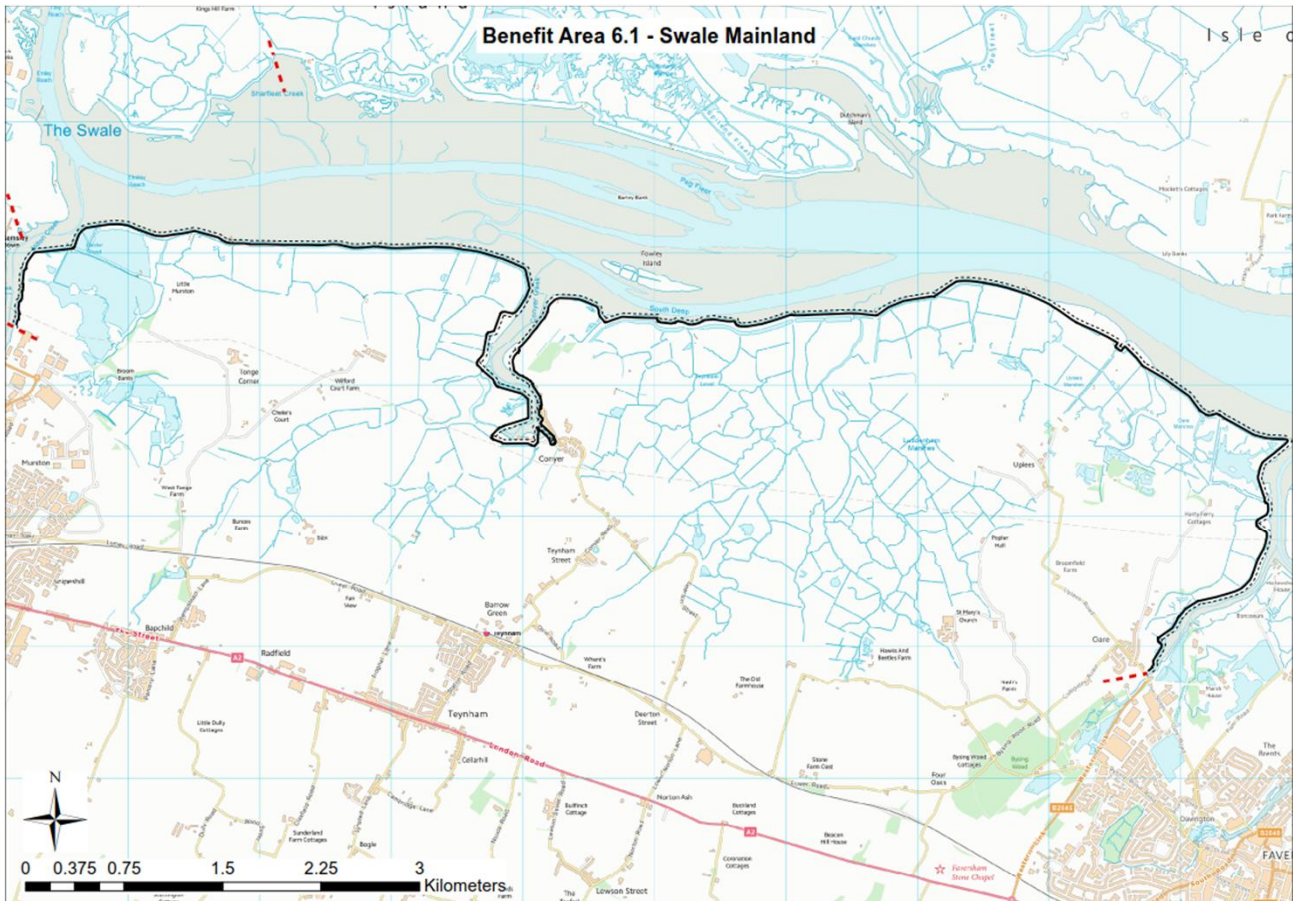


Figure 2: The Swale Estuary at Uplees



# BA6.1: Swale Mainland

Now – 2038	2038-2068	2068-2118
HTL Maintain	HTL Maintain	HTL Maintain but defences raised with SLR to ensure the same SOP provided



Option	Defences Maintained	Defences Maintained for first epoch	Habitat Adaptation	Setback Embankments	Boundary of Benefit Area
Breach					
Defences Raised	Defences Maintained and Raised in year 50	Defences not Maintained	No Active Intervention	Managed Realignment Site	

## Preferred Option

Maintain embankments and upgrade SoP with sea level rise in year 50. Maintenance (with capital works) of the current defences, and raise in year 50, to maintain a minimum SoP of 0.5%AEP protection with sea level rise (which is the current SoP offered).

## Justification

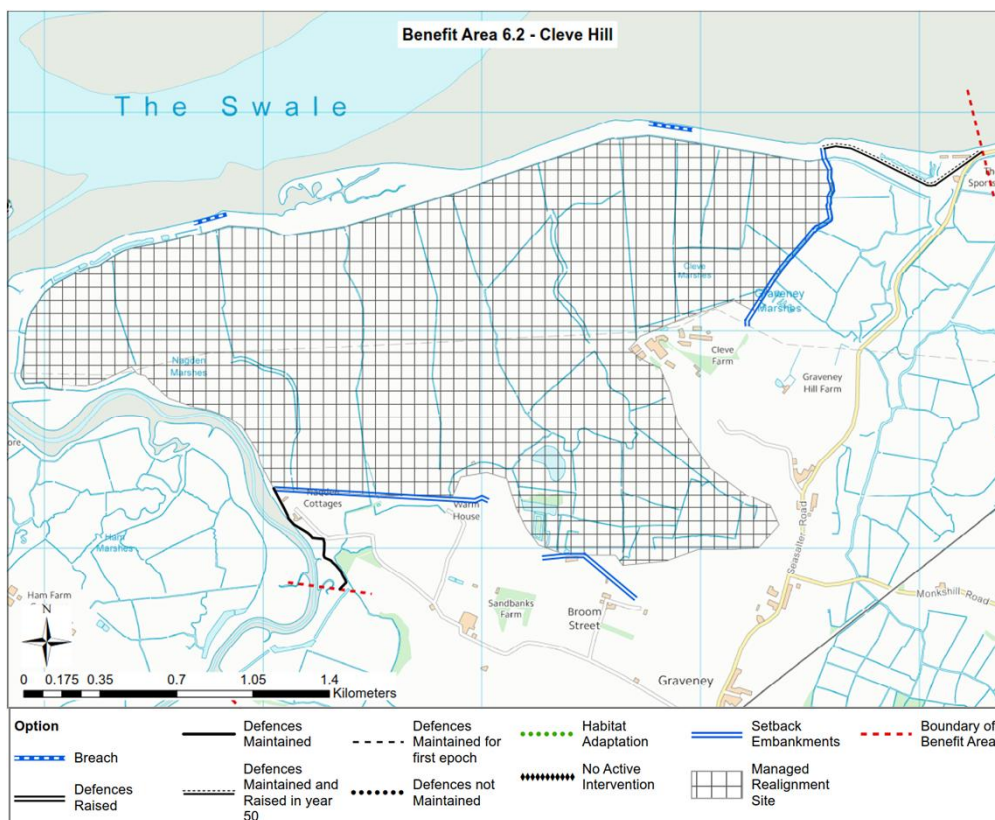
The option has a BCR below one, however is required as part of the legal obligations to cause no net loss of the designated freshwater habitat. The current defences have a 25-year residual life. Following this, the cost to compensate the large area of freshwater habitat is much greater than the cost to maintain the defences with sea level rise. Therefore, it is more cost-effective to maintain the defences and raise with sea level rise. The defences are required to be raised with sea level rise as otherwise the frequency of inundation to the freshwater habitat would increase with sea level rise and compensation for this would be required in year 50.

## Preferred Option Costs

Costs	Benefits	BCR	PF Score
£14,283k	£4,355k	0.3	2%

## BA6.2: Cleve Hill

Now – 2038	2038-2068	2068-2118
HTL Maintain	HTL Maintain and MR	HTL Maintain and MR



### Preferred Option

Ongoing maintenance until year 20. Then construct new setback embankments at Cleve Hill managed realignment site. Maintain embankments and walls either side and at the Sportsman Pub raise in year 50 with sea level rise. Maintenance (patch and repair) of the current defences (embankments) until year 20. After this the Cleve Hill MR site will be developed to mitigate against the strategy wide impacts of coastal squeeze in the second epoch. The defences either side of the MR site will be maintained (capital), apart from the section of defences fronting the freshwater SPA habitat at the Sportsman Pub, where the defences will be raised in year 50 to continue to provide the same SoP with sea level rise (50%AEP) to the freshwater designated habitat. There are potential risks associated with the interaction with the electricity pylons and overhead lines for the MR site and this will need careful consideration during the design stage.

### Justification

MR site at Cleve Hill is required to help compensate for coastal squeeze across the Strategy in the second epoch. The cost of the MR site reduces the overall BCR below one, but is generally justified from the wider Strategy assessment. This option has a high partnership funding score due to the creation of intertidal habitat. The defences will be raised in line with sea level rise near the Sportsman Pub as the cost to compensate the freshwater habitat is much greater than the cost to maintain the defences with sea level rise.

### Preferred Option Costs

Costs	Benefits	BCR	PF Score
£12,250k	£3,390k	0.3	174%