



# SMP policy review - Slaughden

Phase 3

Suffolk Coastal Forum – 13 June 2019

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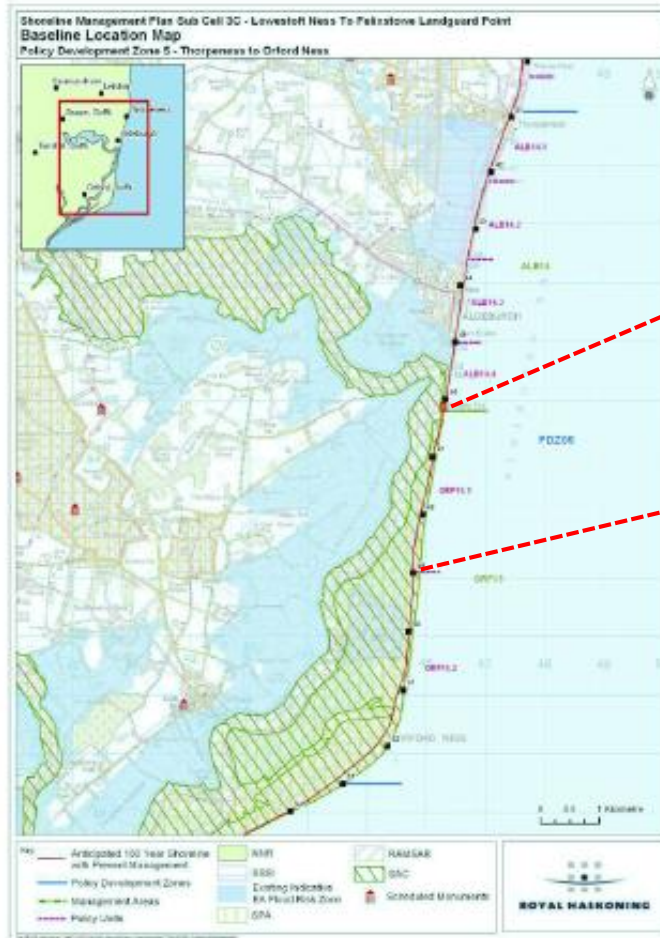
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# Outline

- Background to policy review study
- Work undertaken in Phases 1 and 2
- Alternatives considered
- Phase 3 environmental assessment



# Background to policy review study



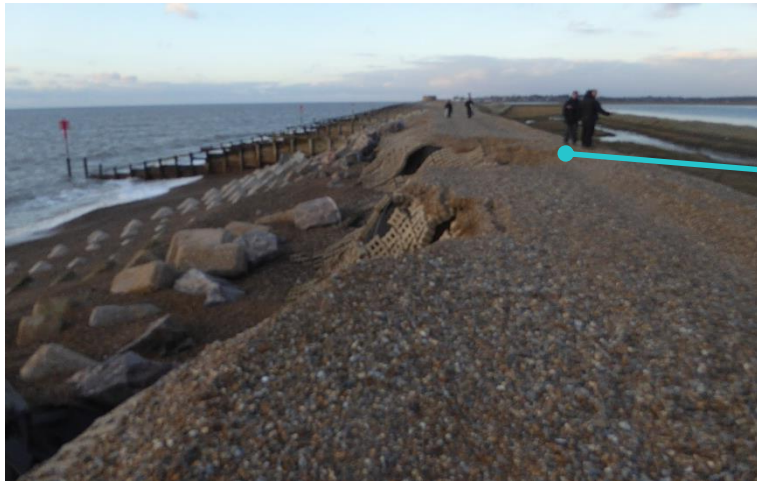
# Need for review of SMP Policy

- Current SMP Policy (2010):
  - To 2025: Hold The Line
  - 2025 – 2055: No Active Intervention
  - 2055 – 2105: No Active Intervention
- But policy caveated as: *‘An interim policy pending an agreed Management and Investment Plan for the Alde and Ore area’* – the Alde Ore Estuary Plan completed in 2016.
- Also since SMP, the vulnerability of the shingle barrier has increased, meaning the risk of breach under a policy of no active intervention has increased.





December 2018



# Work undertaken to date

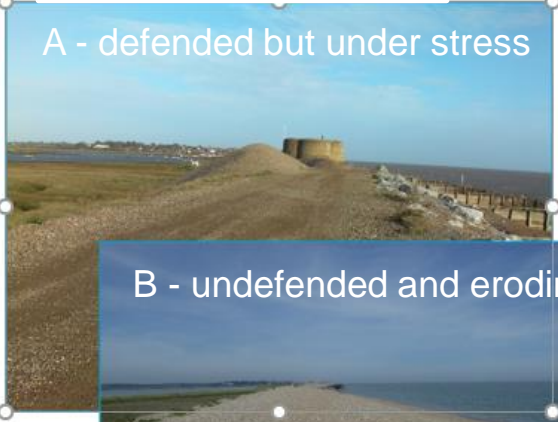
Phase 1	High level appraisal of alternative policy options	Completed Nov 2017
Phase 2	Further assessments looking at impact of alternative policies and approaches with respect to Habitat Regs and WFD	Completed June 2018

Recommendation made to the SCF for a **headline policy change to Managed Realignment**  
***‘to provide resilience against erosion whilst working with a dynamic coast’***

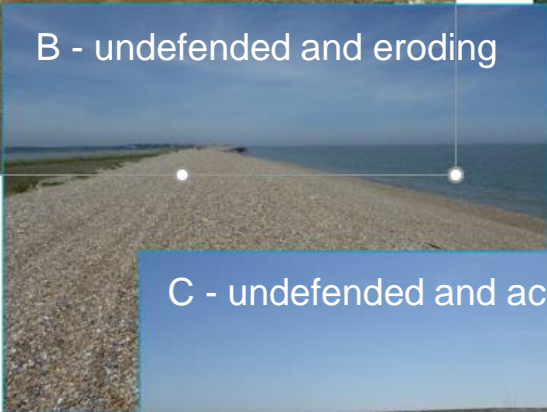


Phase 3	<p>Further environmental study to appraise alternative approaches against Strategic Environmental Assessment (SEA) receptors.</p> <p>If policy change approved - wider consultation, formal adoption and dissemination of the policy change.</p>	<b>This phase</b>
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A - defended but under stress



B - undefended and eroding

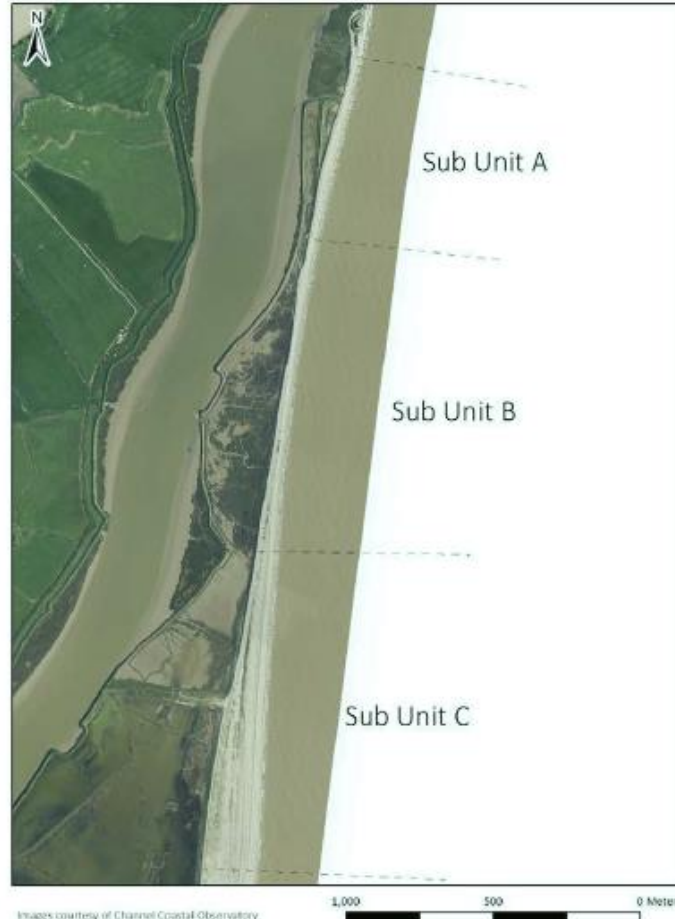


C - undefended and accreting



# Implementation measures considered in phases 1 and 2:

Unit	Measure
A	A1 Do nothing
	A2 Maintain/ develop a beach
	A3 Maintain/ improve the existing revetment structure
	A4 New seawall
	A5 Widen the defence
	A6 New embankment along estuary channel
	A7 Terminal structure
B	B1 Do nothing
	B2 Beach nourishment
	B3 Interventions to hold a beach
	B4 Widen the shingle ridge
	B5 'Natural' shingle ridge management
	B6 Extend the existing revetment structure along the shoreline
	B7 New embankment along estuary channel
	B8 New embankment - alternative alignments
C	C1 Do nothing
All	Shingle Engine

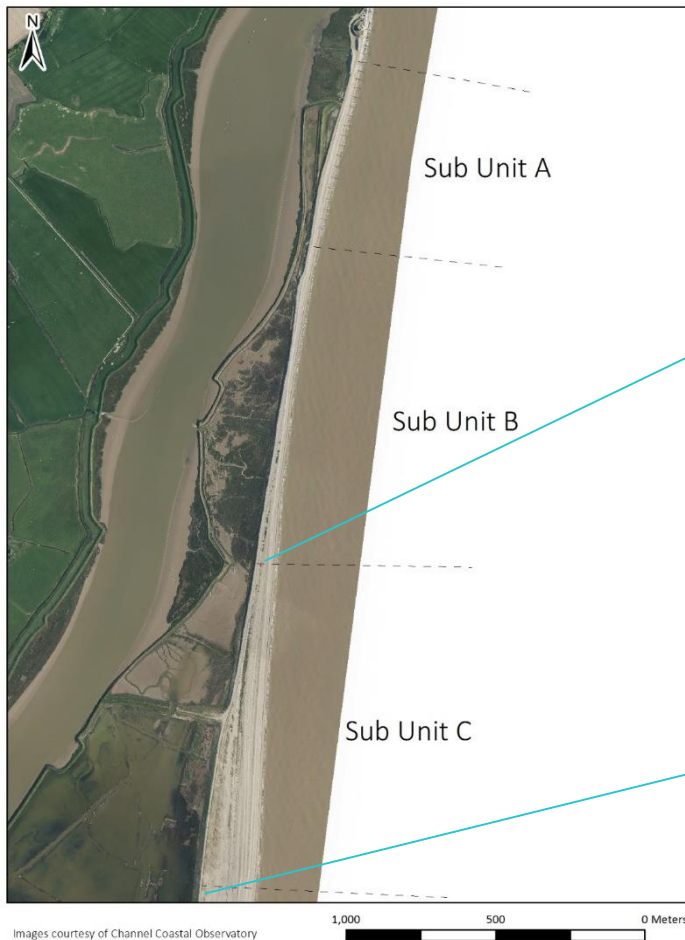


Ultimately 3 possible outcomes:

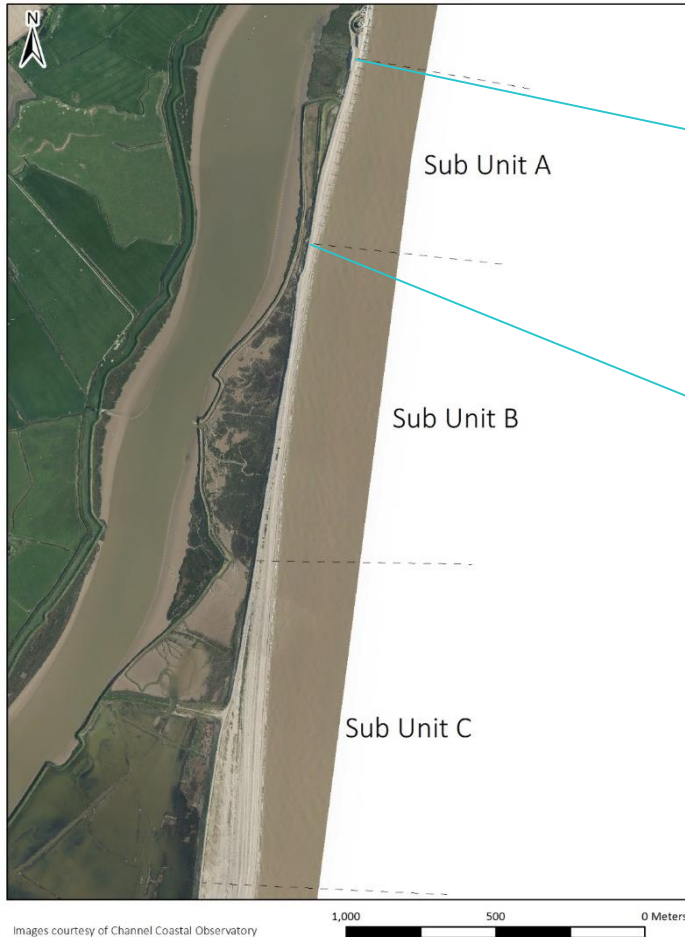
- **Breach** - permanent opening along shingle barrier, with significant changes in wider estuary & adjacent shorelines.
- **No Breach** – maintaining continuous barrier but not necessarily along same alignment as today.
- **Temporary Breach** - a barrier will remain in some form but may be occasionally (and temporarily) breached.



# Measures considered: Sub-unit C – do nothing



## Options considered: Sub-unit A



## Measures considered: Sub-unit A – measures NOT taken forward

- Maintain/develop a beach (A2)



- New seawall (A4)



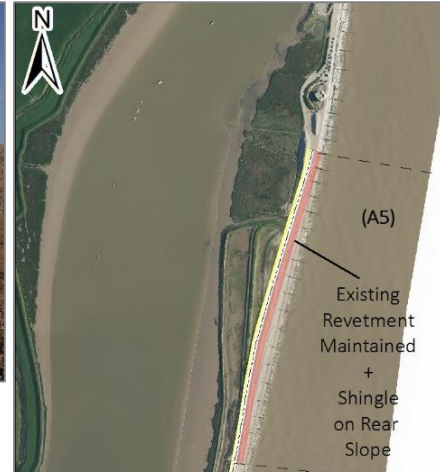


## Measures considered: Sub-unit A – measures taken forward to Phase 3 ...

- Improve / maintain existing revetment (A3)

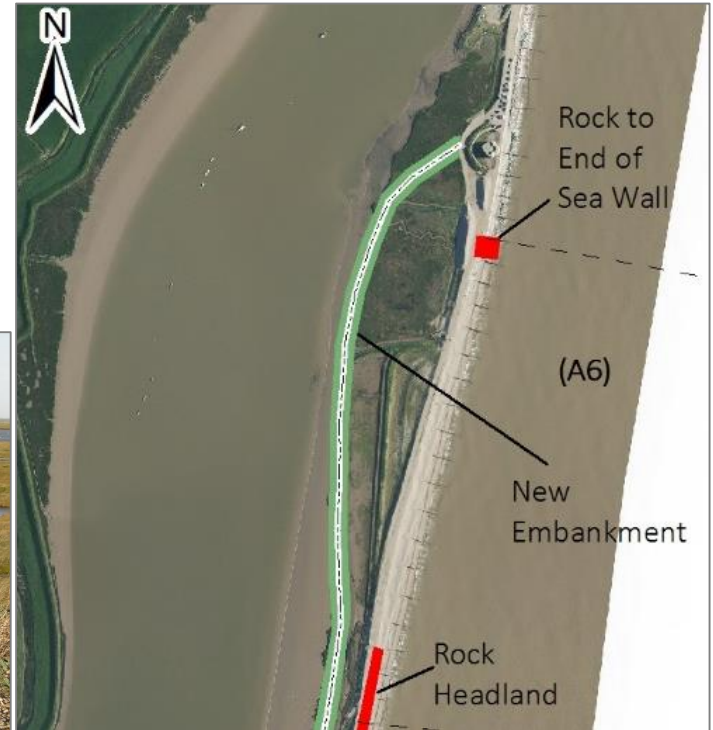


- Widen the defence (A5)



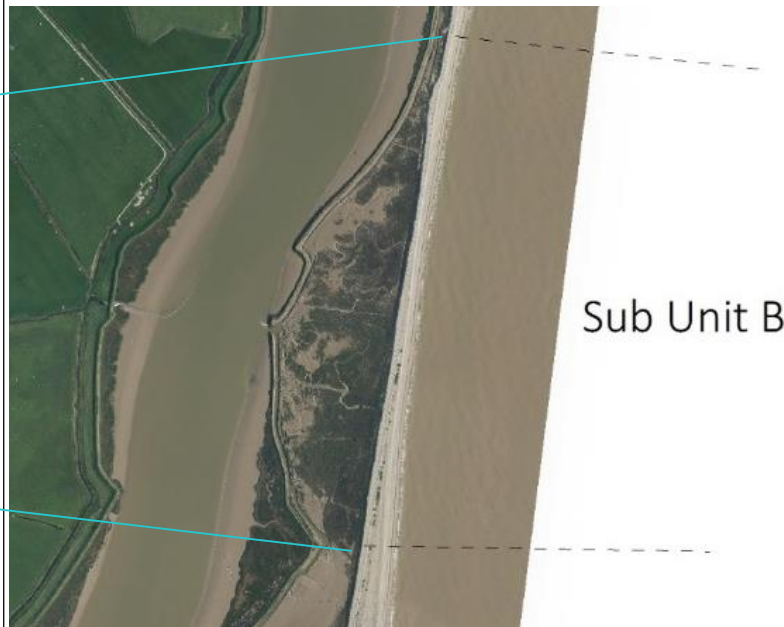
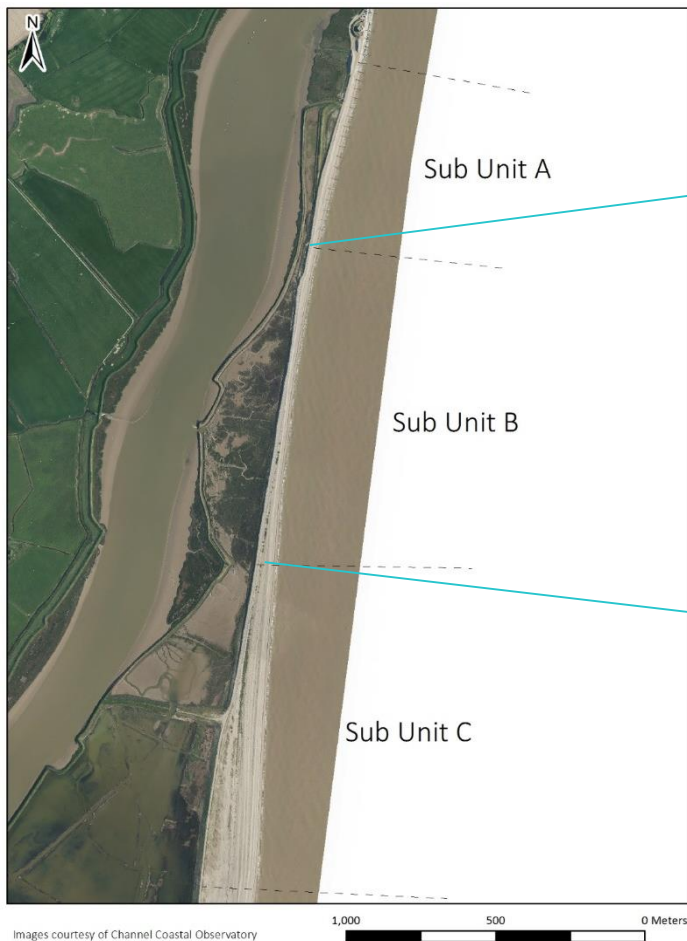
## Measures considered: Sub-unit A – measures taken forward to Phase 3 ...

- New embankment along estuary (A6)





## Measures considered: Sub-unit B



## Measures considered: Sub-unit B – measures NOT taken forward

- Beach nourishment (B2)



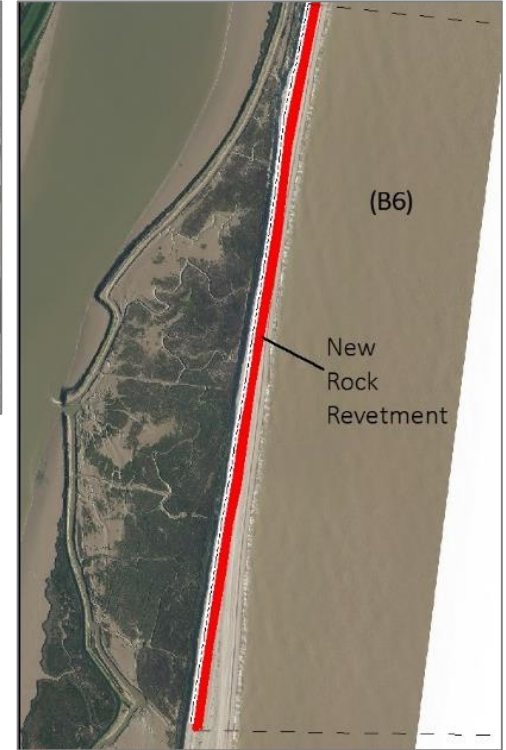
- Interventions to hold a beach (B3)





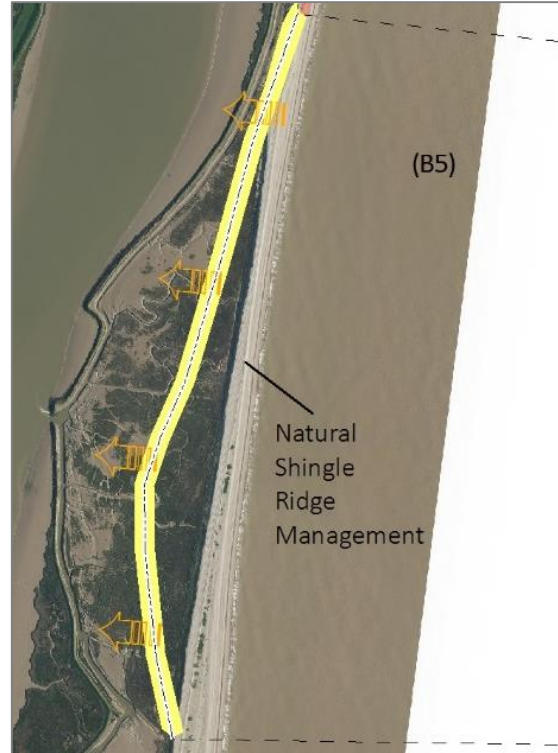
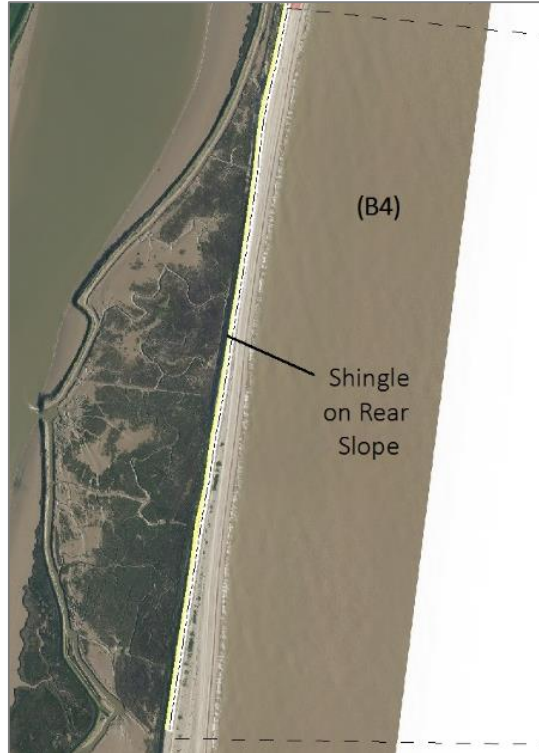
## Measures considered: Sub-unit B – measures NOT taken forward

- Extend existing revetment structure (B6)



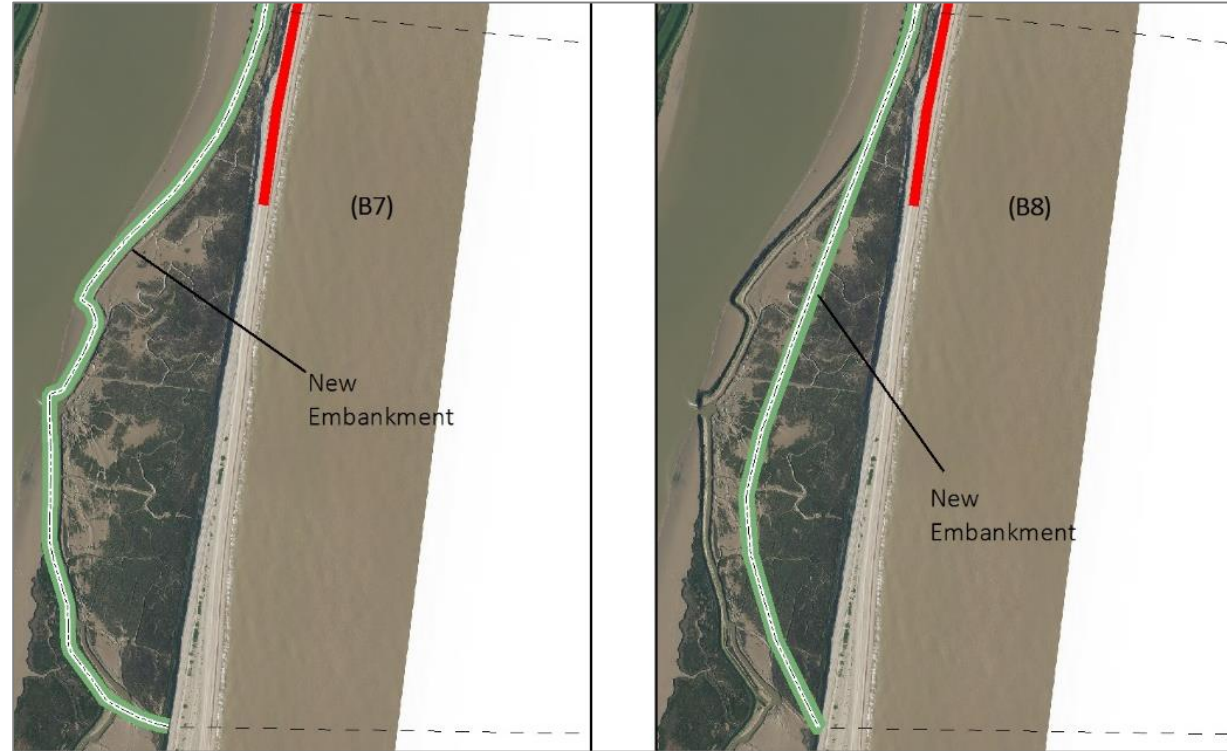
## Measures considered: Sub-unit B – measures taken forward to Phase 3 ...

- Widen the shingle ridge (B4)
- 'Natural' shingle ridge management (B5)

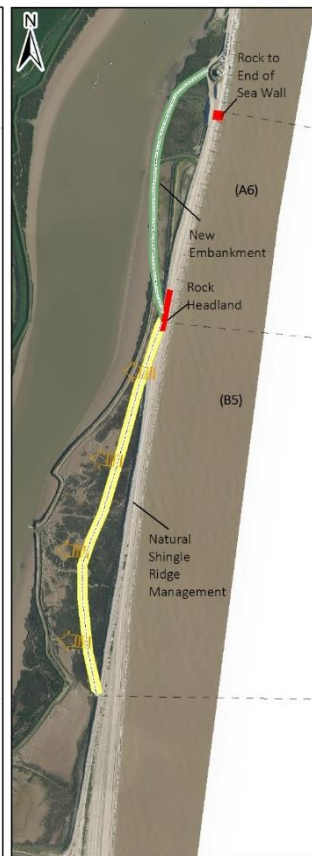
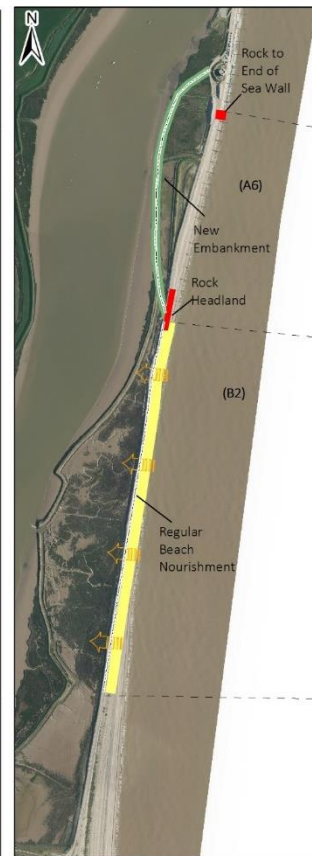
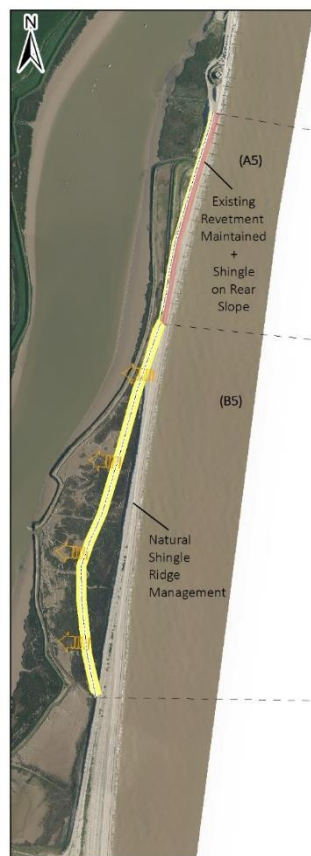
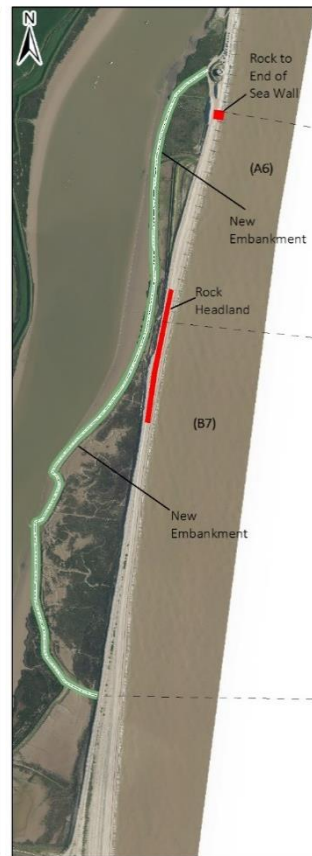
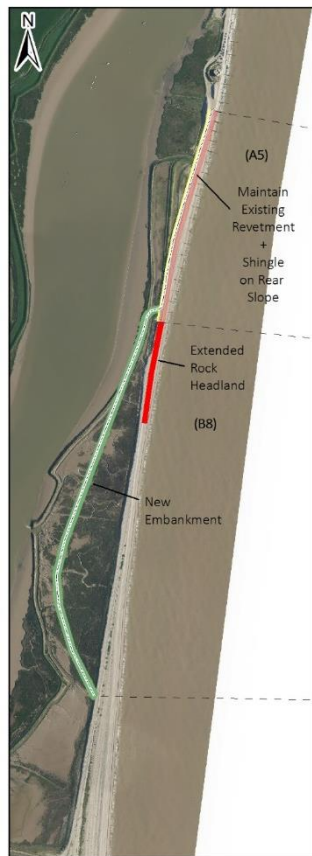
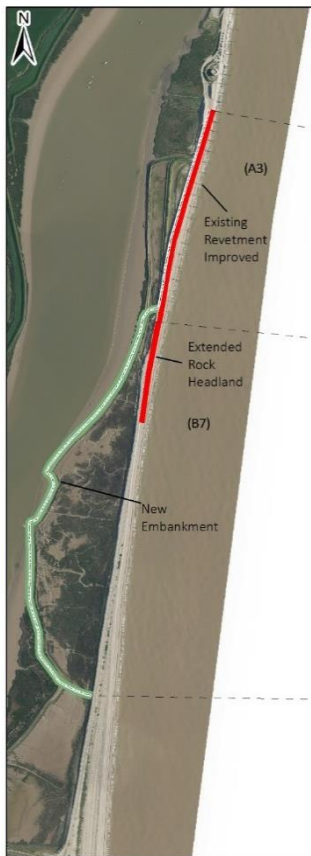


## Measures considered: Sub-unit B – measures taken forward to Phase 3 ...

- New embankments:
  - along estuary channel (B7)
  - along alternative alignments through marsh (B8)







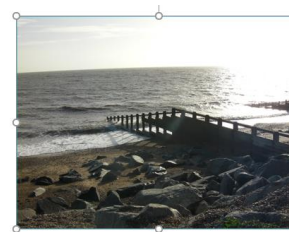
# Phase 3: Environmental assessment

## Scope of work:

- Strategic environmental screening appraisal of a change in SMP policy to Managed Realignment
- SMP-level assessment, in line with existing SMP

## Approach:

- Reviewed changes to environmental baseline
- Used SMP SEA assessment methodology
- Each impact considered in terms of potential effect and significance
- Produced draft environmental screening appraisal report



# Assessment criteria

Table 5: Potential effect: extract from Appendix F of the SMP (Royal Haskoning, 2010).

- Value and sensitivity of the receptors;
- Is the effect permanent / temporary;
- Is the effect positive / negative;
- Is the effect probable / improbable;
- Is the effect frequent / rare;
- Is the effect direct / indirect; and
- Will there be secondary, cumulative and / or synergistic effects.

Table 6: Potential significance: extract from Appendix F of the SMP (Royal Haskoning, 2010).

Significance of SMP Policy	
	SMP policy is likely to result in a significant positive impact on the environment.
	SMP policy is likely to have a positive or minor positive impact on the environment (dependent on scheme specifics at implementation).
	SMP policy is likely to have a neutral or negligible effect on the environment.
	SMP policy is likely to have a negative or minor negative impact on the environment (dependent on scheme specifics at implementation).
	SMP policy is likely to have a significant negative impact on the environment.
	The relationship between the SMP policy and the environment is unknown or unquantifiable.
	The assessment criterion is not applicable to the SMP policy

## Comparison with SMP

- Original SMP assessment concluded minor positive or neutral impacts – however this did not consider the possibility of a breach occurring as result of NAI
- At present, impacts of a breach remain highly uncertain – but potential for far reaching effects across estuary and coastal frontage





# Summary of appraisal

## Biodiversity, fauna and flora

- All measures have potential to improve natural functioning of open coast, but new embankments could constrain estuary
- Possible continued impact on Sudbourne Beach depending on shingle source
- Potential for direct loss of saltmarsh should new embankments be constructed + potential to affect functioning of marsh

## Water

- All measures prevent a permanent breach – no significant change

## Heritage and landscape

- Wider impacts minimised but potential loss of non-designated foreshore features
- Wider impacts on landscape minimised

## Coastal communities

- All measures prevent a permanent breach – no significant change
- Access along coast could be affected





# Conclusions

- Intent of all measures (under MR) are to prevent a permanent breach in the shingle barrier - thereby avoiding large scale changes to the wider estuary
- As such, measures are also compatible with the AOEP Estuary Plan and its overall vision
- Any approach that results in the loss of saltmarsh would need to consider provision of compensatory habitat and case for IROPI
- Approaches involving adding shingle to the rear face or 'natural management barrier' more likely to be environmentally acceptable
- At scheme stage, further appraisal would be required

