

ROYAL HASKONING

Appendix G Scenario Testing



Appendix G Scenario Testing

G1	Objective Appraisal	1
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G1 Objective Appraisal

For the baseline scenario of No Active Intervention and the Preferred Plan, the extent to which the defined objectives for each feature is achieved is assessed. In most instances, consideration of whether the objective is met is based upon the predicted position (e.g. the extent of retreat) and form (e.g. the existence of a beach) of the shoreline. This process does not differentiate between objectives of differing importance or the key policy drivers. The differentiation between different objectives is made in the Management Area Statements, where the recommendations for preferred policy are presented.

For presentation purposes this assessment is recorded as simple yes/no (Y/N) with brief explanatory text.

A summary plot of the objective appraisal is provided for each of the three epochs in Figures G2.1, G2.2 and G2.3 identifying the percentage of each different theme of objective that has been achieved for the 'No Active Intervention' scenario and the Preferred Plan. This information is also tabulated in Tables G2.1, G2.2 and G2.3. The full objective appraisal table is presented for each Management Area in Table G.2.4.

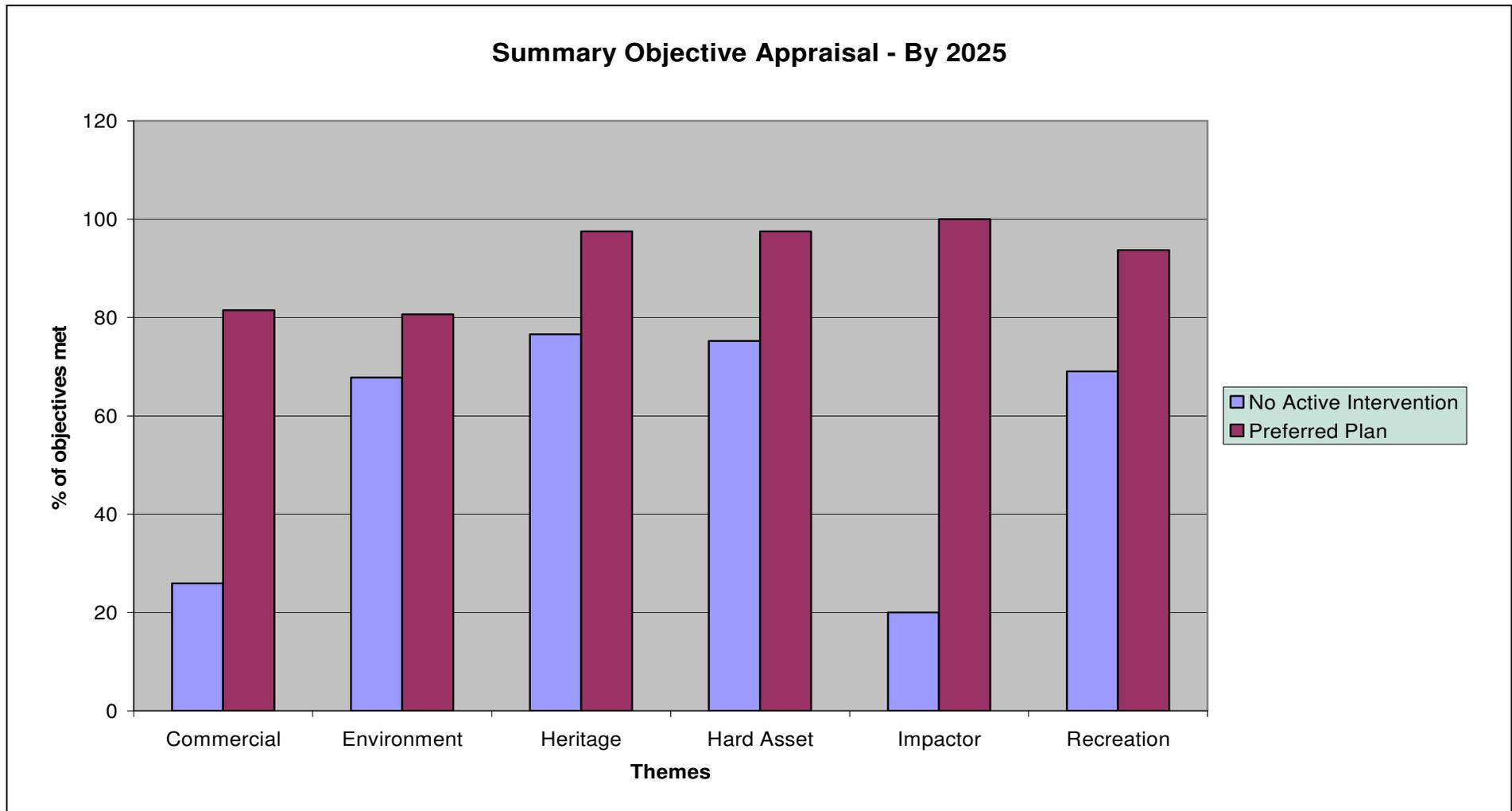


Figure G.1: Summary Objective Appraisal - By 2025

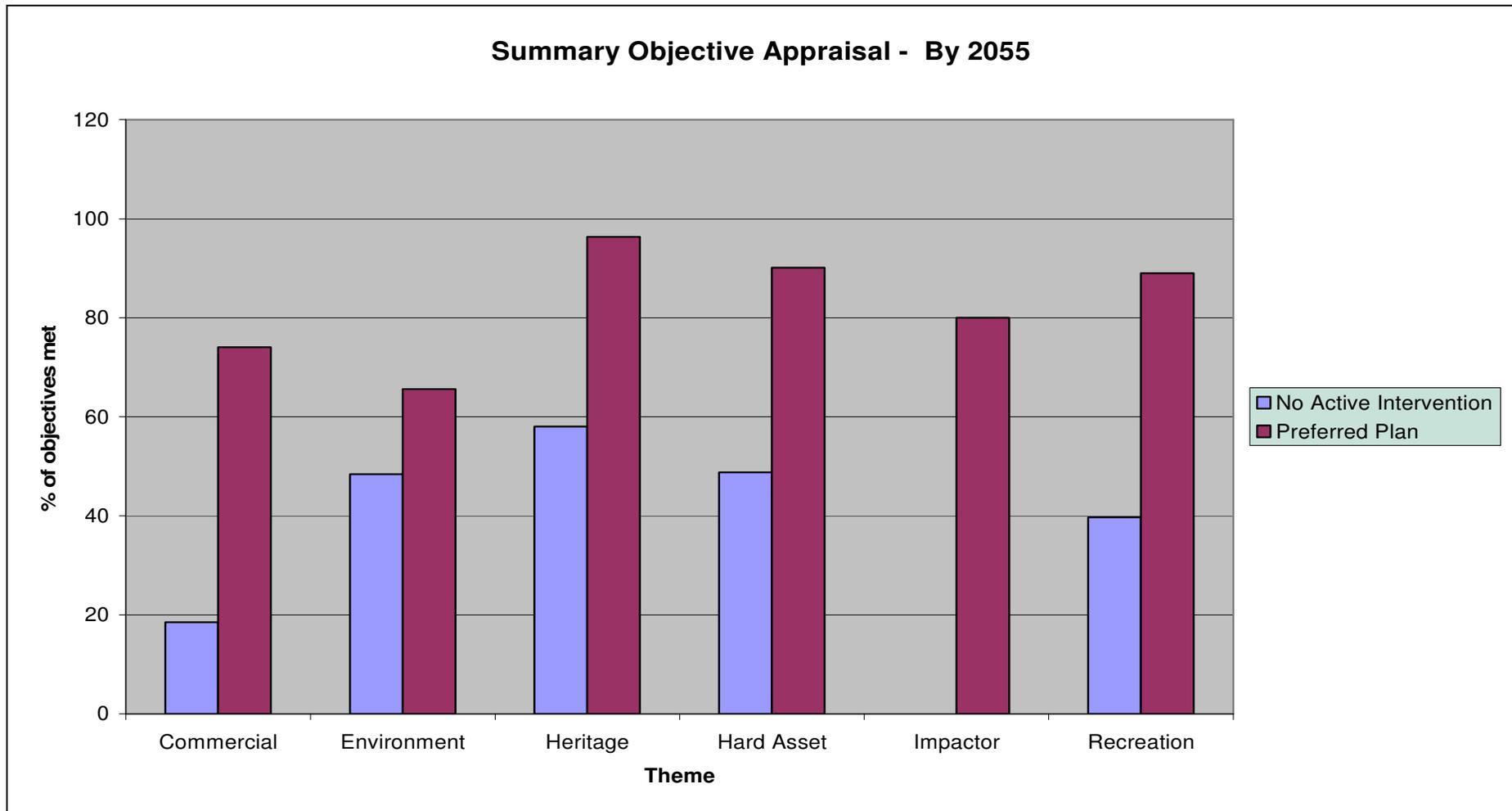


Figure G2.2: Summary Objective Appraisal - By 2055

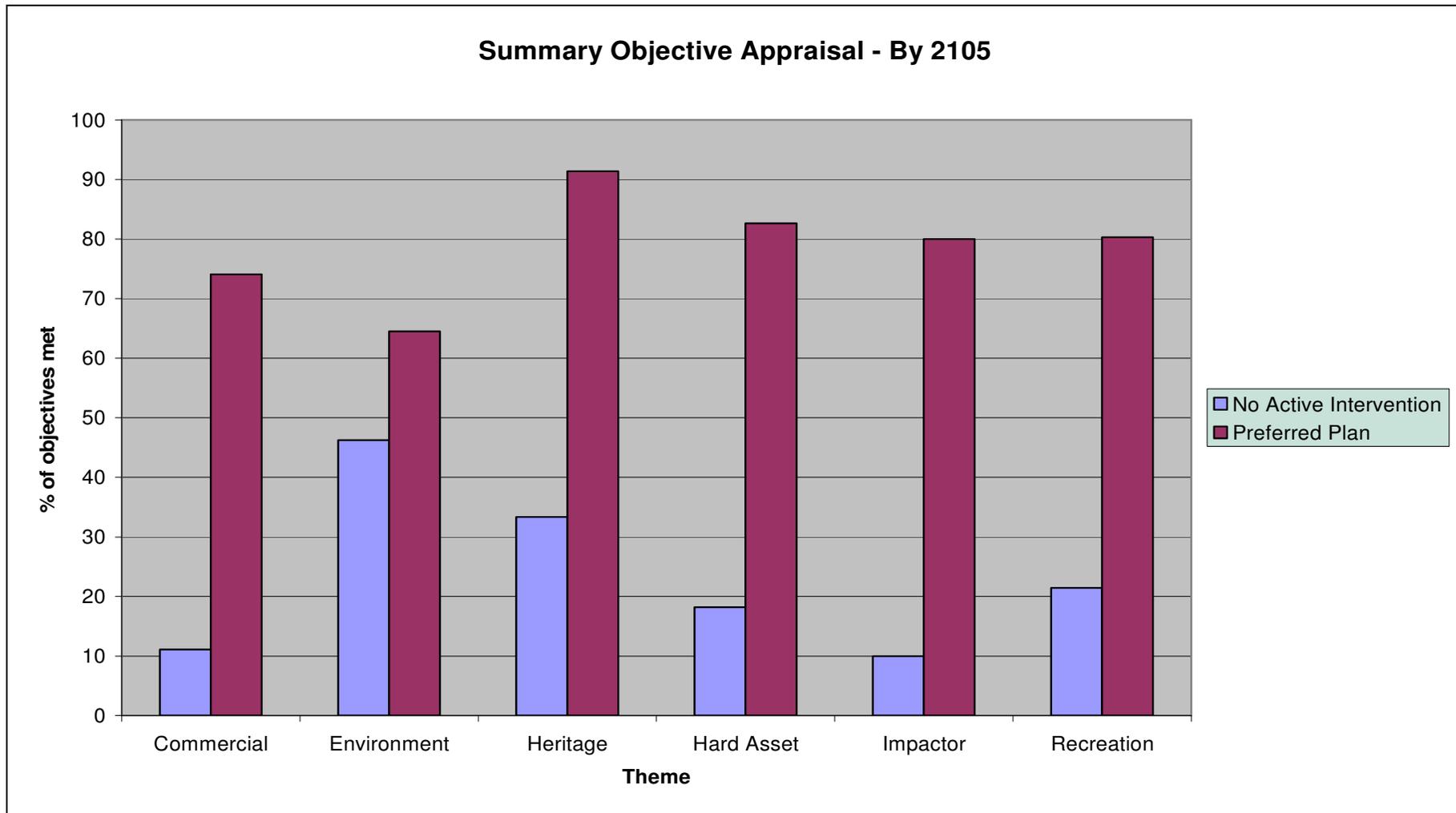


Figure G2.3: Summary Objective Appraisal - By 2105

Table G2.1: Summary of Objective Appraisal for 2025

Themes	% of objectives met for No Active Intervention						% of objectives met for Preferred Plan					
	C	E	H	HA	I	R	C	E	H	HA	I	R
Management Area												
MA01	-	100	100	100	-	75	-	100	100	100	-	100
MA02	-	100	-	100	100	63	-	100	-	100	100	100
MA03	-	0	100	-	0	100	-	0	100	-	100	100
MA04	-	-	100	100	-	80	-	-	100	100	-	80
MA05	-	-	100	100	0	-	-	-	100	100	100	-
MA06	100	50	100	100	-	80	100	50	100	100	-	100
MA07	0	-	67	100	-	83	100	-	100	100	-	100
MA08	-	67	80	100	0	100	-	100	100	100	100	100
MA09	-	80	100	100	100	60	-	80	100	100	100	80
MA10	0	100	100	100	-	100	0	100	100	100	-	100
MA11	0	50	0	29	0	50	50	50	75	71	100	83
MA12	0	67	0	29	-	0	100	100	100	100	-	100
MA13	0	67	100	38	-	80	100	100	100	100	-	80
MA14	0	100	100	60	-	60	100	100	100	100	-	100
MA15	50	100	83	100	-	75	100	100	100	100	-	100
MA16	100	50	100	100	-	50	100	50	100	100	-	100
MA17	0	50	100	50	0	50	100	100	100	100	100	100
MA18	-	67	100	100	-	100	-	67	100	100	-	100
MA19	-	0	0	67	-	0	-	100	100	100	-	100
MA20	0	100	67	100	-	-	0	100	100	100	-	-
MA21	-	100	50	50	-	0	-	100	100	100	-	100
MA22	-	0	100	100	-	80	-	100	100	100	-	100
MA23	0	75	100	75	-	100	67	75	100	100	-	80
MA24	-	-	-	-	-	100	-	-	-	-	-	100
MA25	-	86	78	100	-	73	-	100	100	100	-	100

Themes	% of objectives met for No Active Intervention						% of objectives met for Preferred Plan					
	C	E	H	HA	I	R	C	E	H	HA	I	R
Management Area												
MA26	100	-	100	100	-	33	100	-	100	100	-	33
MA27	-	50	100	100	-	100	-	50	100	100	-	100
MA28	0	100	100	60	0	83	100	100	100	100	100	100
MA29	100	0	0	75	-	100	100	0	100	75	-	100
MA30	100	50	-	-	-	100	100	50	-	-	-	100
MA31	0	100	80	100	0	100	100	100	100	100	100	100
MA32	0	100	-	0	0	60	50	200	-	100	100	100
MA33	0	100	50	-	-	0	100	100	50	-	-	67
Total	26	68	77	75	20	69	81	81	98	98	100	94

Note: Themes are Environment (E), Hard Asset (HA), Heritage (H), Recreational (R), Impactor (I), Commercial Activity (C)

Table G2.2: Summary of Objective Appraisal for 2055

Themes	% of objectives met for No Active Intervention						% of objectives met for Preferred Plan					
	C	E	H	HA	I	R	C	E	H	HA	I	R
Management Area												
MA01	-	100	100	100	-	75	-	100	100	100	-	100
MA02	-	0	-	0	0	25	-	100	-	0	100	88
MA03	-	0	100	-	0	100	-	67	100	-	0	100
MA04	-	-	100	50	-	80	-	-	100	100	-	60
MA05	-	-	100	100	0	-	-	-	100	100	100	-
MA06	100	50	0	100	-	40	100	50	100	100	-	100
MA07	0	-	67	100	-	83	100	-	100	100	-	100
MA08	-	67	60	40	0	25	-	100	100	100	100	100
MA09	-	80	100	50	0	0	-	100	100	100	0	100
MA10	0	100	100	100	-	0	0	100	100	100	-	100
MA11	0	50	0	14	0	50	50	79	75	86	100	83
MA12	0	33	0	0	-	0	100	67	100	100	-	100
MA13	0	42	100	13	-	40	50	42	100	88	-	80
MA14	0	100	100	20	-	0	100	100	100	100	-	100
MA15	0	100	17	33	-	25	50	100	100	100	-	100
MA16	100	50	75	100	-	50	100	50	100	100	-	100
MA17	0	50	100	50	0	50	100	100	100	75	100	100
MA18	-	33	100	100	-	100	-	33	100	100	-	100
MA19	-	0	0	0	-	0	-	100	100	100	-	100
MA20	0	67	67	100	-	-	0	67	100	100	-	-
MA21	-	50	25	50	-	0	-	50	100	100	-	100
MA22	-	0	0	0	-	20	-	100	100	100	-	60
MA23	0	50	100	50	-	100	100	50	100	100	-	100
MA24	-	-	-	-	-	0	-	-	-	-	-	100
MA25	-	29	33	83	-	64	-	43	89	67	-	91

Themes	% of objectives met for No Active Intervention						% of objectives met for Preferred Plan					
	C	E	H	HA	I	R	C	E	H	HA	I	R
Management Area												
MA26	0	-	100	100	-	0	0	-	100	100	-	67
MA27	-	50	100	100	-	40	-	50	100	100	-	100
MA28	0	100	100	60	0	50	100	100	100	100	100	83
MA29	100	0	0	50	-	0	100	0	100	50	-	100
MA30	100	50	-	-	-	33	100	50	-	-	-	100
MA31	0	0	60	67	0	0	100	0	100	100	100	33
MA32	0	0	-	0	0	40	50	100	-	0	100	80
MA33	0	25	50	-	-	0	100	25	50	-	-	67
Total	19	48	58	49	0	40	74	66	96	90	80	89

Table G2.3: Summary of Objective Appraisal for 2105

Themes	% of objectives met for No Active Intervention						% of objectives met for Preferred Plan					
	C	E	H	HA	I	R	C	E	H	HA	I	R
Management Area												
MA01	-	50	0	0	-	25	-	100	100	100	-	100
MA02	-	0	-	0	0	25	-	100	-	0	100	88
MA03	-	0	0	-	0	100	-	67	0	-	0	100
MA04	-	-	100	50	-	0	-	-	100	100	-	20
MA05	-	-	100	0	0	-	-	-	100	0	100	-
MA06	0	50	0	22	-	0	100	50	100	89	-	80
MA07	0	-	0	50	-	0	100	-	67	100	-	100
MA08	-	100	40	20	0	25	-	100	100	100	100	100
MA09	-	80	50	0	0	0	-	100	100	100	0	80
MA10	0	100	0	0	-	0	0	100	100	100	-	100
MA11	0	50	0	0	0	50	50	79	75	71	100	83
MA12	0	33	0	0	-	0	100	67	100	100	-	100
MA13	0	42	50	0	-	40	50	42	100	100	-	80
MA14	0	100	0	0	-	0	100	100	100	100	-	80
MA15	0	67	17	33	-	0	50	67	100	100	-	75
MA16	100	50	75	0	-	50	100	50	100	0	-	100
MA17	0	50	0	25	0	0	100	100	100	75	100	100
MA18	-	33	50	0	-	100	-	33	50	50	-	100
MA19	-	0	0	0	-	0	-	100	100	67	-	100
MA20	0	67	67	100	-	-	0	67	100	100	-	-
MA21	-	50	25	50	-	0	-	50	75	100	-	100
MA22	-	0	0	0	-	0	-	100	100	100	-	60
MA23	0	50	0	0	-	40	67	50	100	88	-	100
MA24	-	-	-	-	-	0	-	-	-	-	-	100
MA25	-	29	33	67	-	45	-	43	100	67	-	82

Themes	% of objectives met for No Active Intervention						% of objectives met for Preferred Plan					
	C	E	H	HA	I	R	C	E	H	HA	I	R
Management Area												
MA26	100	-	100	100	-	33	100	-	100	100	-	33
MA27	-	50	100	100	-	40	-	50	100	100	-	100
MA28	0	0	0	0	0	0	100	100	100	80	100	83
MA29	0	0	0	25	-	0	100	0	100	0	-	100
MA30	0	50	-	-	-	33	100	50	-	-	-	100
MA31	0	0	40	67	0	0	100	0	80	100	100	0
MA32	0	0	-	0	0	40	50	100	-	0	100	60
MA33	0	25	50	-	-	0	100	25	50	-	-	33
Total	11	46	33	18	10	21	74	65	91	83	80	80

Table G2.2 Objective Appraisal

Management Area: MA01		Location: River Tyne to South Pier												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Saltmarsh upstream in River Tyne	E	To ensure that shoreline management does not have a detrimental impact on saltmarsh habitat.	No change.	Y	No change	Y	Significant change to estuary mouth. Potential impact on saltmarsh.	N	No change	Y	No change	Y	Sea level rise may impact saltmarsh	Y
Tynemouth Port	HA	To maintain navigable channel for port operations in River Tyne. For shoreline management not to have a detrimental impact on port operations.	No change.	Y	No change.	Y	Loss of control structures and subsequent loss of navigable channel.	N	No change.	Y	No change.	Y	No change.	Y
South Groyne	H	To maintain listed structure	No change.	Y	No change.	Y	Loss of structure due to deterioration.	N	No change.	Y	No change.	Y	No change.	Y
South Groyne	HA	To maintain navigable channel for port operations in River Tyne	No change.	Y	No change.	Y	Loss of control structures and subsequent loss of navigable channel.	N	No change.	Y	No change.	Y	No change.	Y
Sea Road	HA	To maintain transport links to Littlehaven and Sand Haven beaches	No change.	Y	No change.	Y	Loss of road due to erosion.	N	No change.	Y	No change.	Y	No change.	Y
Littlehaven Beach	R	To maintain a beach suitable for recreation purposes	Beach use disrupted by failing defence.	N	Beach use disrupted by failing defence.	N	Beach allowed room to adapt.	Y	Beach allowed room to adapt.	Y	Beach allowed room to adapt.	Y	Beach allowed room to adapt.	Y
Hotel	HA	To retain or protect existing assets for economic and amenity reasons	Remains protected.	Y	Remains protected.	Y	Loss of hotel due to erosion.	N	Remains protected.	Y	Remains protected.	Y	Remains protected.	Y

Management Area: MA01			Location: River Tyne to South Pier											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Car parks	R	To retain or protect existing assets for economic and amenity reasons	Loss due to erosion	N	Loss due to erosion	N	Loss due to erosion	N	Reduced carpark area provided behind retreated defence.	Y	Reduced carpark area provided behind retreated defence.	Y	Reduced carpark area provided behind retreated defence.	Y
Harbour Drive (between River Tyne & South Pier)	R	To ensure emergency access to beach	No change.	Y	No change.	Y	Loss of road due to erosion.	N	No change.	Y	No change.	Y	No change.	Y
South Pier	H	To maintain listed structure	No change.	Y	No change.	Y	Some loss due to deterioration.	N	No change.	Y	No change.	Y	No change.	Y
South Pier	HA	To maintain shelter for port operations	No change.	Y	No change.	Y	Partial deterioration in conditions.	N	No change.	Y	No change.	Y	No change.	Y
South Pier	R	To maintain facilities for recreational fishing	No change.	Y	No change.	Y	Loss due to deterioration..	N	No change.	Y	No change.	Y	No change.	Y
South Pier	R	To maintain access to sheltered waters for recreational watersports	No change.	Y	No change.	Y	Partial deterioration in conditions.	N	No change.	Y	No change.	Y	No change.	Y
South Pier	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y
South Pier	HA	To allow sustainable management of beaches.	No change.	Y	No change.	Y	Reducing influence of pier as control structure making beach management more difficult.	N	No change.	Y	No change.	Y	No change.	Y

Management Area: MA02		Location: Herd Sand												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Sandhaven Beach	R	To maintain a bathing beach suitable for recreation purposes	No change.	Y	Deterioration in beach quality due to squeeze against land use.	N	Deterioration in beach quality due to squeeze against land use.	N	Beach maintained.	Y	Beach maintained.	Y	Land use changes required to maintain width for beach retreat.	Y
Sandhaven Beach	I	To minimise the potential impact of pollution	No change.	Y	Potential pollution as defences fail.	N	Potential pollution as defences fail.	N	Objective met.	Y	Objective met.	Y	Objective met.	Y
Commercial development	HA	To retain or protect existing commercial property for economic reasons	No loss	Y	Loss of commercial properties at southern end of beach.	N	Loss of amusement park.	N	No loss	Y	Potential loss of existing properties but integrated defence with new development.	Y	Maintain dune protection.	Y
Car parks	R	To retain or protect existing assets for economic and amenity reasons	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y
Promenade and facilities	R	To maintain recreational facilities	No change.	Y	Loss due to erosion	N	Loss due to erosion	N	Protected.	Y	Protected.	Y	Protected.	Y
Car parks	R	To retain or protect existing assets for economic and amenity reasons	Loss due to erosion.	N	Loss due to erosion.	N	Loss due to erosion.	N	Managed partial loss of carpark	Y	Managed partial loss of carpark	Y	Managed partial loss of carpark	Y
Herd Sand Dunes	E	To avoid any interruption to sources of sediment supply to the dunes and to maintain or restore natural or semi-natural localised levels of accretion or erosion	No change.	Y	Coastal squeeze, partial loss of dunes.	N	Coastal squeeze, partial loss of dunes.	N	No loss.	Y	No loss.	Y	No loss.	Y

Management Area: MA02			Location: Herd Sand											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Lifeguard Station	R	To maintain lifeguard and training facility	Loss due to erosion.	N	Loss due to erosion.	N	Loss due to erosion.	N	No change.	Y	Loss due to erosion.	N	Loss due to erosion.	N
Gypsies Green Sports Ground	R	To retain or protect existing assets for recreation reasons	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y
Car parks	R	To retain or protect existing assets for economic and amenity reasons	Loss due to erosion.	N	Loss due to erosion.	N	Loss due to erosion.	N	No change.	Y	Managed partial loss of carpark	Y	Managed partial loss of carpark	Y
Trow Lea Sands	R	To maintain watersports facility/area	No change.	Y	Deterioration of access.	N	Deterioration of access.	N	No change.	Y	Access maintained through managed realignment	Y	Access maintained through managed realignment	Y

Management Area: MA03			Location: Trow											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Coastal footpath	R	To maintain the ability to walk the coastline	Potential space for retreat.	Y										
Durham Coast SSSI (South Shields to Hart Warren)	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Potential contamination from quarry	N	Potential contamination from quarry	N	Potential contamination from quarry	N	Defence to protect quarry could impact SSSI	N	Active retreat would achieve objective	Y	Active retreat would achieve objective	Y
Floating Gun Platform, Trow Point	H	To maintain listed structure	No change.	Y	No change.	Y	At risk from erosion	N	No change.	Y	No change.	Y	At risk from erosion	N
Trow Point to Whitburn Steel Magnesian Limestone cliffs SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Potential contamination from quarry	N	Potential contamination from quarry	N	Potential contamination from quarry	N	Defence to protect quarry could impact SSSI	N	Active retreat would achieve objective	Y	Active retreat would achieve objective	Y
Trow Quarry	I	To minimise the potential impact of pollution but also to minimise reliance on maintenance of future defences	Potential contamination from quarry	N	Potential contamination from quarry	N	Potential contamination from quarry	N	Protected by a short term defence	Y	Managed realignment	Y	Managed realignment	Y
The open space of the Leas (Trow Lea, Frenchman's Lea and Marsden Lea)	R	To maintain safe use and character of the Leas.	Loss of area but character and function maintained.	Y	Loss of area but character and function maintained.	Y	Loss of area but character and function maintained.	Y	Loss of area but character and function maintained.	Y	Loss of area but character and function maintained.	Y	Loss of area but character and function maintained.	Y
The open space of the Leas (Trow Lea, Frenchman's Lea and Marsden Lea)	R	To maintain the ability to walk the coastline	Space to retreat coastal path.	Y										

Management Area: MA04		Location: Frenchman's Bay to Lizard Point												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Marsden Bay Lifeguard Station	R	To maintain the function of the lifeguard station	Not affected	Y	Not affected	Y	Loss due to erosion.	N	Not affected	Y	Not affected	Y	Loss due to erosion.	N
Coast road A183	HA	To maintain transport linkage between South Shields and Whitburn and access to Marsden Bay	No change.	Y	Loss due to erosion.	N	Loss due to erosion.	N	No change.	Y	Subject to agreed diversion.	Y	Subject to agreed diversion.	Y
Marsden Grotto car park	R	To maintain car parking for Leas and Marsden Bay	Partial loss due to erosion.	N	Loss due to erosion.	N	Loss due to erosion.	N	Partial loss due to erosion.	N	Loss due to erosion.	N	Loss due to erosion.	N
Marsden Grotto Café	R	To maintain recreational facilities	No change.	Y	Loss due to erosion.	N	Loss due to erosion.	N	No change.	Y	Loss due to erosion subject to private defence.	N	Loss due to erosion subject to private defence.	N
Residential properties	HA	To prevent loss of residential property to erosion	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y
Marsden Limekilns	H	To maintain heritage value	Heritage value maintained.	Y	Heritage value maintained. Access could be disrupted.	Y	Heritage value maintained. Access could be disrupted.	Y	Heritage value maintained.	Y	Heritage value maintained. Access could be disrupted.	Y	Heritage value maintained. Access could be disrupted.	Y
Marsden Bay Beaches	R	To maintain bathing beach for recreational use	Minor losses.	Y	Minor losses.	Y	Significant loss of beach due to erosion.	N	Minor losses.	Y	Minor losses.	Y	Significant loss of beach due to erosion.	N
Lizard Point access road and car park	R	To maintain car parking for coast and Souter lighthouse	No change.	Y	Loss of carpark.	N	Continued loss of carpark	N	No change.	Y	Relocation of carpark.	Y	Relocation of carpark.	Y

Management Area: MA05			Location: Lizard Point to Souter Point											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Souter Point Lighthouse	H	To maintain lighthouse and associated structures	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y
Old Harbour Quarry Engineered Structure	I	To minimise the potential impact of pollution but also to minimise reliance on maintenance of future defence	Potential contamination from quarry.	N	Potential contamination from quarry.	N	Potential contamination from quarry.	N	Protected.	Y	Managed retreat through removal of quarry material.	Y	Managed retreat through removal of quarry material.	Y
MOD Firing Range	HA	To maintain MOD facility	No change.	Y	No change.	Y	Potential losses due to erosion.	N	No change.	Y	No change.	Y	Potential losses due to erosion.	N

Management Area: MA06			Location: Souter Point to Sunderland Harbour											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Residential Properties, Elm Drive	HA	To prevent loss of residential property to erosion	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y
Whitburn Comprehensive	HA	To prevent loss of school property to erosion	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y	No change.	Y
Northumbrian Water water/ sewerage infrastructure	HA	To maintain local sewage infrastructure	No change.	Y	No change.	Y	Loss due to erosion	N	No change.	Y	No change.	Y	Loss due to erosion	N
Residential properties at The Bents	HA	To prevent loss of residential property to erosion	No change	Y	Increased overtopping.	Y	Potential loss due to erosion.	N	No change	Y	No change	Y	No change	Y
Fishermens Cottages, Whitburn Bents	H	To prevent loss of heritage value due to erosion	No change	Y	Increased overtopping.	Y	Potential loss due to erosion.	N	No change	Y	No change	Y	No change	Y
Whitburn Steel SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	No significant change	Y	No significant change	Y	Loss of integrity of site due to erosion.	N	No significant change	Y	No significant change	Y	Loss of integrity of site due to erosion.	N
Whitburn Bay Bathing Beach	R	To maintain bathing beach for recreational use	No significant change.	Y	Loss due to beach steepening and access.	N	Loss due to beach steepening and access.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Whitburn Bay Bathing Beach	C	Maintain access to the sea for fishing boats. Maintain safe access for anglers .	No significant change.	Y	No significant change.	Y	Loss due to destruction of access.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Whitburn Rd	HA	To maintain transport link along sea front	No change	Y	Increased overtopping.	Y	Loss due to erosion.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Seaburn foreshore promenade	R	To maintain promenade	No change	Y	Increased overtopping.	Y	Loss due to erosion.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Residential properties, Seaburn	HA	To prevent loss of residential property to erosion	No change	Y	Increased overtopping.	Y	Potential erosion and flooding due to overtopping.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y

Management Area: MA06		Location: Souter Point to Sunderland Harbour												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Commercial properties, Seaburn	HA	To prevent loss of commercial property to erosion	No change	Y	Increased overtopping.	Y	Potential erosion and flooding due to overtopping.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Roker cliffs and Parsons Rocks	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Defences intact therefore objective not achieved.	N	Defences fail, natural processes restored.	Y	Defences fail, natural processes restored.	Y	Defences intact therefore objective not achieved.	N	Defences intact therefore objective not achieved.	N	Defences fail, natural processes restored.	Y
Roker Cliff Park	R	To maintain recreational value of open area	No change	Y	No significant change. Erosion may affect area.	Y	Significant affect due to erosion.	N	No change	Y	No change	Y	No significant change. Erosion may affect area.	Y
Roker Seafront including lower promenade	H	To prevent loss of heritage value due to erosion	No change	Y	Loss due to erosion and flooding.	N	Loss due to erosion and flooding.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Roker Seafront including lower promenade	R	To maintain appropriate nature of promenade to sustain commercial, tourist and recreational value.	No change	Y	Loss due to erosion and flooding.	N	Loss due to erosion and flooding.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Roker Beach	R	To maintain bathing beach for recreational use	Loss of beach width due to beach steepening.	N	Loss of beach width due to beach steepening.	N	Loss of beach width due to beach steepening.	N	No change.	Y	Policy to improve beach.	Y	Potential loss due to sea level rise.	N
Properties at Roker	HA	To prevent loss of residential property to erosion	No change.	Y	No change.	Y	Loss due to cliff instability.	N	Protected.	Y	Protected.	Y	Protected.	Y
Properties	HA	To prevent loss of commercial property to erosion	No change.	Y	No change.	Y	Loss due to cliff instability.	N	Protected.	Y	Protected.	Y	Protected.	Y

Management Area: MA07			Location: Sunderland Harbour											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
IRB Station	R	To maintain IRB station function	No change.	Y	No change.	Y	Loss due to erosion.	N	No change.	Y	No change.	Y	No change.	Y
Roker Pier	H	To maintain listed structure	No change.	Y	No change.	Y	Loss due to deterioration.	N	No change.	Y	No change.	Y	No change.	Y
Roker Pier	HA	To maintain shelter for port operations	No change.	Y	No change.	Y	Some interruption of port operations.	N	No change.	Y	No change.	Y	No change.	Y
Roker Pier	R	To maintain facilities for recreational fishing	No change.	Y	No change.	Y	Loss due to deterioration.	N	No change.	Y	No change.	Y	No change.	Y
Roker Pier	R	To maintain access to sheltered waters for recreational watersports	No change.	Y	No change.	Y	Some loss of shelter.	N	No change.	Y	No change.	Y	No change.	Y
Roker Pier	HA	To allow sustainable management of beaches.	No change.	Y	No change.	Y	Minor impact on beaches due to loss of structure	Y	No change.	Y	No change.	Y	No change.	Y
North Pier	H	To maintain archaeological value of structure	Loss due to deterioration.	N	Loss due to deterioration.	N	Loss due to deterioration.	N	Maintained.	Y	Maintained.	Y	Maintained.	Y
North Pier	R	To maintain fishing facility	Loss due to deterioration.	N	Loss due to deterioration.	N	Loss due to deterioration.	N	Maintained.	Y	Maintained.	Y	Maintained.	Y
New South Pier	H	To maintain archaeological value of structure	No significant change.	Y	No significant change.	Y	Loss due to deterioration.	N	Maintained.	Y	Maintained.	Y	Maintained.	Y
New South Pier	R	To maintain fishing facility	No significant change.	Y	No significant change.	Y	Loss due to deterioration.	N	Maintained.	Y	Maintained.	Y	Maintained.	Y
Wear River Mouth	C	To maintain adequate depth at the river mouth for operational use of the river	Loss due to deterioration of North Pier.	N	Loss due to deterioration of North Pier.	N	Loss due to deterioration of North Pier.	N	Maintained.	Y	Maintained.	Y	Maintained.	Y
Sunderland Harbour	R	To maintain a sheltered harbour for recreational watersports	No change.	Y	No change.	Y	Some loss of shelter due to deterioration of piers.	N	No change.	Y	No change.	Y	No change.	Y

Management Area: MA08		Location: Sunderland Harbour to Pincushion												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Sunderland Port/ Docks	HA	To prevent loss of commercial property in Docks area due to erosion or loss of structures	No change.	Y	Partial loss due to deterioration of structures.	N	Loss due to deterioration of structures.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Sunderland Port/ Docks	H	To maintain opportunities for educational awareness of historical features and research.	No change.	Y	Partial loss due to deterioration of structures.	N	Loss due to deterioration of structures.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
North Dock Tufa RIGS	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Loss due to deterioration.	N	Loss due to deterioration.	N	Maintained.	Y	Maintained.	Y	Maintained.	Y	Maintained.	Y
Hendon Sewage Treatment Works	HA	To maintain sewage treatment infrastructure for Sunderland	No change.	Y	Loss due to erosion.	N	Loss due to erosion.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Industrial property (Oil depot etc)	HA	To prevent loss of commercial property due to erosion or loss of structures and to prevent potential pollution	No change.	Y	Loss due to erosion.	N	Loss due to erosion.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Hendon Railway	HA	To maintain rail transport link to docks	No change.	Y	No change.	Y	Loss due to erosion at railway line further south	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Hendon and Grangetown Beach and Promenade areas	R	To create appropriate quality recreational coastal amenity area	No change.	Y	Loss due to erosion.	N	Loss due to erosion.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Hendon and Grangetown Beach and Promenade areas	R	To provide better access for recreational use of the beach	No change.	Y	Loss due to erosion.	N	Loss due to erosion.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Hendon outfall	HA	To maintain sewerage infrastructure for Sunderland	No change.	Y	Loss due to erosion.	N	Loss due to erosion.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y

Management Area: MA08		Location: Sunderland Harbour to Pincushion												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Hendon Cliffs SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Natural processes prevail	Y	Natural processes prevail	Y	Natural processes prevail	Y	Natural processes prevail	Y	Natural processes prevail	Y	Natural processes prevail	Y
Southern Radial Route at Ryhope	HA	To maintain the route of the proposed Southern radial road over its design life.	Not affected.	Y	Not affected.	Y	Subject to erosion beyond its design life.	Y	Not affected.	Y	Not affected.	Y	Route protected.	Y
Grangetown residential properties	HA	To prevent loss of residential property to erosion	Not affected.	Y	Not affected.	Y	Some loss due to erosion	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Grangetown residential properties	H	To prevent loss of community to erosion	Not affected.	Y	Not affected.	Y	Some loss due to erosion	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
Railway line	HA	To maintain rail transport link	Not affected.	Y	Some loss due to erosion	N	Some loss due to erosion	N	Not affected.	Y	Rail link protected	Y	Rail link protected	Y
Cliff top footpaths	R	To maintain pedestrian access along cliff line.	Width retained to retreat path	Y	No opportunity for further setback	N	No opportunity for further setback	N	Width retained to retreat path	Y	Coastline erosion controlled	Y	Coastline erosion controlled	Y
Ryhope cliffs (quarry)	I	To minimise the potential impact of pollution but also to minimise reliance on maintenance of future defences	Quarry tip potentially exposed	N	Quarry tip potentially exposed	N	Quarry tip potentially exposed	N	Quarry tip exposed, investigate contamination.	Y	Management of contamination	Y	Management of contamination	Y
Area of Potential Archaeological Importance	H	To maintain archaeological value of area and access to these interests	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Some loss due to erosion	Y	Erosion managed.	Y	Erosion managed.	Y
Proposed new railway station at Ryhope	HA	To maintain opportunity for new railway station	Not affected.	Y	Possible loss of railway.	N	Loss of railway	N	Not affected.	Y	Erosion managed.	Y	Erosion managed.	Y
Ryhope village	HA	To prevent loss of residential property to erosion	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y
Ryhope village	H	To prevent loss of community to erosion	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y

Management Area: MA08			Location: Sunderland Harbour to Pincushion											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Halliwell Banks SINC	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Natural development maintained	Y	Natural development maintained	Y	Natural development maintained	Y	Natural development maintained	Y	Controlled erosion of frontage	Y	Controlled erosion of frontage	Y
Ryhope Village Conservation Area	H	To prevent loss of heritage value due to erosion	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y	Erosion managed.	Y	Erosion managed.	Y
Area of Special Landscape value	R	To maintain the Special Landscape Value of the area.	Natural eroding frontage.	Y	Natural eroding frontage.	Y	Natural eroding frontage.	Y	Natural eroding frontage.	Y	Managed eroding frontage	Y	Managed eroding frontage	Y

Management Area: MA09		Location: Pincushion to Chourdon Point												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Ryhope Dene Railway Cutting SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Naturally eroding frontage	Y	Naturally eroding frontage	Y	Naturally eroding frontage	Y	Naturally eroding frontage	Y	Naturally eroding frontage	Y	Naturally eroding frontage	Y
Hendon to Seaham shoreline	R	To maintain traditional access and use of foreshore and denes.	Access progressively lost	N	Access progressively lost	N	Access progressively lost	N	Access progressively lost	N	Opportunity for formal access	Y	Opportunity for formal access	Y
Ryhope Denemouth SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Naturally eroding frontage	Y	Naturally eroding frontage	Y	Naturally eroding frontage	Y	Naturally eroding frontage	Y	Naturally eroding frontage	Y	Naturally eroding frontage	Y
Ryhope beach sea cliffs (RIGS)	E	To maintain the educational and observational value of the exposed cliffs.	Naturally eroding cliffs	Y	Naturally eroding cliffs	Y	Naturally eroding cliffs	Y	Naturally eroding cliffs	Y	Managed eroding cliffs	Y	Managed eroding cliffs	Y
NEDL/ YEDL Manor House Penshaw Electrical supply assets at risk from erosion/flooding.	HA	To maintain electrical services to communities	Not affected	Y	Not affected despite erosion of coastal slope	Y	Loss due to erosion	N	Defence maintained.	Y	Defence maintained.	Y	Defence maintained.	Y
Seaham Beach	R	To maintain bathing beach for recreational use	Potential lowering of beach	Y	Failure of defence and access	N	Squeeze of beach against cliff	N	Potential lowering of beach	Y	Maintaining access but increased beach lowering	Y	Potential loss of beach	N
Seaham coastal footpath	R	To maintain the ability to walk the coastline	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
North Road B1287	HA	To maintain seafront road	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA09			Location: Pincushion to Chourdon Point											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Residential properties	HA	To prevent loss of residential property to erosion	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Residential properties	HA	To prevent loss of residential property to erosion	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Listed buildings on Terrace Green	H	To maintain listed structure	Not affected	Y	Not affected	Y	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
War Memorial carpark	R	To maintain carpark and amenity area.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Seaham Port	HA	To prevent loss of commercial property in port area due to erosion or loss of structures	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Durham Coast SSSI	E	Subject to natural processes to maintain the integrity of the designated habitats and species	Potential leaching of contaminants	N	Potential leaching of contaminants	N	Potential leaching of contaminants	N	Potential leaching of contaminants	N	Managed retreat achieves objective	Y	Managed retreat achieves objective	Y
Seaham Harbour	R	To maintain facility for recreational watersport activities	Not affected	Y	Some loss of access	N	Some loss of access	N	Protected	Y	Protected	Y	Protected	Y
Port access and commercial area	HA	To maintain regional commercial port activity.	Not affected	Y	Loss of some facilities due to erosion	N	Loss of some facilities due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Chemical beach	I	To minimise the potential impact of pollution but also to minimise reliance on maintenance of future defences.	Not affected	Y	Potential contamination from quarry	N	Potential contamination from quarry	N	Not affected	Y	Extended defence would increase reliance on management.	N	Continued defence would increase reliance on management.	N

Management Area: MA09			Location: Pincushion to Chourdon Point											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Durham Coast SAC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Naturally eroding cliffs	Y	Managed eroding cliffs and coastal squeeze	Y	Managed eroding cliffs and coastal squeeze	Y						
WW II Pillbox on Blast Beach	H	To record heritage value.	Opportunity provided to record heritage value.	Y	Opportunity provided to record heritage value.	Y	Opportunity provided to record heritage value.	Y	Opportunity provided to record heritage value.	Y	Opportunity provided to record heritage value.	Y	Opportunity provided to record heritage value.	Y

Management Area: MA10			Location: Chourdon Point to Blackhall Rocks											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Hawthorn Conservation Area	H	To prevent loss of heritage value due to erosion	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
Hawthorn Viaduct	H	To maintain listed structure.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
Hawthorn Viaduct	H	To maintain rail transport link.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
Easington Area of Landscape Value	E	To maintain integrity and extent of Area of Landscape Value.	Naturally eroding cliffs	Y	Naturally eroding cliffs	Y	Naturally eroding cliffs	Y	Naturally eroding cliffs	Y	Naturally eroding cliffs	Y	Naturally eroding cliffs	Y
Shippersea Bay Railway Bridge	HA	To maintain rail transport link.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
Agricultural land	C	To protect agricultural land	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Horden Dene	E	To maintain integrity and extent of freshwater habitats.	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y
Warren House Gill grassland	E	To maintain integrity and extent of wildlife site.	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y
Castle Eden Dene	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y
Castle Eden Dene	R	To maintain access and assist with appropriate management.	Not affected	Y	Access progressively lost	N	Access progressively lost	N	Not affected	Y	Access managed	Y	Access managed	Y

Management Area: MA11		Location: Blackhall Rocks to Heugh Breakwater												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Teesmouth and Cleveland Coast IBA	E	To ensure that viable populations of nesting bird species are maintained, within the context of a dynamic coastal system	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Blackhall Rock - part of Durham Coast SSSI	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Managed natural development of coast	Y	Managed natural development of coast	Y	Managed natural development of coast	Y
Blackhall Rock - part of Durham Coast SSSI	R	To address public safety issues.	Natural development of coast	N	Natural development of coast	N	Natural development of coast	N	Managed natural development of coast ie. cave formation monitored	Y	Managed natural development of coast ie. cave formation monitored	Y	Managed natural development of coast ie. cave formation monitored	Y
Crimdon Park Caravan Site	C	To maintain the integrity of the caravan park.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion and coastal squeeze against railway line	N	Progressive loss due to erosion and coastal squeeze against railway line	N	Progressive loss due to erosion and coastal squeeze against railway line	N
Carpark	R	To maintain car parking area.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Managed partial loss of carpark	Y	Managed partial loss of carpark	Y	Managed partial loss of carpark	Y
Road	HA	To maintain access road to beach and carpark.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Durham Coast NNR	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Managed natural development of coast	Y	Managed natural development of coast	Y	Managed natural development of coast	Y

Management Area: MA11		Location: Blackhall Rocks to Heugh Breakwater												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Durham Coast SAC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Managed natural development of coast	Y	Managed natural development of coast	Y	Managed natural development of coast	Y
Teesmouth and Cleveland SPA and Northumbria SPA	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	North Sands – some loss due to coastal squeeze. Loss of rocky foreshore, Hartlepool Headland	N	Managed erosion – readjustment and recovery of habitats	Y	Managed erosion – readjustment and recovery of habitats	Y
Northumbria Coast Ramsar	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	North Sands – some loss due to coastal squeeze. Loss of rocky foreshore, Hartlepool Headland	N	Managed erosion – readjustment and recovery of habitats	Y	Managed erosion – readjustment and recovery of habitats	Y
Ponyworld and Sandhurst Bungalow, Crimdon Dene	HA	To prevent loss of residential property and sports facility due to erosion.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Hesleden-Crimdon Dene Complex	E	To maintain integrity and extent of wildlife site.	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Training of Crimdon beck could influence habitats	N	Managed natural development of coast	Y	Managed natural development of coast	Y
Crimdon Park to North Sands Bathing Beach	R	To maintain bathing beach for recreational use.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Crimdon Park to North Sands Bathing Beach	R	To maintain the beach system.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y

Management Area: MA11		Location: Blackhall Rocks to Heugh Breakwater												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Hart Warren Dunes – part of Durham Coast SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Natural development of coast	Y	Natural development of coast	Y	Natural development of coast	Y	Training of Crimdon beck could influence habitats	N	Managed natural development of coast	Y	Managed natural development of coast	Y
Hart Warren Golf Links	R	To maintain integrity of golf links.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Hart Warren Farm	HA	To prevent loss of residential property to erosion	Not affected	Y	Not affected	Y	Loss due to erosion	N	Not affected	Y	Not affected	Y	Loss due to erosion	N
WWII Pill boxes	H	To record heritage value.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Hartlepool Heritage Areas	E	To maintain appropriately vegetated area.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Britmag (CJC Chemical) works site	HA	To maintain protection of commercial activity whilst in operation.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Britmag (CJC Chemical) works site	HA	To maintain potential for development.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Works closed	Y	Works closed	Y	Works closed	Y
Tees and Hartlepool Foreshore and Wetlands SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	No affect	Y	No affect	Y	No affect	Y	No affect	Y	No affect	Y	No affect	Y
Spion Kop Landfill	I	To minimise the potential impact of pollution but also to minimise reliance on maintenance of future defences.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Spion Kop Cemetery Local Nature Reserve	H	To protect or appropriately remove bodies.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA11			Location: Blackhall Rocks to Heugh Breakwater											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Spion Kop Cemetery Local Nature Reserve	E	To maintain historical and natural value of the Local Nature Reserve.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Hartlepool agricultural land	C	To protect agricultural land.	Progressive loss due to erosion/flooding	N	Progressive loss due to erosion/flooding	N	Progressive loss due to erosion/flooding	N	Protected	Y	Protected	Y	Protected	Y
Coastal cycleway/walkway along Spion Kop cemetery frontage	R	To maintain pedestrian/cycle transport link.	Not affected	Y										
Hartlepool Headland SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N
Hartlepool Headland Ramsar	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N
Hartlepool Headland SPA	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N	Progressive loss of rocky foreshore at Hartlepool Headland	N
Hartlepool Headland Conservation Area	H	To maintain heritage value of Conservation Area.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Residential properties	HA	To protect residential properties from loss due to erosion.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA11		Location: Blackhall Rocks to Heugh Breakwater												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Commercial properties	HA	To protect commercial properties from loss due to erosion.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Hartlepool Headland Listed buildings	H	To protect listed buildings.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA12			Location: Hartlepool Bay											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Heugh Breakwater	HA	To maintain function of breakwater as a control structure. Coastal management associated with the Heugh Breakwater should not result in deterioration of navigation of small craft to Victoria Harbour.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Breakwater maintained	Y	Breakwater reduced in length	Y	Breakwater reduced in length	Y
Hartlepool Docks and Harbour SINC	E	Maintenance of natural physical processes which support key habitat and species within context of a heavily modified coast	Deterioration of defences would impact habitats	N	Deterioration of defences would impact habitats	N	Deterioration of defences would impact habitats	N	No affect	Y	No affect	Y	No affect	Y
Hartlepool Town Wall and Sandwell Gate	H	To protect the Scheduled Ancient Monument of the Town Wall.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Protected	Y	Protected	Y	Protected	Y
Victoria Harbour	C	To maintain commercial harbour facility.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Protected	Y	Protected	Y	Protected	Y
Middleton jetty to North Pier	R	Provide opportunity to improve coastal walkway/cycleway.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Protected	Y	Protected	Y	Protected	Y
West Harbour and North Pier	R	To maintain the interests and access to the sea of Tees and Hartlepool Yacht Club.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Protected	Y	Protected	Y	Protected	Y
Commercial properties at risk of flooding	HA	To protect commercial property from loss due to flooding	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Protected	Y	Protected	Y	Protected	Y
Residential properties at risk of flooding	HA	To protect residential property from loss due to flooding	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA12			Location: Hartlepool Bay											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Hartlepool Marina and Harbour	C	To maintain regeneration and commercial interests of Hartlepool.	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Protected	Y	Protected	Y	Protected	Y
Middleton Pier	R	To maintain pier.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Protected	Y	Protected	Y	Protected	Y
Network Railway line	HA	To maintain rail transport link.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Residential properties	HA	To protect residential property from loss due to flooding	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Protected	Y	Protected	Y	Protected	Y
Coast Road A178	HA	To maintain road transport link.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Carr House Sands (South Pier to Little Scar)	R	To improve access to beach	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Access managed.	Y	Access managed	Y	Access managed	Y
Carr House Sands (South Pier to Little Scar)	E	To maintain integrity of CWS.	Generally stable	Y	Generally stable	Y	Generally stable	Y	Generally stable	Y	Generally stable	Y	Generally stable	Y
Long Scar rock platform	E	To maintain integrity and extent of RIGS.	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
Residential properties at risk of flooding	HA	To protect residential property from loss due to flooding	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Progressive loss due to deterioration/flooding	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA13			Location: Tees Bay											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Little Scar	E	To maintain integrity and extent of RIGS.	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
Seaton Carew ship wreck	H	To avoid damage to Designated Wreck.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Hartlepool Submerged Forest SSSI	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site. To maintain and record exposure of the geological interest by allowing natural processes to proceed freely.	Natural processes continue	Y	Natural processes continue	Y	Natural processes continue	Y	Natural processes continue. Opportunity to record	Y	Natural processes continue. Opportunity to record	Y	Natural processes continue. Opportunity to record	Y
Residential properties	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Planned retreat. Some losses	Y	Protected along retreated alignment	Y
Commercial properties	HA	To prevent loss of commercial properties due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Planned retreat. Some losses	N	Protected along retreated alignment	Y
Seaton Sands Beach	R	To maintain bathing beach for recreational use	No change.	Y	Deterioration in beach quality due to squeeze against land use.	N	Deterioration in beach quality due to squeeze against land use.	N	Beach maintained.	Y	Beach maintained.	Y	Land use changes required to maintain width for beach retreat.	Y
Seaton Sands Beach	E	To maintain the dynamic nature of the coastline and access for observation.	Natural development	Y	Natural development	Y	Natural development	Y	Natural development. Roll back of dunes	Y	Natural development	Y	Natural development	Y
Seaton Dunes and Common SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Natural development	Y	Natural development	Y	Natural development	Y	Natural development. Roll back of dunes	Y	Natural development	Y	Natural development	Y

Management Area: MA13			Location: Tees Bay											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Seaton Dunes	E	To maintain integrity of local designated area.	Natural development	Y	Natural development	Y	Natural development	Y	Natural development. Roll back of dunes	Y	Natural development	Y	Natural development	Y
North Gare Bathing Beach	R	To maintain bathing beach for recreational use	No change.	Y	Potential space for retreat.	Y	Potential space for retreat.	Y	No change.	Y	Beach allowed room to adapt.	Y	Beach allowed room to adapt.	Y
Seaton Carew Golf Course	R	To maintain golf course.	Limited retreat	N	Progressive loss due to coastal squeeze as room for beach retreat is required.	N	Progressive loss due to coastal squeeze as room for beach retreat is required.	N	Limited retreat	N	Progressive loss due to coastal squeeze as room for beach retreat is required.	N	Progressive loss due to coastal squeeze as room for beach retreat is required.	N
North Gare Breakwater	HA	To maintain function of breakwater as a control structure.	Progressive loss due to deterioration of structure	N	Complete loss of control structure.	N	Complete loss of control structure.	N	Protected.	Y	Protected.	Y	Protected.	Y
Residential properties at risk of flooding	HA	To prevent loss of residential properties due to erosion.	Loss due to flooding.	N	Loss due to flooding.	N	Loss due to flooding.	N	Protected.	Y	Protected.	Y	Protected.	Y
Commercial properties at risk of flooding	HA	To prevent loss of commercial properties due to erosion.	Loss due to flooding.	N	Loss due to flooding.	N	Loss due to flooding.	N	Protected.	Y	Protected.	Y	Protected.	Y
Agricultural land at risk of flooding	C	To prevent loss of agricultural land due to erosion.	Loss due to flooding.	N	Loss due to flooding.	N	Loss due to flooding.	N	Protected.	Y	Possible loss	N	Possible loss	N
Hartlepool Power Station	HA	To prevent loss of Power Station due to erosion.	Minor loss and interruption of facility due to erosion.	N	Progressive loss due to erosion.	N	Progressive loss due to erosion.	N	Protected.	Y	Protected.	Y	Protected.	Y
Seal Sands SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Siltation due to deterioration of training structures	N	Siltation due to deterioration of training structures	N	Siltation due to deterioration of training structures	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N

Management Area: MA13			Location: Tees Bay											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Cowpen Marsh SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Siltation due to deterioration of training structures	N	Siltation due to deterioration of training structures	N	Siltation due to deterioration of training structures	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
Teesmouth NNR	E	Management aims to maximize populations of key waterfowl and seal species by retaining all intertidal areas, maintaining the quality of these habitats, minimizing pollution threats and reducing disturbance. Supplementary feeding and roosting sites have been created for waterfowl. Terrestrial habitats and species benefit from sand dune and grazing management. Visitors are welcomed, and observation hides, leaflets, interpretive panels are provided.	Siltation due to deterioration of training structures	N	Siltation due to deterioration of training structures	N	Siltation due to deterioration of training structures	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
Mouth of the River Tees	HA	To maintain navigable channel for port operations in River Tees. For shoreline management not to have a detrimental impact on port operations.	Siltation of channel due to failure of North Gare Breakwater.	N	Progressive siltation of channel	N	Progressive siltation of channel	N	Channel maintained by control structures and dredging.	Y	Channel maintained by control structures and dredging.	Y	Channel maintained by control structures and dredging.	Y
South Gare Lighthouse	H	To maintain listed structure.	Not affected.	Y	Not affected.	Y	Loss of listed structure due to failure of South Gare breakwater	N	South Gare breakwater and listed structure maintained	Y	South Gare breakwater and listed structure maintained	Y	South Gare breakwater and listed structure maintained	Y
South Gare Breakwater	HA	To maintain function of breakwater as a control structure.	Not affected.	Y	Not affected.	Y	Failure of South Gare breakwater at start of period	N	South Gare breakwater maintained	Y	South Gare breakwater maintained	Y	South Gare breakwater maintained	Y

Management Area: MA13			Location: Tees Bay											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Lifeboat Station	R	To maintain function of lifeboat station.	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y	Not affected.	Y
Teeside Port & associated industrial property	C	To ensure that management of the open coast does not have detrimental impact on the operation and protection of Teeside Port.	Port operations affected by siltation of channel due to failure of North Gare Breakwater.	N	Port operations affected by siltation of channel due to failure of North Gare Breakwater.	N	Port operations affected by siltation of channel due to failure of North Gare Breakwater.	N	Port operation maintained. Property protected.	Y	Port operation maintained. Property protected.	Y	Port operation maintained. Property protected.	Y
Coatham Sands/ South Gare Bathing beach	R	To maintain bathing beach for recreational use	Minor change.	Y	Deterioration in beach quality due to coastal squeeze.	N	Deterioration in beach quality due to squeeze against land use.	N	Minor change.	Y	Beach allowed room to adapt.	Y	Land use change gives opportunity for width for beach retreat.	Y
South Gare and Coatham Sands SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Affected by deterioration of training structure	N	Adapts to natural development	Y	Adapts to natural development	Y	Natural development within current context of control structures	Y	Natural development within current context of control structures	Y	Natural development within current context of control structures	Y
Redcar Rocks SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
Teesmouth and Cleveland Coast SPA	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
Teesmouth and Cleveland Coast Ramsar	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N

Management Area: MA14			Location: Coatham and Redcar											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Redcar Bathing Beach (near Redcar Rocks)	R	To maintain recreational value of bathing beach.	Beach use disrupted by failing defence.	N	Beach use disrupted by failing defence. Loss of beach width.	N	Beach use disrupted by failing defence. Loss of beach width.	N	Defence maintained.	Y	Some loss of beach width due to coastal squeeze.	Y	Further loss of beach width due to coastal squeeze.	N
Commercial Property & Residential Property - Redcar Esplanade and Borough Road	HA	To prevent loss of commercial properties due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Commercial Property & Residential Property - Redcar Esplanade and Borough Road	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Granville Terrace and The Esplanade, Redcar	R	To maintain safe use of seafront promenade.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Redcar Lifeboat Station	R	To maintain access and function of lifeboat station.	Not affected	Y	Progressive loss due to erosion. Interruption of operations.	N	Progressive loss due to erosion. Interruption of operations.	N	Protected and maintained.	Y	Protected and maintained.	Y	Protected and maintained.	Y
RNLI Zetland Lifeboat Museum	H	To maintain listed structure.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Fishing fleet	C	To maintain facility for fishing fleet.	Some deterioration.	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Maintained	Y	Maintained	Y	Maintained	Y
Coast Road	HA	To maintain road transport link.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected or not affected	Y

Management Area: MA14		Location: Coatham and Redcar												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Residential properties and schools at risk from flooding	HA	To prevent loss or damage to residential property and schools due to flooding.	Affected by flooding after failure of defences.	N	Failed defences.	N	Failed defences.	N	Protected	Y	Protected behind retreated defence	Y	Protected behind retreated defence	Y
Residential property behind The Stray	HA	To prevent loss or damage to residential property due to flooding.	Affected by flooding after failure of defences.	N	Failed defences.	N	Failed defences.	N	Protected	Y	Protected behind retreated defence	Y	Protected behind retreated defence	Y
Redcar Promenade - The Stray	R	To maintain recreational value of promenade.	Value reduced due to failure of defences.	N	Value reduced due to failure of defences.	N	Value reduced due to failure of defences.	N	Maintained	Y	Maintained at retreated alignment	Y	Maintained at retreated alignment	Y
Redcar Sands Bathing Beach	R	To maintain recreational value of bathing beach.	Minimal change	Y	Recreational value reduced by coastal squeeze	N	Beach width significantly reduced by coastal squeeze	N	Minimal change	Y	Beach allowed to retreat	Y	Beach allowed to retreat	Y
Strategic Wildlife corridor - Redcar to Saltburn	E	To maintain the connectivity of the wildlife corridor	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y

Management Area: MA15		Location: Marske and Saltburn Sands												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Fox Covert SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Cliff House	H	To maintain listed structure.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Residential Properties	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
St Germain's churchyard	H	To maintain listed structure.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Protected	Y	Protected	Y
Marske Sands Bathing Beach	R	To maintain recreational value of bathing beach.	Minimal change	Y	Progressive narrowing of beach	N	Progressive narrowing of beach	N	Minimal change	Y	Beach development controlled	Y	Beach development controlled	Y
Agricultural land	C	To prevent loss of agricultural land due to erosion.	Minimal change	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Minimal change	Y	Some loss as space for managed beach retreat required	N	Some loss as space for managed beach retreat required	N
Hazel Grove SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Minimal change	Y	Minimal change	Y	Progressive loss due to erosion	N	Minimal change	Y	Minimal change	Y	Progressive loss due to erosion	N
Beach Huts (1-20) on the lower promenade	H	To maintain listed structure.	Not affected	Y	Loss due to erosion	N	Loss due to erosion	N	No change	Y	Protected	Y	Protected	Y

Management Area: MA15			Location: Marske and Saltburn Sands											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Residential properties	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Loss due to erosion	N	Loss due to erosion	N	No change	Y	Protected	Y	Protected	Y
The Inclined Tramway (upper and lower buildings)	H	To maintain listed structure.	Not affected	Y	Loss due to erosion	N	Loss due to erosion	N	No change	Y	Protected	Y	Protected	Y
Watersports Centre	R	To retain watersports facility.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Maintained	Y	Maintained	Y	Maintained	Y
The Saltburn Pier and entrance	H	To maintain listed structure.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Maintained	Y	Maintained	Y	Maintained	Y
Fishing fleet	C	To maintain facility for fishing fleet.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Maintained	Y	Maintained	Y	Maintained	Y
Car Park adjacent to park along Saltburn Beck	R	To maintain parking facility.	Not affected	Y	Loss due to erosion	N	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Saltburn Gill SSSI and SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
A174 Coast Road	HA	To maintain the road transport link along the coast.	Not affected	Y	Loss due to erosion	N	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Saltburn Sands Beach	R	To maintain recreational value of bathing beach and access to beach.	No change	Y	Some narrowing of beach	Y	Further narrowing of beach	N	No change	Y	Some narrowing of beach	Y	Further narrowing of beach	N
Old Saltburn Conservation Area	H	To maintain integrity and extent of Conservation Area.	Not affected	Y	Loss due to erosion	N	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA16			Location: Huntcliffe											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Ship Inn and (Coastguard??) cottages	H	To maintain listed structure and function of Inn.	Not affected	Y	Loss due to erosion	N	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Cleveland Way	R	To maintain the ability to walk the coast.	Potential space for retreat.	Y	Potential space for retreat.	Y	Potential space for retreat.	Y	Potential space for retreat.	Y	Potential space for retreat.	Y	Potential space for retreat.	Y
Huntcliff and Boulby Cliffs (for nesting sea birds)	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Minimal change	Y	Minimal change	Y	Progressive loss due to erosion	Y	Minimal change	Y	Progressive loss due to erosion	Y	Progressive loss due to erosion	Y
Huntcliff Roman Signal Station	H	To record historical significance of structure.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Mineral Railway (private)	HA	To maintain function of rail transport link.	Not affected	Y	Not affected	Y	Loss due to erosion	N	Not affected	Y	Not affected	Y	Loss due to erosion	N
National Trust Land - part of the cliff and a section of Warsett Hill	E	Maintain coastal habitats and ensure space for retreat. National Trust policy favours adaptation, to allow time and space to change with the coast and work with the forces of nature.	Objective achieved	Y	Objective achieved	Y	Objective achieved	Y	Objective achieved	Y	Objective achieved	Y	Objective achieved	Y
The Guibal Fan House	H	To maintain Scheduled Ancient Monument.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Residential properties and surrounding open space	R	To manage erosion of cliffs in a safe manner.	Erosion not managed	N	Erosion not managed	N	Erosion not managed	N	Erosion to be managed	Y	Erosion to be managed	Y	Erosion to be managed	Y
Potential coastal mining area	C	To maintain operation of mine within mining rights.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Potential coastal mining area	C	To take into account potential impact of historical and current mining operations in planning defence strategies.	Objective achieved	Y	Objective achieved	Y	Objective achieved	Y	Objective achieved	Y	Objective achieved	Y	Objective achieved	Y

Management Area: MA16			Location: Huntcliffe											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Farm House	H	To maintain listed structure.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y

Management Area: MA17			Location: Skinningrove (Cattersty Sands to Hummersea Scar)											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Cattersty Ponds SINC	E	To maintain integrity and extent of Local Wildlife Trust Reserve.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
North Yorkshire and Cleveland Heritage Coast (now extended to include Skinningrove foreshore)	E	To ensure that development, including coastal defence structures does no compromise the landscape value or character of the Heritage Coast. To ensure that the biodiversity if the Heritage Coast is not threatened or lost due to Interruption of natural physical processes within the framework of Heritage coast objectives aiming to enhance conservation, recreation, beach and water quality and community interests.	Loss of Heritage features due to erosion	N	Loss of Heritage features due to erosion	N	Loss of Heritage features due to erosion	N	Opportunity for protection that is sympathetic to landscape and character.	Y	Opportunity for protection that is sympathetic to landscape and character.	Y	Opportunity for protection that is sympathetic to landscape and character.	Y
Cattersty Sands dune system SINC	E	To maintain integrity and extent of sand dune system within the context of a dynamic coastal system.	Loss of beach and dunes due to deterioration of jetty	N	Loss of beach and dunes due to deterioration of jetty	N	Loss of beach and dunes due to deterioration of jetty	N	Maintains beach levels and therefore dunes	Y	Maintains beach levels and therefore dunes	Y	Maintains beach levels and therefore dunes	Y
Skinningrove Jetty	HA	To maintain protection provided by jetty structure.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	structure maintained	Y	structure maintained	Y	Inner section protected	Y

Management Area: MA17			Location: Skinningrove (Cattersty Sands to Hummersea Scar)											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Skinningrove Jetty	HA	Not to preclude potential future development for commercial activities or other appropriate development.	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	structure maintained	Y	structure maintained	Y	Inner section protected	N
Industrial Heritage area including the jetty, slag cliffs and inclined plan area	I	To minimise the potential impact of pollution	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Progressive loss due to deterioration	N	Protected	Y	Protected	Y	Protected	Y
Car Park adjacent to park along Skinningrove Beck	R	To maintain car parking facility.	Not affected	Y	Some losses due to erosion	Y	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Skinningrove Village	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Some losses due to erosion	Y	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Skinningrove Village	H	To maintain listed structures.	Not affected	Y	Some losses due to erosion	Y	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Skinningrove Village	H	To maintain Areas of Potential Archaeological Interest.	Not affected	Y	Some losses due to erosion	Y	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Commercial fishing area	C	To maintain commercial operations.	Interruptions result from loss of jetty	N	Interruptions result from loss of jetty	N	Interruptions result from loss of jetty	N	Protected	Y	Protected	Y	Protected	Y
Hummersea Farm and Warsett Farm residential properties	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Hummersea Beach	R	To maintain access to beach.	Deterioration of access.	N	Loss of access.	N	Loss of access.	N	Access managed as coast retreats	Y	Access managed as coast retreats	Y	Access managed as coast retreats	Y

Management Area: MA17		Location: Skinningrove (Cattersty Sands to Hummersea Scar)												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
National Trust Land	E	To ensure that development, including coastal defence structures, does not compromise the landscape value or character of the coast. To ensure that the biodiversity of the coast is not threatened or lost due to interruption of natural physical processes. National Trust policy favours adaptation rather than hard defence, to allow time and space to change with the coast and work with the forces of nature.	Objective achieved through NAI	Y										

Management Area: MA18		Location: Boulby												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Boulby Alum Quarry site and works (disused), SAM	H	To maintain historic value of SAM.	Not affected	Y	Not affected	Y	Potential loss due to erosion	N	Not affected	Y	Not affected	Y	Potential loss due to erosion	N
Boulby Quarry SSSI	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Minimal change	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Minimal change	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Hunt and Boulby cliffs	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Minimal change	Y	Minimal change	Y	Progressive loss due to erosion	Y	Minimal change	Y	Minimal change	Y	Progressive loss due to erosion	Y
Boulby Barns Cottages	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N
Boulby Grange	H	To maintain listed structures.	Not affected	Y										
Boulby Grange	HA	To prevent loss of residential properties due to erosion.	Not affected	Y										
Coastguard Station	R	To maintain the function of the coastguard station.	Not affected	Y										
North York Moors IBA	E	To ensure that viable populations of nesting bird species are maintained, within the context of a dynamic coastal system	Progressive loss due to erosion	N										

Management Area: MA19		Location: Cowbar and Staithes												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Cowbar Lane	HA	To maintain vehicle access to Cowbar cottages and Cowbar side of Staithes village.	Not likely to be affected.	Y	Loss due to erosion.	N	Loss due to erosion.	N	Not likely to be affected. realign lane as necessary.	Y	May not be affected. .	Y	Policy to maintain defence.	Y
Cowbar Cottages	HA	To prevent loss of residential properties due to erosion.	Not likely to be affected.	Y	May not be affected. .	y	Potential loss due to erosion or need to realign road	N	Protected	Y	Protected	Y	Protected	y
Staithes harbour	R	To maintain harbour facility for recreational use.	Loss of facility as structures deteriorate	N	Loss of facility as structures deteriorate	N	Loss of facility as structures deteriorate	N	Protected	Y	Protected	Y	Protected	Y
Staithes harbour	H	To maintain harbour facility for commercial fishing use.	Loss of facility as structures deteriorate	N	Loss of facility as structures deteriorate	N	Loss of facility as structures deteriorate	N	Protected	Y	Protected	Y	Protected	Y
Staithes harbour	R	To maintain harbour facility for lifeboat use.	Loss of facility as structures deteriorate	N	Loss of facility as structures deteriorate	N	Loss of facility as structures deteriorate	N	Protected	Y	Protected	Y	Protected	Y
Staithes village	HA	To prevent loss of residential properties due to erosion.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Staithes village	H	To maintain integrity of Designated Area and individual listed structures.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Staithes Beach	R	To maintain recreational value of the beach.	Progressive loss due to deterioration of structures	N	Progressive loss due to deterioration of structures	N	Progressive loss due to deterioration of structures	N	Protected	Y	Protected	Y	Protected	Y
Hartie Loup	E	To maintain access for observation of scientific and educational interest.	Loss of access due to erosion	N	Loss of access due to erosion	N	Loss of access due to erosion	N	Access to be managed	Y	Access to be managed	Y	Access to be managed	Y

Management Area: MA20		Location: Staithes to Runswick Bay												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Staithes to Port Mulgrave SSSI	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Not affected	Y	Affected by sea level rise	Y	Affected by sea level rise	Y	Not affected	Y	Affected by sea level rise	Y	Affected by sea level rise	Y
Tumulus - Beacon Hill	H	To protect Scheduled Ancient Monument.	Not affected	Y										
Residential properties adjacent to the current cliff or slip slope top (including Far Rosedale, The Bungalows and Long Row)	HA	To prevent loss of residential properties due to erosion.	Not affected	Y										
Remains of Port Mulgrave ironstone mine	H	To facilitate through coastal management improved interpretation and management.	Not achieved	N	Not achieved	N	Not achieved	N	Opportunity provided within examination of this area	Y	Opportunity provided	Y	Opportunity provided	Y
Port Mulgrave Harbour	C	For shoreline management not to worsen the situation with the use of the harbour.	Deterioration of structures will affect harbour use.	N	Deterioration of structures will affect harbour use.	N	Deterioration of structures will affect harbour use.	N	Deterioration of structures will affect harbour use.	N	Deterioration of structures will affect harbour use.	N	Deterioration of structures will affect harbour use.	N
Freshwater artificial ponds adjacent to the Cleveland Way	E	Improve resource of freshwater ponds suitable for great crested newt breeding	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N

Management Area: MA20			Location: Staithes to Runswick Bay											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Rosedale cliffs - National Trust Land	E	To allow natural processes to function and resources to retreat as necessary. National Trust policy favours adaptation, to allow time and space to change with the coast and work with the forces of nature.	Achieved through NAI	Y	Achieved through NAI	Y	Achieved through NAI	Y	Achieved through NAI	Y	Achieved through NAI	Y	Achieved through NAI	Y
Lingrow Howe site	H	To record historic value of site.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected.	Y	Not affected	Y	Not affected	Y

Management Area: MA21		Location: Runswick Bay to Sandsend Ness												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Residential/ holiday homes directly above Runswick Bay	HA	To prevent loss of property due to erosion.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
North York Moors National Park Village Conservation Area	H	To maintain integrity and extent of Conservation Area.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Victoria iron works	H	To facilitate management and increased interpretation of site.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Slipway	R	To maintain facility to enable vessels to be launched.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Runswick Bay SSSI	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Not affected	Y	Affected by sea level rise	Y	Affected by sea level rise	Y	Not affected	Y	Affected by sea level rise	Y	Affected by sea level rise	Y
Runswick Bay coastal woodland /scrub area	E	To maintain integrity and extent value of woodland area.	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
WWII pillbox	H	To record historic value of site.	Need to record historic value	Y	Need to record historic value	Y	Need to record historic value	Y	Need to record historic value	Y	Need to record historic value	Y	Need to record historic value	Y
Runswick Sands Beach	R	To maintain access to beach and recreational value of beach.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Kettleness Alum works, Deepgrove, Ness End and Gaytress quarries	H	To maintain SAMs.	Not affected	Y	Not affected	Y	Potential loss due to erosion	N	Not affected.	Y	Not affected	Y	Potential loss due to erosion	N

Management Area: MA21			Location: Runswick Bay to Sandsend Ness											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Residential properties and Coastguard station at Kettleless Farm	HA	To prevent loss of residential properties due to erosion. Maintain function of coastguard station.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected.	Y	Not affected	Y	Not affected	Y

Management Area: MA22		Location: Sandsend Wyke												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Dismantled railway line (route of Cleveland Way and cycle route)	R	To maintain recreational value of walkway/cycleway.	Not affected	Y	Not affected	Y	Local discontinuity due to erosion	N	Not affected	Y	Not affected	Y	Opportunity for local realignment near Whitestone Cliff and Holms Grove	Y
Car Park	R	To maintain car parking facility.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Slipway onto beach	R	To maintain facility for launching vessels.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Upgang Beck SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not protected	N	Not protected	N	Not protected	N	Not affected	Y	Allowed to develop naturally	Y	Allowed to develop naturally	Y
Sandsend Becks residential properties.	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
A174 Coast road, Sandsend and East Row Bridges	HA	To maintain road transport link.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Alternative link needs to be investigated	Y	Alternative link needs to be investigated	Y
Sandsend Beach	R	To maintain recreational and amenity value of the bathing beach.	Not affected	Y	Loss of access	N	Loss of access	N	Not affected	Y	Access maintained but loss of beach	N	Access maintained but loss of beach	N

Management Area: MA22			Location: Sandsend Wyke											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Sandsend village	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Sandsend village	HA	To prevent loss of commercial properties due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Sandsend village	H	To maintain Conservation Area.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Foul sewer in beach	HA	To maintain sewerage to community.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Whitby Golf Course	R	To maintain recreational value of the golf course.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N

Management Area: MA23			Location: Whitby											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
West cliff SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Properties on West Cliff frontage - hotels & guesthouses	HA	To prevent loss of commercial property due to erosion.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Properties on West Cliff frontage - hotels & guesthouses	HA	To prevent loss of residential property due to erosion.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Whitby Sands Bathing Beach	R	To maintain recreational value of bathing beach.	Not affected	Y	Not affected	Y	Beach use disrupted by lowering beach levels	N	No change from existing conditions	N	Opportunity to maintain higher beach levels	Y	Opportunity to maintain higher beach levels	Y
Whitby Sands Bathing Beach	C	To ensure that defence policy does not impact detrimentally on inshore fishing.	Increased beach loss at cliff worsening fishing problem	N	Increased beach loss at cliff worsening fishing problem	N	Increased beach loss at cliff worsening fishing problem	N	No change from existing conditions	N	Opportunity to maintain higher beach levels reducing development of bar	Y	Opportunity to maintain higher beach levels reducing development of bar	Y
West Pier	HA	To maintain function of West Pier as a control structure for Whitby Sands.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
West Pier	HA	To maintain function of West Pier as a control structure for Whitby Harbour.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
East Pier	R	To maintain opportunity for improved recreational and tourism use of Pier.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA23		Location: Whitby												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
East Pier	HA	To maintain function of West Pier as a control structure for Whitby Harbour.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Whitby Harbour	R	To assess potential impact of proposed harbour works on shoreline management.	No significant affect on coastal processes	Y	No significant affect on coastal processes	Y	No significant affect on coastal processes	Y	No significant affect on coastal processes	Y	No significant affect on coastal processes	Y	No significant affect on coastal processes	Y
Whitby Harbour	C	That shoreline management policy should not have a detrimental impact on harbour operations.	Increased wave action in harbour	N	Increased wave action in harbour	N	Increased wave action in harbour	N	Maintains protection and identifies importance of spending beach	Y	Maintains protection and identifies importance of spending beach	Y	Maintains protection and identifies importance of spending beach	Y
Esk estuary	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Esk estuary	HA	To avoid increased flood risk due to shoreline management policy.	Increased wave overtopping in harbour	N	Increased wave overtopping in harbour	N	Increased wave overtopping in harbour	N	Maintains protection	Y	Maintains protection	Y	Maintains protection	Y
Tate Hill Sands and pier	C	To maintain function of spending beach within harbour.	Spending beach lost	N	Spending beach lost	N	Spending beach lost	N	Maintains protection and identifies importance of spending beach	Y	Maintains protection and identifies importance of spending beach	Y	Maintains protection and identifies importance of spending beach	Y
Residential properties behind Tate Hill Sands	HA	To prevent loss of residential properties due to erosion.	Progressive loss due to increased exposure	N	Progressive loss due to increased exposure	N	Progressive loss due to increased exposure	N	Maintains protection	Y	Maintains protection	Y	Maintains protection	Y

Management Area: MA23			Location: Whitby											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Whitby to Saltwick SSSI	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Not affected	Y	Affected by sea level rise	Y	Affected by sea level rise	Y	Not affected	Y	Affected by sea level rise	Y	Affected by sea level rise	Y
SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
Whitby Abbey cliffs	R	To address public safety threat from falling rocks.	Not affected	Y	Not affected	Y	Loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
Television mast	HA	To maintain service currently provided by television mast.	Not affected	Y	Not affected	Y	Loss due to erosion	N	Protected	Y	Protected	Y	Potential loss due to cliff weathering	N
Coastguard lookout	R	To maintain service currently provided by Coastguard lookout.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Whitby Abbey, St Mary's Church and associated grounds	H	To maintain Whitby Abbey SAM.	Not affected	Y	Not affected	Y	Loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA24			Location: Whitby to Saltwick Nab											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
National Trust land (Saltwick Nab Headland)	R	To facilitate safe management of access to the land. National Trust policy favours adaptation, to allow time and space to change with the coast and work with the forces of nature.	Allowed to develop naturally	Y	Allowed to develop naturally. Loss of access	N	Allowed to develop naturally. Loss of access	N	Allowed to develop naturally. Access to be managed	Y	Allowed to develop naturally. Access to be managed	Y	Allowed to develop naturally. Access to be managed	Y

Management Area: MA25		Location: Saltwick Nab to Hundale Point (Robin Hood's Bay)												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Saltwick Bay Beach access path	R	To maintain safe access to the beach from the Holiday Park.	Progressive loss of access due to erosion	N	Progressive loss of access due to erosion	N	Progressive loss of access due to erosion	N	Allowed to develop naturally. Access to be managed	Y	Allowed to develop naturally. Access to be managed	Y	Allowed to develop naturally. Access to be managed	Y
Saltwick Alum works	H	To maintain historical value of Alum works and provide opportunity for increased interpretation.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	SMP highlights likely timing of loss. Opportunity to record	Y	SMP highlights likely timing of loss. Opportunity to record	Y	SMP highlights likely timing of loss. Opportunity to record	Y
Whitby High Light Lighthouse and fog signal properties	HA	To prevent loss of residential property due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Robin Hoods Bay: Maw Wyke to Beast Cliff SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
Robin Hoods Bay Special Area of Conservation	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
National Trust land (Limekiln Slack, Bottom House, Raindale and Rocket Post Field)	H	National Trust policy favours adaptation, to allow time and space to change with the coast and work with the forces of nature.	Natural development	Y	Natural development	Y	Natural development	Y	Natural development	Y	Natural development	Y	Natural development	Y
Railway line (dismantled)/ cyclepath	R	To maintain character and function of path.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y

Management Area: MA25			Location: Saltwick Nab to Hundale Point (Robin Hood's Bay)											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Robin Hoods Bay Sensitive Marine Area	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N
Residential properties on cliff top at northern end of Robin Hood's Bay	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Victoria Hotel	H	To maintain heritage value of Victoria Hotel.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Robin Hood's Bay Village Conservation Area and access road	H	To maintain heritage value of Robin Hoods Bay Conservation Area.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
The Quarterdeck	H	To recognise the need for appropriate transition between defended and undefended areas.	Abrupt transition	N	Abrupt transition	N	Abrupt transition	N	SMP highlights need for transition	Y	SMP highlights need for transition	Y	SMP highlights need for transition	Y
The Sands Bathing Beach	R	To maintain recreational value of bathing beach.	Natural development	Y	Natural development	Y	Natural development	Y	Natural development	Y	Natural development	Y	Natural development	Y
Youth Hostel at Boggle Hole	HA	To prevent loss of commercial properties due to erosion.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Stoupe Bank Farm - residential property	HA	To prevent loss of residential properties due to erosion. Maintain access to the beach.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Beach at Stoupe Brow	R	Maintain access to the beach.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Access managed	Y	Access managed	Y	Access managed	Y

Management Area: MA25			Location: Saltwick Nab to Hundale Point (Robin Hood's Bay)											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Stoupebrow Cottage Farm - residential property	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
National Trust landholding and component archaeological sites (cliff top fields around Boggle Hole, the Low Peak Alum Works site, quarries and farmland, Coastal Wardens property at Peakside, an information centre shop and fields)	H	To maintain integrity and value of heritage assemblage and opportunity for recording historical value. National Trust policy favours adaptation, to allow time and space to change with the coast and work with the forces of nature.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	SMP identifies timing of loss to provide opportunity for recording historical value.	Y	SMP identifies timing of loss to provide opportunity for recording historical value.	Y
Raven Hall Hotel golf course	R	To maintain recreational golf course facility.	Not affected	Y	Some loss due to erosion	Y	Progressive loss due to erosion	N	Not affected	Y	Some loss due to erosion	Y	Progressive loss due to erosion	N
Raven Hall Hotel	HA	To prevent loss of commercial properties due to erosion.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Raven Hall Hotel	H	To prevent loss of historically significant features.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Boggle Hole bridge	R	To maintain the ability to walk the coast.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Stoupe Beck bridge	R	To maintain the ability to walk the coast.	Existing defence	Y	Existing defence	Y	Discontinuity in path due to deterioration of bridge	N	Existing defence	Y	Existing defence	Y	Realignment of path	Y

Management Area: MA25			Location: Saltwick Nab to Hundale Point (Robin Hood's Bay)											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Coastguard Station	R	To maintain the function of the coastguard station.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Ravenscar vantage point	E	To maintain the natural beauty of the landscape and access to appropriate vantage points.	Progressive loss of access	N	Progressive loss of access	N	Progressive loss of access	N	Natural development with managed access	Y	Natural development with managed access	Y	Natural development with managed access	Y
Burnt Howe	H	To maintain the SAM.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Walkway/cycleway along disused railway line.	R	To maintain pedestrian/cycleway function.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Bent Rigg coastguard lookout and WW2 nissen huts	H	To record historical value.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	SMP indicates timing of loss – opportunity to record historical value	Y	SMP indicates timing of loss – opportunity to record historical value	Y
Coastguard Station	R	To maintain the function of the coastguard station.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Hayburn Wyke SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N	Not affected	Y	Affected by sea level rise	N	Affected by sea level rise	N

Management Area: MA25			Location: Saltwick Nab to Hundale Point (Robin Hood's Bay)											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
National Trust Land (coastal woodlands from Hayburn Wyke to Iron Scar)	E	Maintain functioning woodlands and access to the resources. National Trust policy favours adaptation, to allow time and space to change with the coast and work with the forces of nature.	Natural development	Y	Natural development	Y	Natural development	Y	Natural development	Y	Natural development	Y	Natural development	Y
Iron Scar and Hundale Point to Scalby Ness SSSI	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Not affected	Y	Affected by sea level rise	Y	Affected by sea level rise	Y	Not affected	Y	Affected by sea level rise	Y	Affected by sea level rise	Y
Cloughton Salt Pans carpark	R	To maintain car parking facilities and access at Cloughton Salt Pan.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y

Management Area: MA26			Location: Hundale Point to Scalby Ness											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Coastguard lookout, Creek Point	R	To maintain function of coastguard lookout.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion. Retreat of facility.	N	Progressive loss due to erosion. Retreat of facility.	N	Progressive loss due to erosion. Retreat of facility.	N
Cliff Top House, Field Lane Burniston	H	To maintain listed structure.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Crook Ness carpark	R	To maintain car parking facilities and access at Crook Ness.	Not affected	Y	Deterioration of access to beach	N	Deterioration of access to beach	N	Not affected	Y	Car park not affected. Access managed	Y	Car park not affected. Access managed	Y
Agricultural land, Burniston	C	To minimise impact on agricultural industry.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Sewage Works, Burniston	HA	To maintain function of sewage infrastructure.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Residential property, Scalby Mills	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Sea Life Centre access road and carpark	R	To maintain access and car parking facility to seafront amenities.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y

Management Area: MA27		Location: Scarborough North Bay and Castle Cliffs												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Sea Life Centre	R	To maintain recreational value of Sea Life Centre.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
North Cliff Golf Course and clubhouse	R	To maintain recreational value of golf course.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
North Bay Promenade	R	To maintain the recreational amenity of the seafront promenade.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
North Sands Bathing Beach	R	To maintain the recreational value of the bathing beach.	Not affected	Y	Reduction in quality as levels lower and defences deteriorate.	N	Reduction in quality as levels lower and defences deteriorate.	N	Opportunity to maintain higher beach levels	Y	Opportunity to maintain higher beach levels	Y	Opportunity to maintain higher beach levels	Y
North Bay to South Toll House cliff SSSI	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Affected by foreshore defence	N	Affected by foreshore defence and sea level rise	N	Affected by foreshore defence and sea level rise	N	Affected by defence	N	Affected by foreshore defence , cliff stabilisation sea level rise	N	Affected by foreshore defence , cliff stabilisation sea level rise	N
Scarborough SINC (The Holms)	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y
Alexandra and Clarence Garden area	R	To maintain opportunity for environmental enhancement.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y
Properties behind Clarence Gardens	HA	To prevent loss of residential properties due to erosion.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y
Properties behind Clarence Gardens	HA	To prevent loss of commercial properties due to erosion.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y
Royal Albert Rd and Marine Drive coast roads	HA	To maintain road transport link.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y

Management Area: MA27			Location: Scarborough North Bay and Castle Cliffs											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Castle & walls	H	To maintain the SAM.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y
Beacon site	H	To maintain the SAM.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y
St Marys Church	H	To maintain the SAM.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y
Roman Signal Station	H	To maintain the SAM.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y
Iron age settlement site	H	To maintain the SAM.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y
Scarborough Borough Council Conservation Area	H	To maintain the heritage value of the Conservation Area.	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y	Protected	Y

Management Area: MA28		Location: Castle Cliffs to White Nab												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Harbour & infrastructure	C	To ensure shoreline management does not have an adverse affect on the operation of the harbour.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
East Pier	HA	To maintain function of pier as control structure for South Bay.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Scarborough RNLi Lifeboat Station	R	To maintain function of lifeboat station.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Foreshore Road	HA	To maintain road transport link.	Progressive loss due to flooding	N	Progressive loss due to flooding	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
South Sands Bathing Beach	R	To maintain recreational value of the bathing beach.	Not affected	Y	Not affected	Y	Reduction in quality as levels lower and defences deteriorate.	N	Not affected	Y	Not affected	Y	Opportunity to maintain higher beach levels	Y
Commercial properties	HA	To prevent loss of commercial properties due to erosion.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
Tourism infrastructure/ development (theatre etc)	R	To prevent loss of recreational amenity of tourist infrastructure due to erosion.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
Scarborough Borough Council Conservation Area	H	To maintain the heritage value of the Conservation Area.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
Spa Complex, cliff railway and promenade	H	To maintain the character and function of the Spa Complex.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y

Management Area: MA28			Location: Castle Cliffs to White Nab											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Spa Road widening	I	To assess potential impact of proposed Spa Road widening works on shoreline management.	Not possible	N	Not possible	N	Not possible	N	Confirmed not to have a significant impact	Y	Confirmed not to have a significant impact	Y	Confirmed not to have a significant impact	Y
Scarborough South Bay Beach - Valley Bridge southwards towards Holbeck and Cornelian	R	To maintain characteristic value of the beach.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
SINC, South Cliff Gardens	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Protected	Y	Protected	Y	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
The Grand Hotel	H	To prevent loss of the heritage structure due to erosion.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
Residential properties at South Cliff	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Protected	Y
South Cliff Golf Course	R	To maintain recreational value of golf course.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Walking path on seaward edge of golf course	R	To maintain ability to walk the coast.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Managed retreat	Y	Managed retreat	Y
Yorkshire Water Sewage Pumping station, overflow pipeline out to sea and McCains pipeline out to sea.	HA	To maintain sewerage service to community.	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N	Not affected	Y	Not affected	Y	Progressive loss due to erosion	N

Management Area: MA29			Location: White Nab to Cayton Bay											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Coast Road A165	HA	To maintain road transport link.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Cayton, Cornelian and South Bays SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N
WWII pillbox, Cornelian Bay	H	To record heritage value.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Opportunity to record heritage value	Y	Opportunity to record heritage value	Y	Opportunity to record heritage value	Y
Residential properties at Knipe Point and Osgodby	HA	To prevent loss of residential properties due to erosion.	At risk	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	At risk	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N
National Trust Land (Osgodby/Knipe Points)	E	Maintain integrity of heritage features, access to site and also ensure health and safety issues are addressed.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Cayton Sands Bathing Beach and associated surf shop	R	To maintain recreational value of bathing beach and suitable access.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Access maintained	Y	Access maintained	Y	Access maintained	Y
The Beach House (Old Pump House)	HA	To prevent loss of residential property due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Protected in association with access	Y	Not specifically protected	N
Cayton Village Caravan Park	C	To maintain integrity of caravan park and access to beach.	Not affected	Y	Not affected	Y	Some loss due to erosion. Loss of access	N	Not affected	Y	Not affected	Y	Some loss due to erosion. Access maintained	Y
Residential properties behind Killerby Cliff	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Not affected	Y	Some loss due to erosion.	N	Not affected	Y	Not affected	Y	Some loss due to erosion.	N
WWII pillbox	H	To record heritage value.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Opportunity to record heritage value	Y	Opportunity to record heritage value	Y	Opportunity to record heritage value	Y

Management Area: MA30		Location: Cayton Bay to Filey Brigg												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Gristhorpe Bay and Red Cliff SSSI	E	To maintain or restore natural or semi-natural levels of accretion or erosion in the locality of the site.	Progressive loss due to erosion	Y										
Gristhorpe Cliffs holiday parks	C	To maintain integrity of caravan park facility and safely manage continued erosion.	Not affected	Y	Not affected	Y	Some loss due to erosion.	N	Not affected	Y	Not affected	Y	Managed loss due to erosion.	Y
National Trust Land (cliff top field at Newbiggin Farm)	R	Ensure clifftop grasslands are able to retreat and are not lost under defence structures	Not affected	Y										
Coastal footpath, Care Nazz, Filey Brigg	R	To maintain ability to safely walk the coast.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Managed retreat of path	Y	Managed retreat of path	Y
Filey Brigg (SSSI)	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Progressive loss due to erosion	N										
Filey Brigg (SSSI)	R	To ensure continued access to the site in a sustainable manner	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Managed retreat of path	Y	Managed retreat of path	Y

Management Area: MA31			Location: Filey Brigg to Muston Sands											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Roman Signal Station	H	To maintain the SAM.	Not affected	Y	Not affected	Y	Potential loss due to erosion	N	Not affected	Y	Not affected	Y	Potential loss due to erosion	N
Filey Brigg Ponds (Countryside Stewardship Scheme for Wildlife)	E	To maintain pond habitat for wildlife.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Sailing Club	R	To maintain facility for recreational sailing.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Filey Sands Beach	R	To maintain recreational value of the bathing beach.	Not affected	Y	Lowering beach levels.	N	Lowering beach levels.	N	Not affected	Y	Opportunity to maintain higher beach levels	Y	Opportunity to maintain higher beach levels	Y
Filey Sands Beach	I	To assess impact of loss of sand from Filey Bay system.		N		N		N	Monitoring	Y	Monitoring	Y	Monitoring	Y
Miniature Golf Course	R	To maintain miniature golf recreational facility.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Cobles Landing	C	To maintain boat hardstand and launching facility.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Cobles Landing	H	To maintain heritage value of Coble Landing.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Protected	Y	Protected	Y	Protected	Y
Northcliffe Lodge, Mitford Street	H	To maintain listed structure.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
The Lodge and Coach House, Clifford Street	H	To maintain listed structure.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y

Management Area: MA31			Location: Filey Brigg to Muston Sands											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
SBC Conservation Area	H	To maintain heritage value of conservation area.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Protected	Y	Protected	Y
Residential properties on The Crescent	HA	To prevent loss of residential properties due to erosion.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Commercial properties on The Beach Road	HA	To prevent loss of commercial properties due to erosion.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Protected	Y	Protected	Y
Foul sewer within the beach, currently buried	HA	To maintain sewerage services to community.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y

Management Area: MA32		Location: Muston Sands to Speeton												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Filey Golf Course	R	To maintain the recreational value of the golf course.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Leisure Complex and Caravan Park Flat Cliff	C	To maintain integrity of caravan park facility and safely manage continued erosion.	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Protection during development of managed retreat	Y	Managed retreat	Y	Managed retreat	Y
Leisure Complex and Caravan Park Flat Cliff	E	To advise on recession rates for development planning.	Not achieved	N	Not achieved	N	Not achieved	N	Objective achieved in SMP	Y	Objective achieved in SMP	Y	Objective achieved in SMP	Y
Great Crested Newt Habitat	E	To maintain habitat for Great Crested Newt.	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Residential properties at Flat Cliff and access road	HA	To prevent loss of residential properties due to erosion/slippage. To maintain safe access to residential properties.	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Protection during development of evacuation plan	Y	No further defence	N	No further defence	N
Yorkshire Water Pumping Station	HA	Define risk to pumping station and address sustainability issues.	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Protection during development of evacuation plan	Y	No further defence	N	No further defence	N
Flat Cliffs Sewer infrastructure	HA	To maintain sewerage service to community.	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Protection during development of evacuation plan	Y	No further defence	N	No further defence	N
Hunmanby Sands Beach	R	To maintain recreational value of the bathing beach.	Natural development	Y	Natural development	Y	Natural development	Y						

Management Area: MA32		Location: Muston Sands to Speeton												
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Hunmanby Sands Beach	I	To assess impact of loss of sand from Filey Bay system.	No assessment	N	No assessment	N	No assessment	N	Monitoring to assess impact	Y	Monitoring to assess impact	Y	Monitoring to assess impact	Y
Hunmanby Sands Beach	R	To maintain safe access to the beach.	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Potential catastrophic loss due to cliff failure	N	Protection during development of managed retreat	Y	Managed retreat	Y	Managed retreat	Y
Residential properties at Hunmanby Gap (Gap Road)	HA	To prevent loss of residential properties due to erosion.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Managed retreat. Some losses due to erosion	N	Managed retreat. Some losses due to erosion	N
SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N						
Reighton Sands Holiday Park	C	To maintain integrity of caravan park.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Managed retreat. Some losses due to erosion	N	Managed retreat. Some losses due to erosion	N	Managed retreat. Some losses due to erosion	N
Reighton Sands Bathing Beach	R	To maintain recreational value of bathing beach.	Natural development	Y	Natural development	Y	Natural development	Y						
Coastal path	R	To maintain ability to walk coast.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Space available to retreat.	Y	Space available to retreat.	Y	Space available to retreat.	Y

Management Area: MA33			Location: Speeton to Flamborough Head											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
Danes Dyke	H	To maintain the SAM.	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y	Not affected	Y
Beach access to Thornwick Bay	R	To maintain safe access to beach.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Access managed	Y	Access managed	Y	Access managed	Y
North Landing	C	To maintain ability for commercial fishing activities to continue.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Local protection permitted	Y	Local protection permitted	Y	Local protection permitted	Y
North Landing	R	To maintain recreational value of bathing beach.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Local protection permitted	Y	Local protection permitted	Y	Local protection permitted	Y
Golf Course	R	To maintain recreational value of golf course.	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Old lighthouse and associated buildings at Flamborough Head	H	To maintain the SAM.	To be assessed		To be assessed		To be assessed		To be assessed		To be assessed		To be assessed	
Flamborough Head SSSI	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Flamborough Head cSAC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N
Special Protection Area - Flamborough Head and Bempton Cliffs	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Progressive loss due to erosion	Y	Progressive loss due to erosion	Y	Not affected	Y	Progressive loss due to erosion	Y	Progressive loss due to erosion	Y

Management Area: MA33			Location: Speeton to Flamborough Head											
Feature	Theme	Objective	No Active Intervention						Preferred Plan					
			Up to 2025		Up to 2055		Up to 2105		Up to 2025		Up to 2055		Up to 2105	
SINC	E	To maintain or enhance the condition or integrity of the site within the context of a dynamic coastal system	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N	Not affected	Y	Progressive loss due to erosion	N	Progressive loss due to erosion	N