
Appendix A to Executive Report April 2015: River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy

Location Maps, Strategic Option Summary and Option Development Unit Detail

Preferred Strategic Options

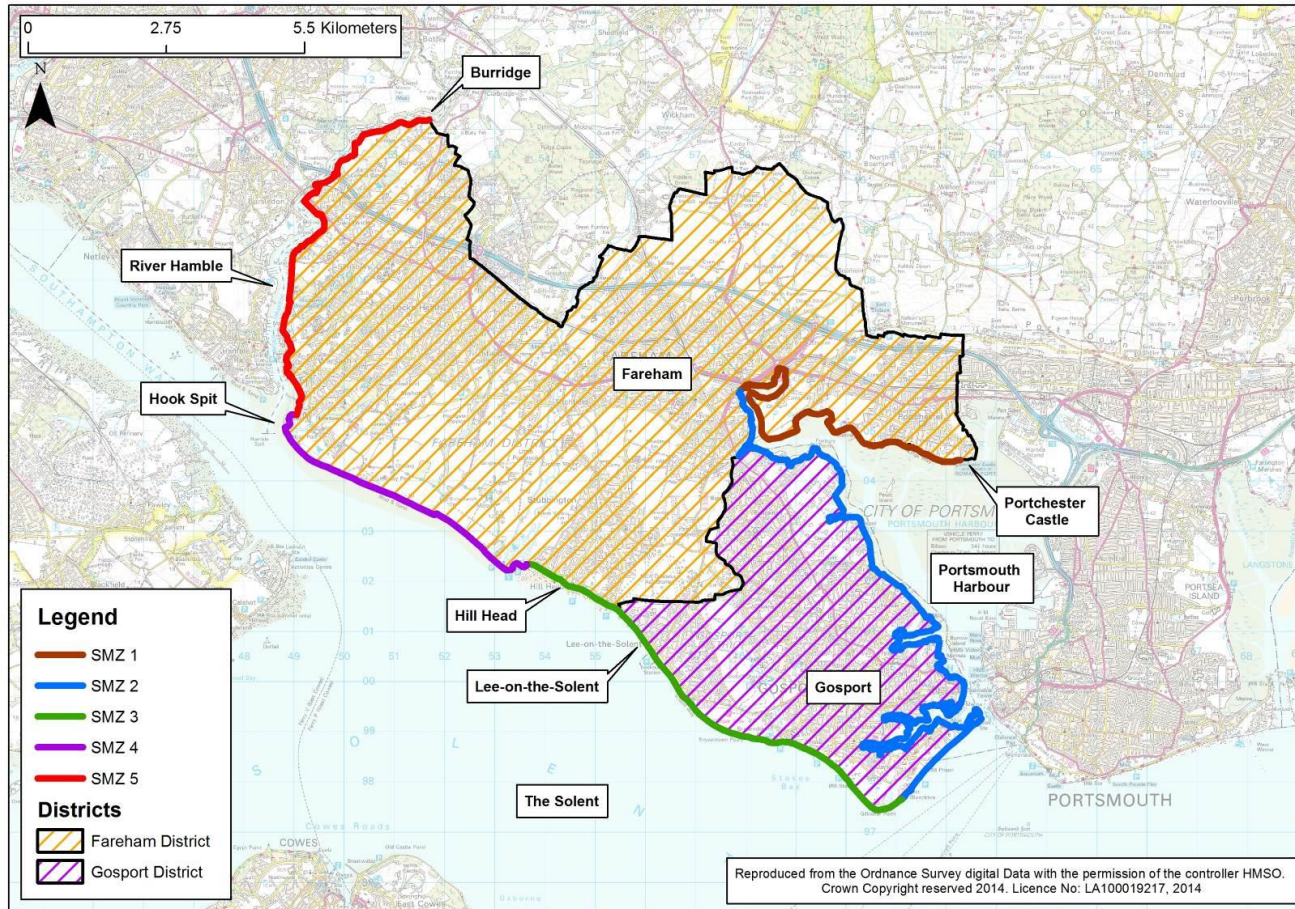


Figure 1: Strategy Management Zones (SMZ's)

Table 1. Strategy Management Zone Summary

Management Zone	1	2	3	4	5
Name	North Portsmouth Harbour	Fareham and Gosport (Portsmouth Harbour west)	Stokes Bay and Lee on the Solent	Titchfield Haven to Hook Lake	River Hamble East Bank
Geographic Extent	Hospital Lane to Upper Quay)	(Upper Quay to Fort Monckton)	Fort Monckton to Hill Head Sailing Club	Hill Head Sailing Club to Warsash Maritime College	Warsash Maritime College to Eversdown Copse)
Option Development Units	ODU 1 to ODU6	ODU 7 – ODU 20	ODU 21 & 22	ODU 23 to ODU 25	ODU 26 to ODU 29
SMP Policy	Hold the Line	Hold the Line	Hold the Line	Mixed Hold the Line, No Active Intervention and Managed Realignment	Mixed Hold the Line and No Active Intervention
Zones Characterised by (Common themes / issues)	<ul style="list-style-type: none"> • Consistent coastal processes (estuarine, low wave energy (typically) • Coastal Access • Mainly residential and recreational land use • flood and erosion risk – localised becoming more significant over time • potentially contaminated land • environmentally designated foreshore 	<ul style="list-style-type: none"> • Consistent coastal processes (estuarine, very sheltered) • Very low erosion risk • Significant flood risk pockets from present day • Mixed mainly urban frontages (MOD interspersed) • Regeneration opportunities • environmentally designated foreshore 	<ul style="list-style-type: none"> • Open Coast / beaches • Coherent littoral processes unit • Moderate wave energy • Erosion risk and limited flood risk to assets • Recreational / tourism usage • environmentally designated habitats 	<ul style="list-style-type: none"> • Environmentally designated habitats with Enhancement Opportunities • Open Coast / beaches • Rural • Few defences • Low / Moderate wave energy • Few properties at risk of flooding or erosion • Coastal Access requirements • Leisure / recreation use 	<ul style="list-style-type: none"> • Open Coast / beaches • Eroding cliffs • Low / Moderate wave energy • Estuarine / Sheltered • Low / wave energy • Localised flood risk issues • Low erosion • Coastal access / recreation usage • Environmentally designated habitats

Option development unit detail beneath overarching Strategic options

Strategy Management Zone 1 – North Portsmouth Harbour (ODUs 1- 6)

Delay sustain – maximise life of existing defences and then sustain minimum 1:100 year SoP (phased) from 2030, with environmental improvements to currently eroding former landfill sites

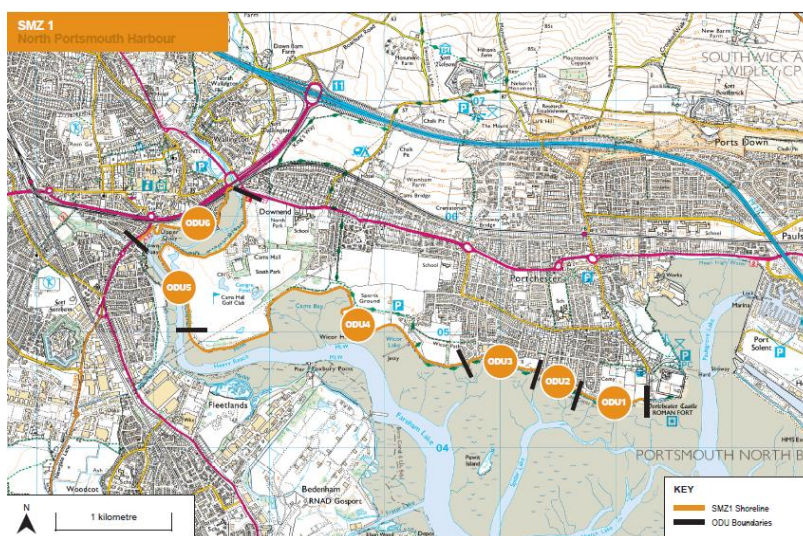


Figure 2. Strategy Management Zone 1 overview (Reproduced from the Ordnance Survey digital data with the permission of the controller HMSO. Crown Copyright reserved 2014. Licence No. LA 100019217, 2014)

		ODU 1	ODU 2	ODU 3	ODU 4	ODU 5	ODU 6
2015-2030	Works	Maintain	Maintain	Maintain	Plan environmental improvement and work to unlock funding to implement remediation or protection by 2030	Do Nothing	Maintain
	Notes	-	-	-	-	-	-
2030-2060	Works	Maintain	Setback flood wall/crest raising/seawall	Setback flood wall/crest raising/seawall	Seawall or remediation scheme	Do Nothing	Maintain
	Notes	-	Approx. 300m long. Further details to be investigated during scheme appraisal	Approx. 650m long. Further details to be investigated during scheme appraisal	Approx. 3500m long. Further details to be investigated during scheme appraisal	-	-
2060-2115	Works	Setback flood wall/crest raising/seawall	Maintain	Maintain	Maintain	Do Nothing	Setback flood wall/crest raising/seawall
	Notes	Approx. 270m long. Details to be investigated during scheme appraisal	NA	NA	NA	NA	Approx. 1230m long. Further details to be investigated during scheme appraisal

Table 1. The measures required in each ODU to implement the preferred strategic option in SMZ 1.

Strategy Management Zone 2 –Fareham and Gosport including creeks (ODUs 7- 20)

Sustain minimum 1:100 year flood SoP (phased) – Maintain existing defences, but implement new defences as required to maintain a minimum 1:100 year standard of protection against flooding. Implement new defences to prevent key assets / properties from eroding.

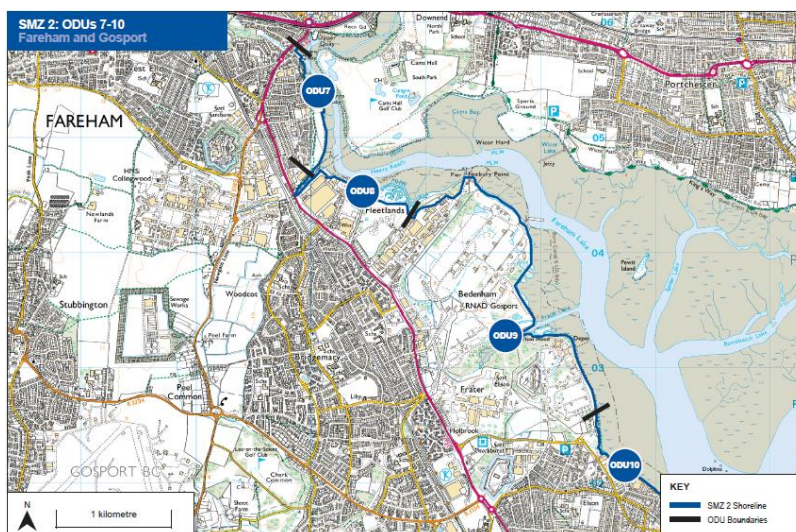


Figure 3. Strategy Management Zone 2 overview (ODUs 7-10) (Reproduced from the Ordnance Survey digital data with the permission of the controller HMSO. Crown Copyright reserved 2014. Licence No. LA 100019217, 2014)

		ODU 7	ODU 8	ODU 9 (MOD)	ODU 10	ODU 11	ODU 12 (MOD)	ODU 13
2015-2030	Works	Earth embankment + PLP	Maintain	Flood wall	Maintain	Flood wall (setback)	Maintain	Maintain
	Notes	Approx. length of 500m. Further details to be investigated during scheme appraisal	-	Approx. length of 2500m.	-	Approx. length of 450m. Further details to be investigated during scheme appraisal	-	-
2030-2060	Works	Maintain	Maintain	Maintain	Maintain	Maintain	Maintain	Maintain
	Notes	-	-	-	-	-	-	-
2060-2115	Works	Upgrade / Improve	Maintain	Upgrade / Improve	Flood wall (crest raising)	Upgrade / Improve	Maintain	Flood wall (crest raising)
	Notes	Details to be investigated during scheme appraisal	-	Details to be investigated during scheme appraisal	Approx. length of 1470m. Further details to be investigated during scheme appraisal	Details to be investigated during scheme appraisal	-	Approx. length of 540m. Further details to be investigated during scheme appraisal

Table 3. The measures required in each ODU to implement the preferred strategic option in SMZ 2.

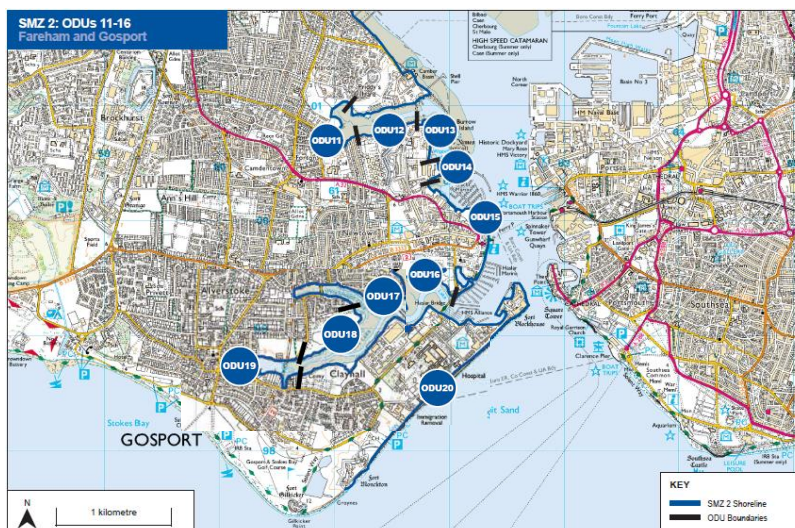


Figure 4. Strategy Management Zone 2 overview (ODUs 11-20) (Reproduced from the Ordnance Survey digital data with the permission of the controller HMSO. Crown Copyright reserved 2014. Licence No. LA 100019217, 2014)

		ODU 14	ODU 15	ODU 16	ODU 17	ODU 18	ODU 19	ODU 20
2015-2030	Works	Flood wall (setback)	PLP	Maintain	Flood wall (setback) + PLP	Maintain Natural Defence	Flood wall	Flood wall
	Notes	Approx. length of 350m. Further details to be investigated during scheme appraisal	-	-	Approx. length of 580m. Further details to be investigated during scheme appraisal	-	Approx. length of 280m. Further details to be investigated during scheme appraisal	Approx. length of 400m. Further details to be investigated during scheme appraisal
2030-2060	Works	Maintain	Flood wall	Maintain	Maintain	Maintain Natural Defence	Maintain	Maintain
	Notes	-	Approx. length of 1480m. Further details to be investigated during scheme appraisal	-	-	-	-	-
2060-2115	Works	Upgrade / Improve	Maintain	Earth embankment (setback)	Upgrade / Improve	Maintain Natural Defence	Upgrade / Improve	Upgrade / Improve
	Notes	Details to be investigated during scheme appraisal	-	Approx. length of 800m.	Details to be investigated during scheme appraisal	-	Details to be investigated during scheme appraisal	Details to be investigated during scheme appraisal

Table 4. The measures required in each ODU to implement the preferred strategic option in SMZ 2.

Strategy Management Zone 3 – Open Coast Hold the Line (ODUs 21 and 22)

Maintain protection – Undertake scheduled maintenance of the beaches and defences and ensure current protection is maintained. The SoP against flooding will fall in the longer term due to Sea Level Rise.

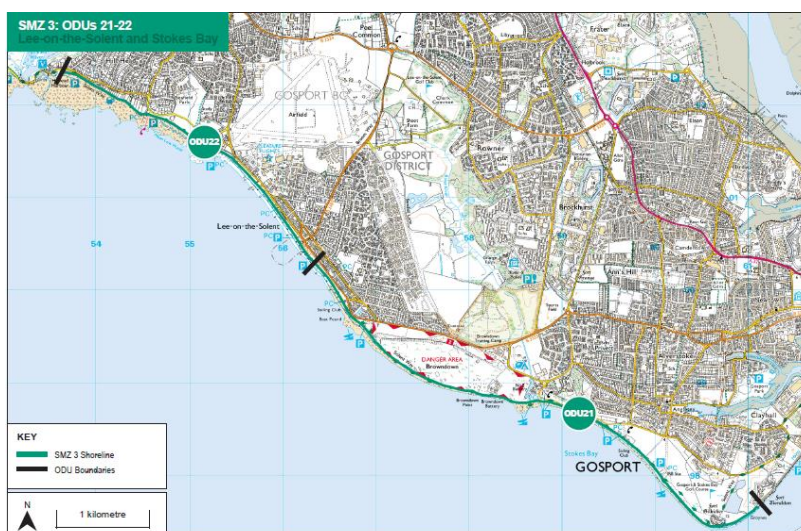


Figure 5. Strategy Management Zone 3 overview (Reproduced from the Ordnance Survey digital data with the permission of the controller HMSO. Crown Copyright reserved 2014. Licence No. LA 100019217, 2014)

		ODU 21	ODU 22
2015-2030	Works	Beach management (scheduled recycling and maintenance)	Beach management (scheduled recycling and maintenance)
	Notes	-	-
2030-2060	Works	Beach management (scheduled recycling and maintenance)	Beach management (scheduled recycling and maintenance)
	Notes	-	-
2060-2115	Works	Beach management (scheduled recycling and maintenance) and Groyne upgrades	Beach management (scheduled recycling and maintenance) and Groyne upgrades
	Notes	Capital renourishment to be considered subject to existing beach performance and sea level rise	Capital renourishment to be considered subject to existing beach performance and sea level rise

Table 5. The measures required in each ODU to implement the preferred strategic option in SMZ 3.

Strategy Management Zone 4 – Open Coast HTL / NAI / MR (ODU 23 to 25)

Allow natural processes to continue, but sustain protection to the environmentally important sites of Hook Lake and Titchfield Haven and seek to create habitat through regulated tidal exchange at Hook Lake (phased).



Figure 6. Strategy Management Zone 4 overview (Reproduced from the Ordnance Survey digital data with the permission of the controller HMSO. Crown Copyright reserved 2014. Licence No. LA 100019217, 2014)

		ODU 23	ODU 24	ODU 25
2015-2030	Works	Maintain	No Active Intervention (private maintenance permitted)	Maintain
	Notes	-	-	-
2030-2060	Works	Seawall and crest raising	No Active Intervention (private maintenance permitted)	Flood wall and sluice gate – regulate tidal exchange
	Notes	Approx. 1050m long.	-	Approx. 500m long.
2060-2115	Works	Maintain	No Active Intervention (private maintenance permitted)	Maintain
	Notes	-	-	-

Table 6. The measures required in each ODU to implement the preferred strategic option in SMZ 4.

Strategy Management Zone 5– Hamble Estuary (ODUs 26 to 29)

Do Minimum until 2060, but with Solent Way footpath adaptation from 2030, then sustain a minimum 1:100 flood SoP at key flood risk locations. Maximise life of existing defences managing flood risk with local measures and footpath adaptation from 2030, then provide minimum 1:100 year SoP.



Figure 7. Strategy Management Zone 5 overview (ODUs 26-27) (Reproduced from the Ordnance Survey digital data with the permission of the controller HMSO. Crown Copyright reserved 2014. Licence No. LA 100019217, 2014)

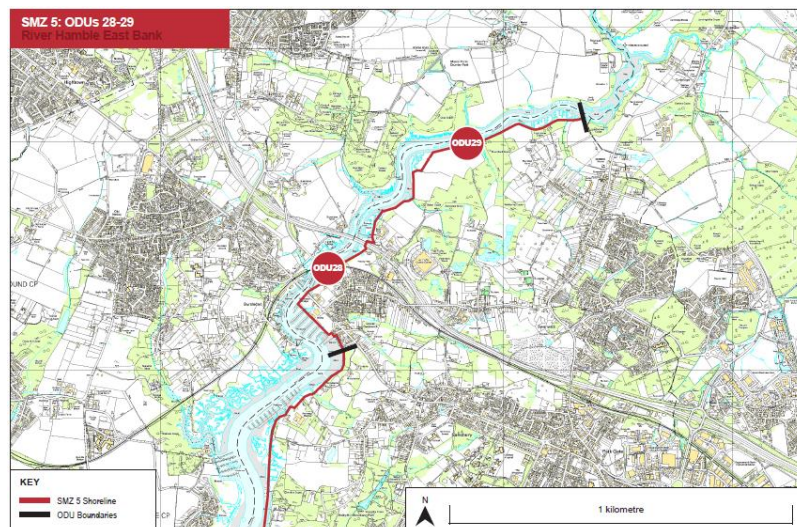


Figure Error! No text of specified style in document. Strategy Management Zone 5 overview (ODUs 28-29) (Reproduced from the Ordnance Survey digital data with the permission of the controller HMSO. Crown Copyright reserved 2014. Licence No. LA 100019217, 2014)

Preferred Strategic Options

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		ODU 26	ODU 27	ODU 28	ODU 29
2015-2030	Works	PLP	Maintain	PLP	No Active Intervention
	Notes	-	-	-	-
2030-2060	Works	Maintain	Footpath adaption	Maintain	No Active Intervention
	Notes	-	-	-	-
2060-2115	Works	Flood wall (crest raising)	Maintain	Flood wall (crest raising)	No Active Intervention
	Notes	Approx. 420m long. Further details to be investigated during scheme appraisal	NA	Approx. 790m long. Further details to be investigated during scheme appraisal	NA

Table 7. The measures required in each ODU to implement the preferred strategic option in SMZ 5.