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C5 SUPPORTING INFORMATION

C5.1 Introduction and overview

This section details the supporting information produced for the SMP to inform the baseline scenario assessment in Appendix C. In order to develop feasible strategic options for the North Solent shoreline, there is a requirement to understand the implications and consequences of the following 'No Active Intervention' and 'With Present Management' policy options.

- 'No Active Intervention' (NAI) policy scenario, in which there is no expenditure on maintaining or improving existing coastal and flood defences throughout the North Solent SMP area, and that therefore defences will fail at a time dependent upon their residual life and the condition of the fronting beaches and inter-tidal areas.
- With Present Management' (WPM) policy scenario, which considers that all existing defence practices are continued, and that defences are maintained to provide a similar level of protection to that provided at present. In some cases this will require considerable improvement to existing defences to maintain their integrity and effectiveness; presently redundant structures do not form part of this analysis.

This section presents the tidal flooding, saltmarsh evolution and coastal erosion mapping analysis which supports development of these baseline scenarios. More specifically, the North Solent SMP assessments used a high level analysis to identify properties potentially at risk from coastal erosion and tidal flooding. The National Property Dataset (2005) was used, under licence from the EA, to determine the number and location of residential and commercial properties at risk from erosion and/or tidal flooding. Each property with a postal address within the NPD was represented by a point (please note that outbuildings, such as warehouses, barns, etc that do not have a postal address assigned to them are not included within the NPD). Properties with a single address point but with multiple occupancies, i.e. blocks of flats, were identified within the attribute tables and have been included in the SMP assessments.

Only those property points from the NPD that fell within the erosion risk zones were included in the total number of properties, including multiple occupancies. If a property point fell landward of the 50-100yr erosion zone, this was not included in the totals. Aerial photography was not used as a base layer. Therefore, at the SMP scale of assessment the total number of properties potentially at risk from erosion and flooding will be underestimated. Flood and Coastal Erosion Risk Management Strategies will provide more accurate totals and valuations for the properties at risk

C5.2 Tidal flooding

C5.2.1 Tidal flooding method

The aim of the tidal flooding analysis was to demonstrate the number of properties at risk from flooding now and in 100 years time assuming no defences.

The following data was collated and inserted into a GIS; the 2007 EA 1:200 year floodzone map 3 for the North Solent, the 2108 EA 1:200 year flood risk area for West Sussex and the 2115 Partnership for Urban South Hampshire (PUSH) 1:200 year Strategic Flood Risk Assessment. Overlaying this information onto the National Property Dataset (2005) base map enabled a comparison to be made between the number of properties at risk from tidal flooding now and in 100 years time for each Local Authority, and for each affected Ward.

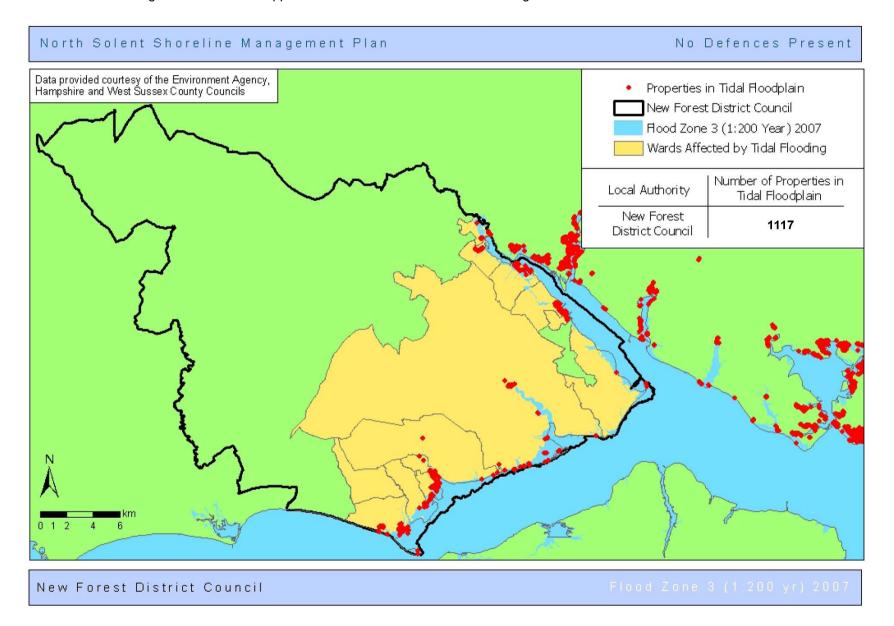
C5.2.2 Tidal flooding maps and tables per council ward

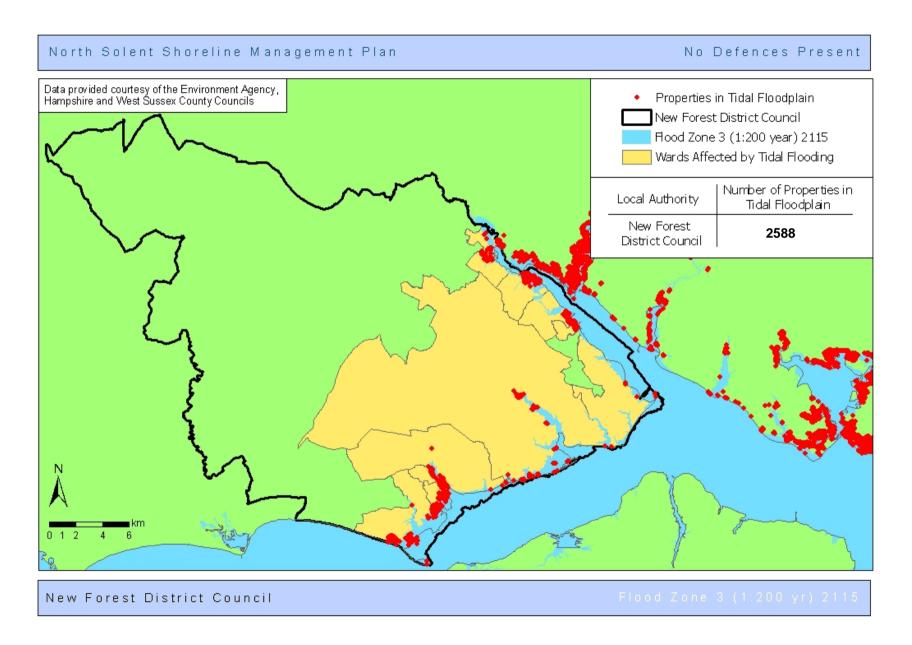
The following tables and maps present the total number and type of properties per Council, potentially within the tidal floodplain, assuming No Defences, for 2007 and 2115.

Total per Council	-	operties in tidal 1 in 200 year event	Com	mercial	Residential		
	2007	2115	2007	2115	2007	2115	
New Forest District	1,117	2,588	273	427	844	2,161	
Test Valley Borough	0	0	0	0	0	0	
Southampton City	2,373	6,581	644	1,345	1,729	5,236	
Eastleigh Borough	103	140	82	73	21	67	
Winchester City	0	4	0	1	0	3	
Fareham Borough	632	1,894	106	258	526	1,636	
Gosport Borough	952	3,702	92	308	860	3,394	
Portsmouth City	15,756	28,489	1,340	2,010	14,416	26,479	
Havant Borough	1,754	3,235	136	166	1,618	3,069	
Chichester District	2,207	4,772	94	189	2,113	4583	
Total	24,894	51,405	2,767	4,777	22,127	46,628	

Table C5.1: Total number and type of properties per Council, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115

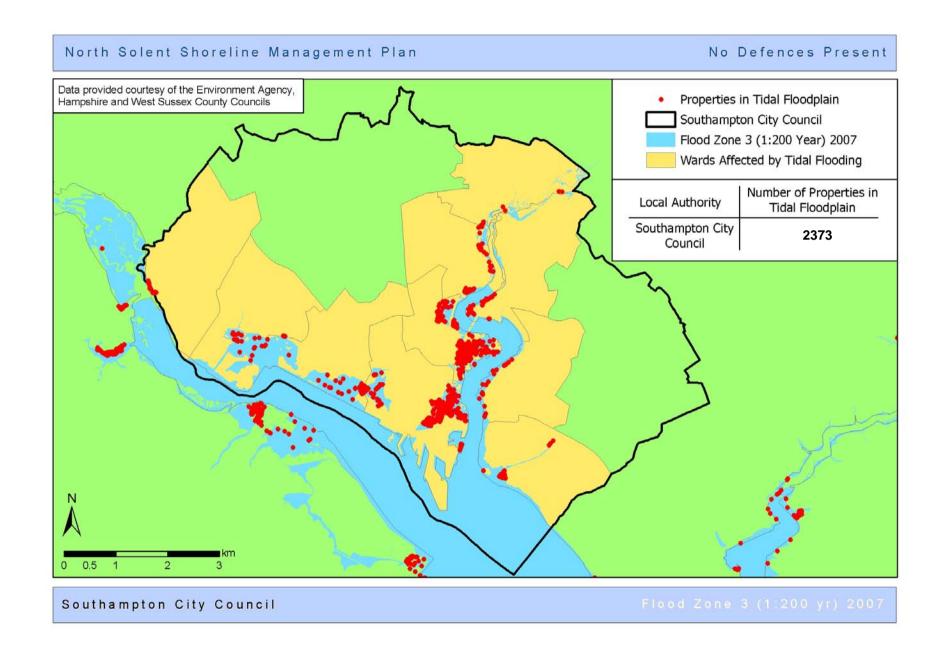
Eastleigh Borough Council have fewer commercial properties in the floodplain in 2115 compared with 2007 because the floodplain maps for 2115 were derived from modelling of Lidar data, and are of a higher resolution and more accurate than those produced for 2007, which were derived from coarser models; therefore, the 2007 flood zone maps includes areas of high ground, which are excluded in the flood maps of 2115.

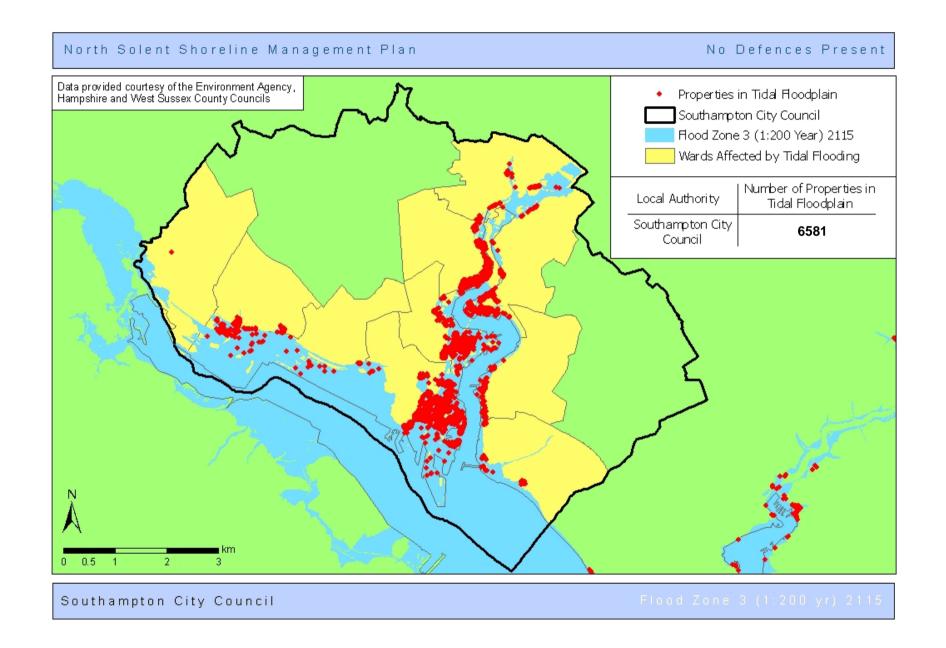




Local Authority	Electoral Ward	Ward Number of properties in tidal flood-plain from a 1 in 200 year event			Commercial		Residential	
		2007	2115	2007	2115	2007	2115	
	Boldre & Sway	4	33	1	2	3	31	
	Brockenhurst & Forest South East	30	80	2	7	28	73	
	Buckland	0	89	0	3	0	86	
	Dibden and Hythe East	175	459	136	189	39	270	
New	Fawley, Blackfield & Langley	0	6	0	3	0	3	
Forest District	Hordle	0	2	0	0	0	2	
Council	Hythe West & Langdown	192	381	3	6	189	375	
	Lymington Town	126	527	27	51	99	476	
	Marchwood	327	316	69	69	258	247	
	Milford	148	258	14	37	134	221	
-	Pennington	13	20	7	9	6	11	
	Totton East	18	107	10	44	8	63	
	Totton South	84	310	4	7	80	303	

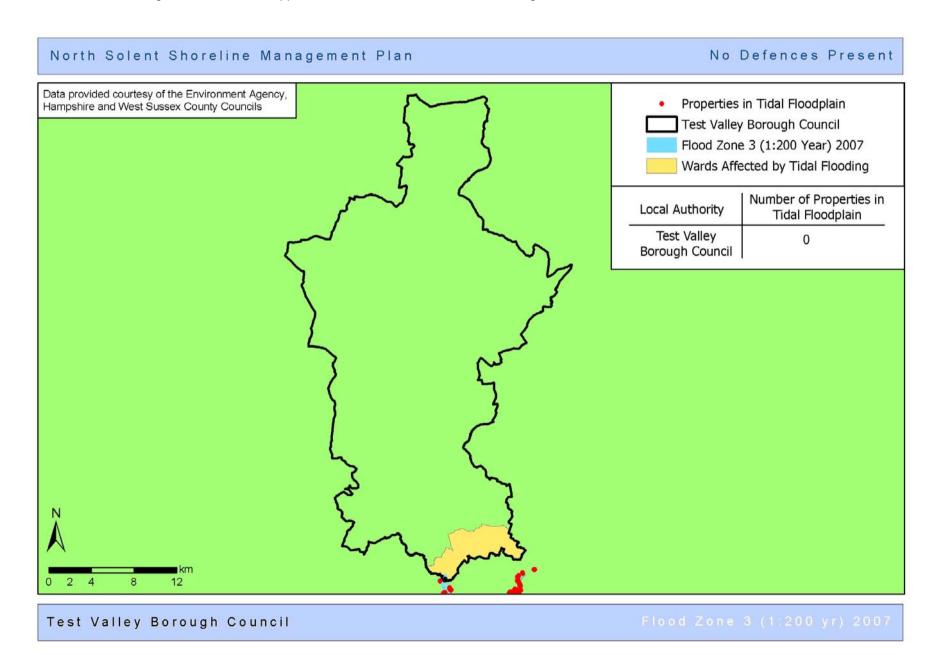
Table C5.2: Total number and type of properties per New Forest District Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115



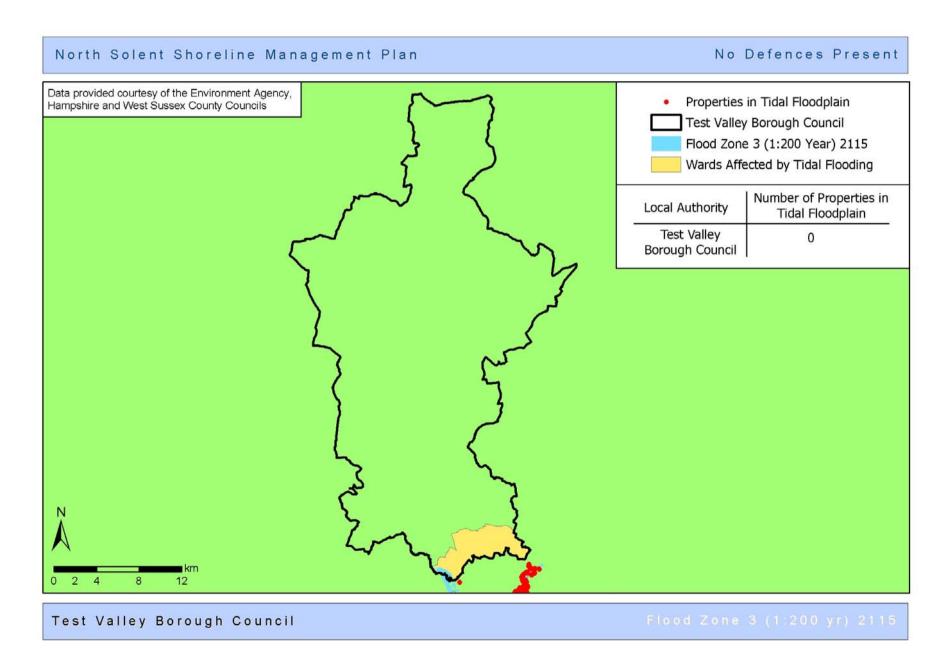


Local Authority	Electoral Ward	in tidal floo	properties d-plain from year event	Commercial		Residential	
		2007	2115	2007	2115	2007	2115
	Bargate	875	3130	306	758	569	2372
	Bevois	842	1068	243	210	599	858
	Bitterne Park	121	612	19	60	102	552
Southampton	Freemantle	25	39	25	39	0	0
City	Millbrook	11	267	7	164	4	103
Council	Peartree	141	160	37	54	104	106
	Portswood	108	733	0	45	108	688
	Redbridge	26	295	3	2	23	293
	Swaythling	0	186	0	9	0	177
	Woolston	224	91	4	4	220	87

Table C5.3: Total number and type of properties per Southampton City Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115

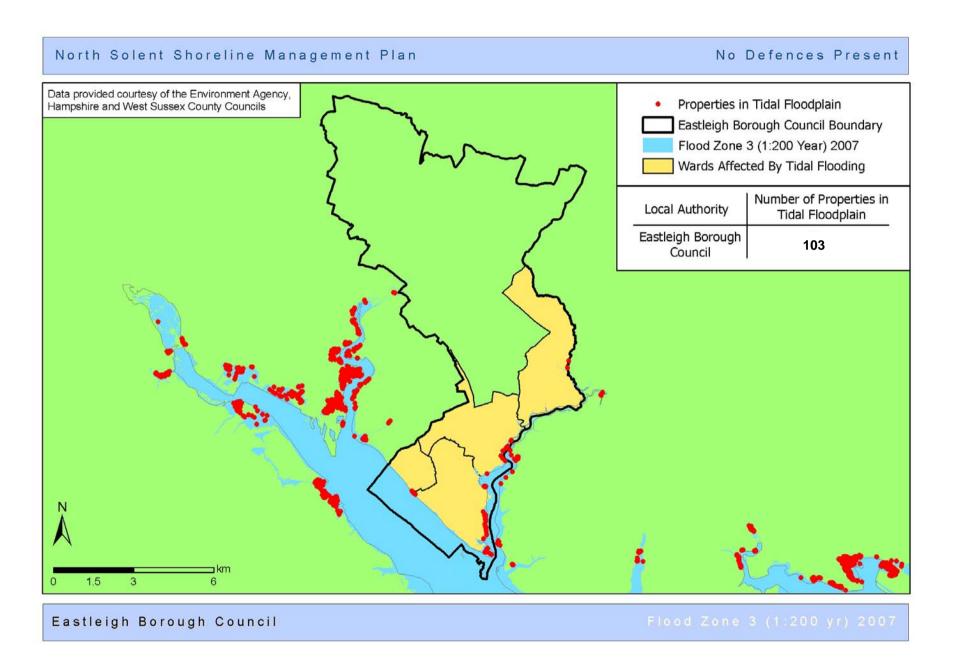


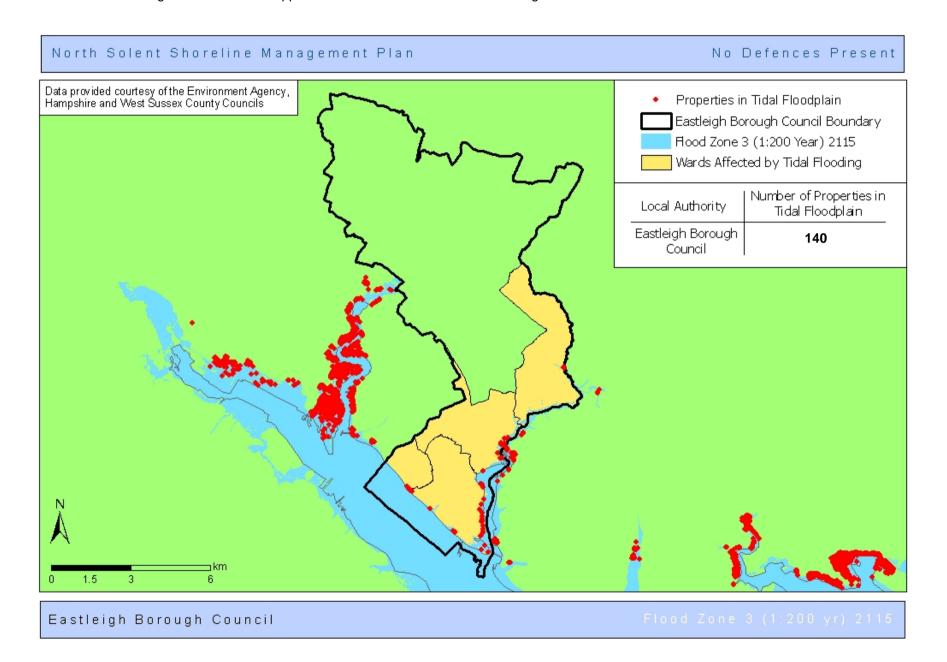
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Local Authority	Electoral Ward	Number of properties in tidal flood-plain from a 1 in 200 year event		Comm	nercial	Resid	ential
		2007	2115	2007	2115	2007	2115
Test Valley Borough Council	Chilworth, Nursling & Rownhams	0	0	0	0	0	0

Table C5.4: Total number and type of properties per Test Valley Borough Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115

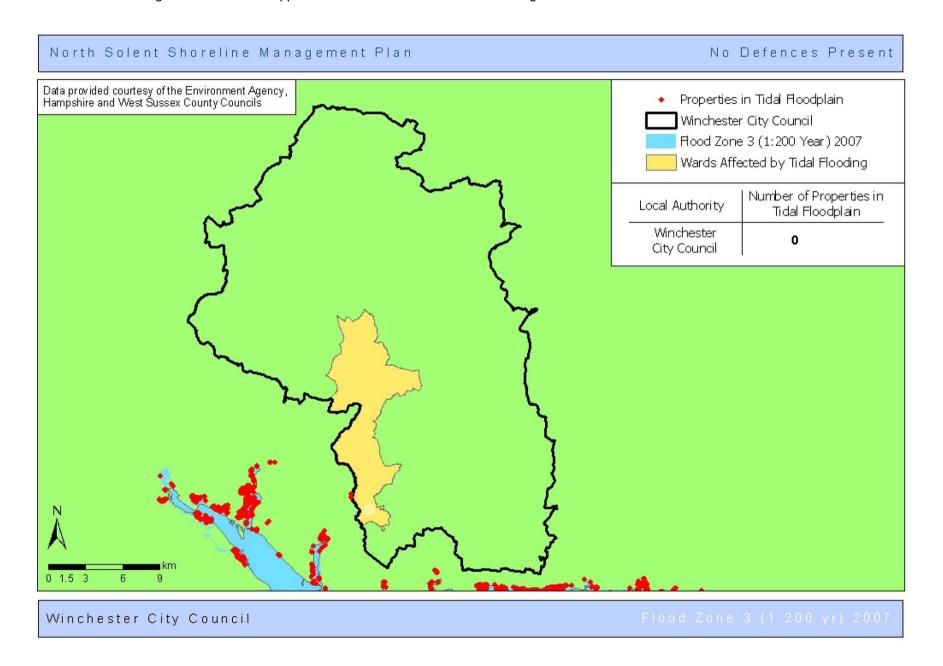


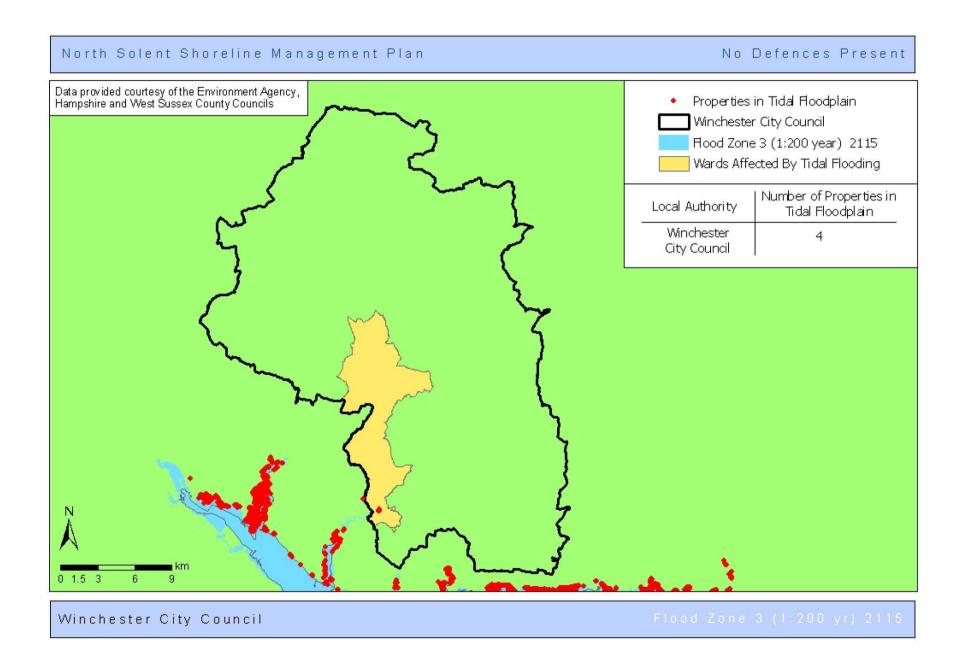


Local Authority	Electoral Ward	Number of properties in tidal flood-plain from a 1 in 200 year event		Commercial		Residential	
71001101110		2007	2115	2007	2115	2007	2115
	Botley	0	4	0	0	0	4
Eastleigh Borough	Bursledon & Old Netley	8	27	6	11	2	16
Council	Hamble-le-Rice &						
Journal	Butlocks Heath	87	72	76	72	11	10
	Netley Abbey	8	37	0	0	8	37

Table C5.5: Total number and type of properties per Eastleigh Borough Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115

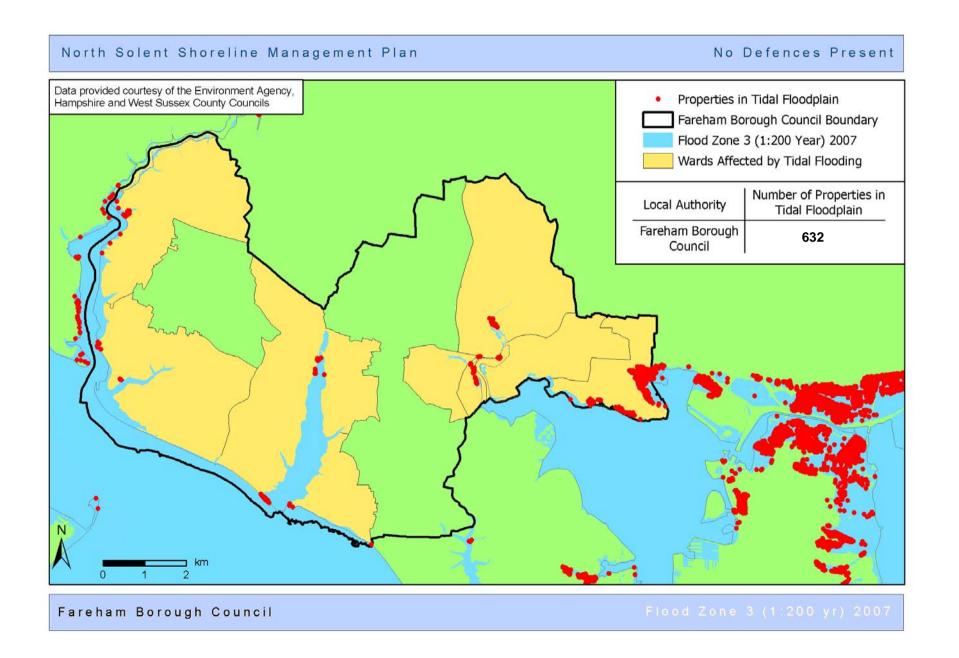
Hamble-le-Rice and Butlocks Heath wards have fewer properties in the floodplain in 2115 compared with 2007 because the flood zone maps for 2115 were derived from modelling of Lidar data, and are of a higher resolution and more accurate than those produced for 2007, which were derived from coarser models; therefore, the 2007 flood zone maps includes areas of high ground, which are excluded in the flood maps of 2115.

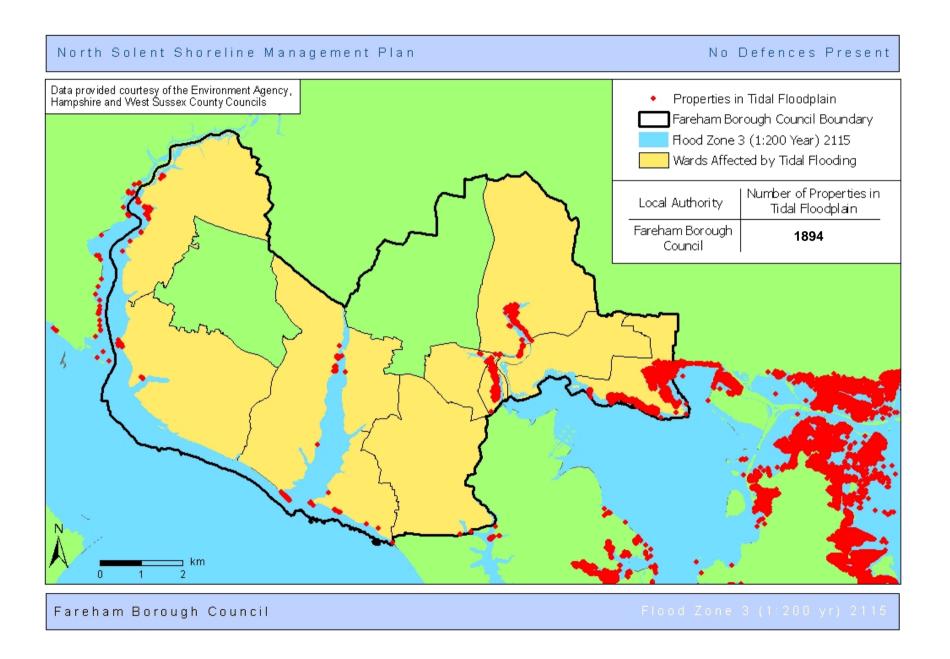




Local Authority	Electoral Ward	Number of properties in tidal flood-plain from a 1 in 200 year event		Commercial		Residential	
		2007	2115	2007	2115	2007	2115
Winchester	Owslebury &						
City Council	Curdridge	0	4	0	1	0	3

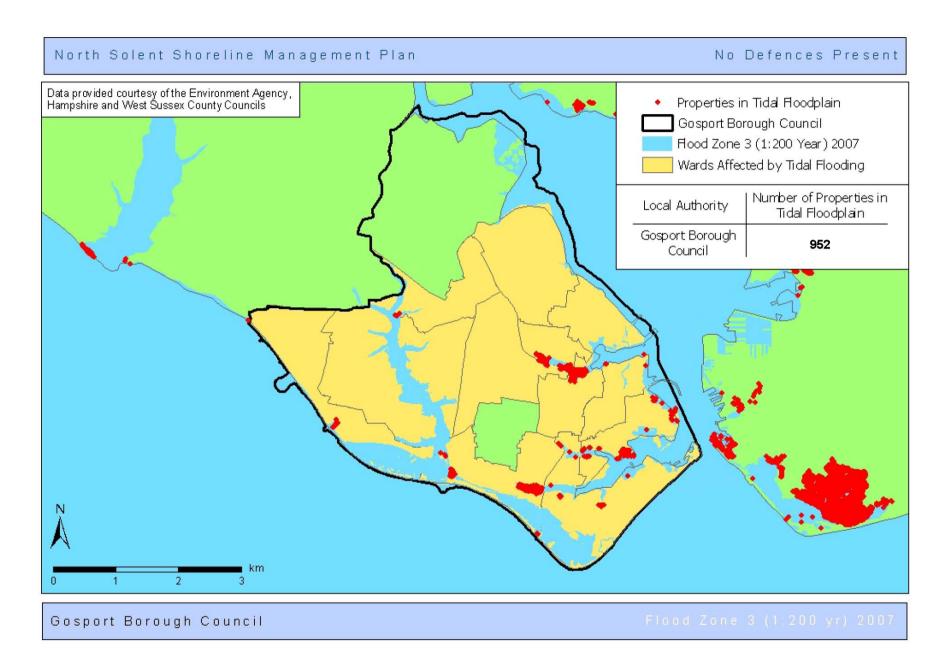
Table C5.6: Total number and type of properties per Winchester City Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115

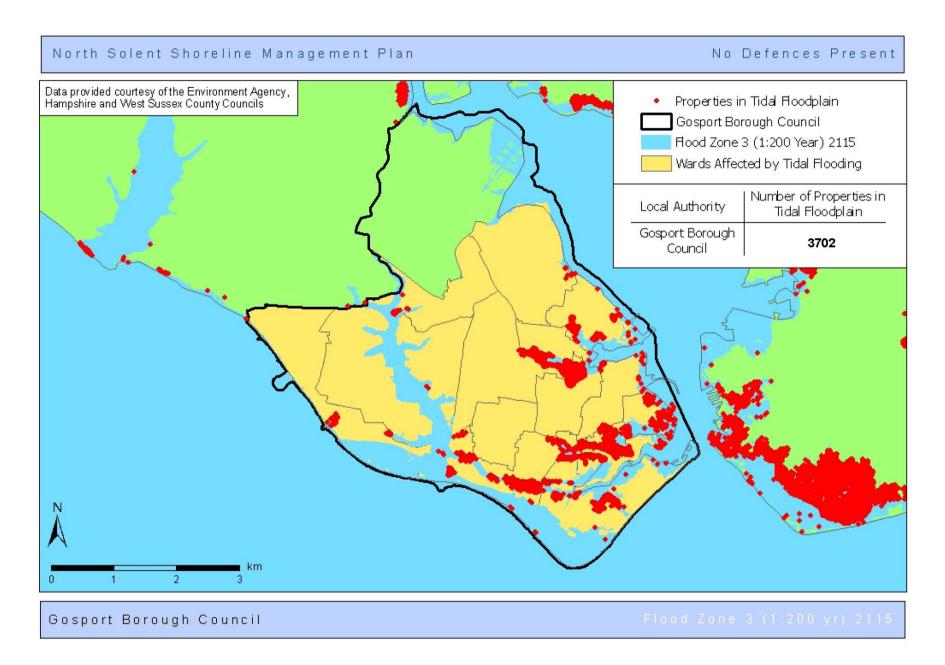




Local Authority	Electoral Ward	in tidal floo	properties d-plain from year event	Comm	nercial	Residential		
		2007	2115	2007	2115	2007	2115	
	Fareham East	0	399	0	79	0	320	
	Fareham South	0	23	0	0	0	23	
	Hill Head	1	22	1	3	0	19	
Fareham	Portchester East	536	1282	83	124	453	1158	
Borough Council	Portchester West	0	2	0	1	0	1	
Council	Sarisbury	35	52	15	25	20	27	
	Titchfield	48	92	0	16	48	76	
	Warsash	12	21	7	10	5	11	
	Stubbington	0	1	0	0	0	1	

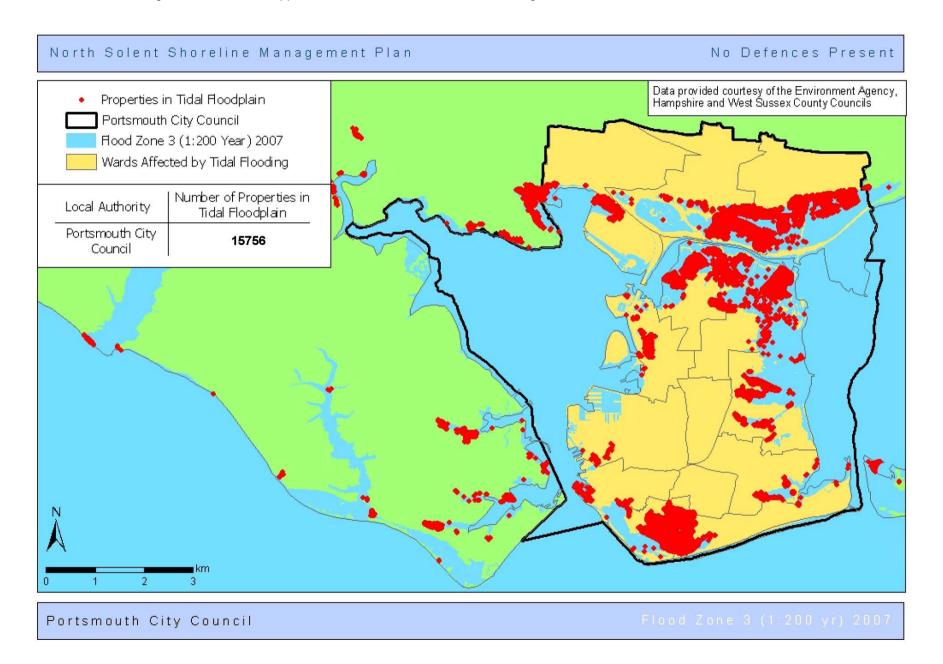
Table C5.7: Total number and type of properties per Fareham Borough Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115

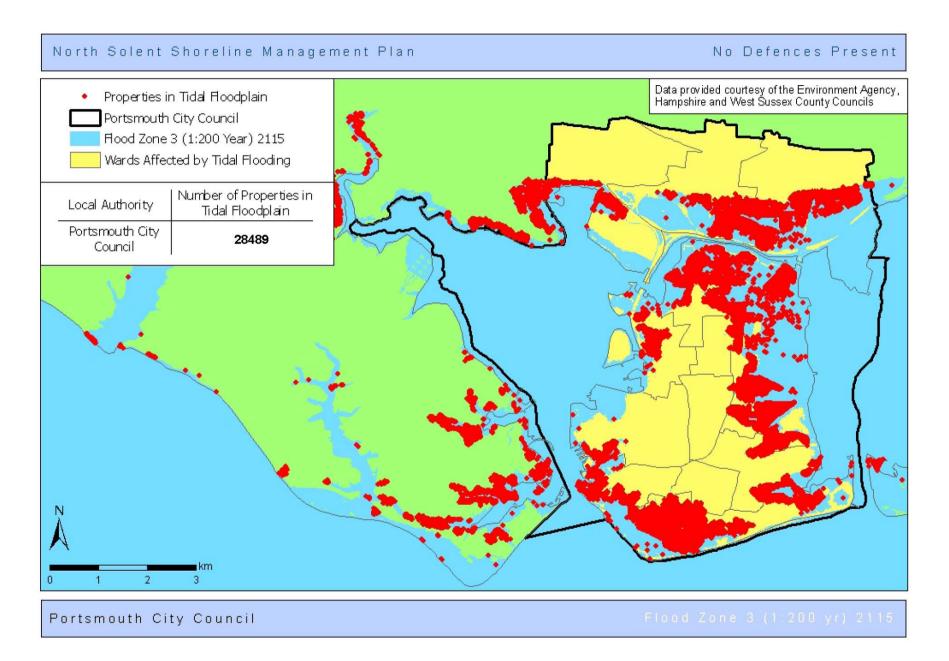




Local Authority	Electoral Ward	in tidal floo	Number of properties in tidal flood-plain from a 1 in 200 year event		Commercial		Residential	
		2007	2115	2007	2115	2007	2115	
	Alverstoke	236	561	12	22	224	539	
	Anglesey	14	350	4	13	10	337	
	Brockhurst	18	156	2	28	16	128	
	Christchurch	13	92	2	31	11	61	
	Elson	0	11	0	10	0	1	
Coopert	Forton	162	270	12	21	150	249	
Gosport Borough	Grange	0	5	0	2	0	3	
Council	Hardway	5	118	0	5	5	113	
000.1011	Lee East	0	0	0	0	0	0	
	Lee West	8	33	1	4	7	29	
	Leesland	131	306	6	22	125	284	
	Privett	0	2	0	0	0	2	
	Rowner & Holbrook	18	58	0	0	18	58	
	Town	347	1740	53	150	294	1590	

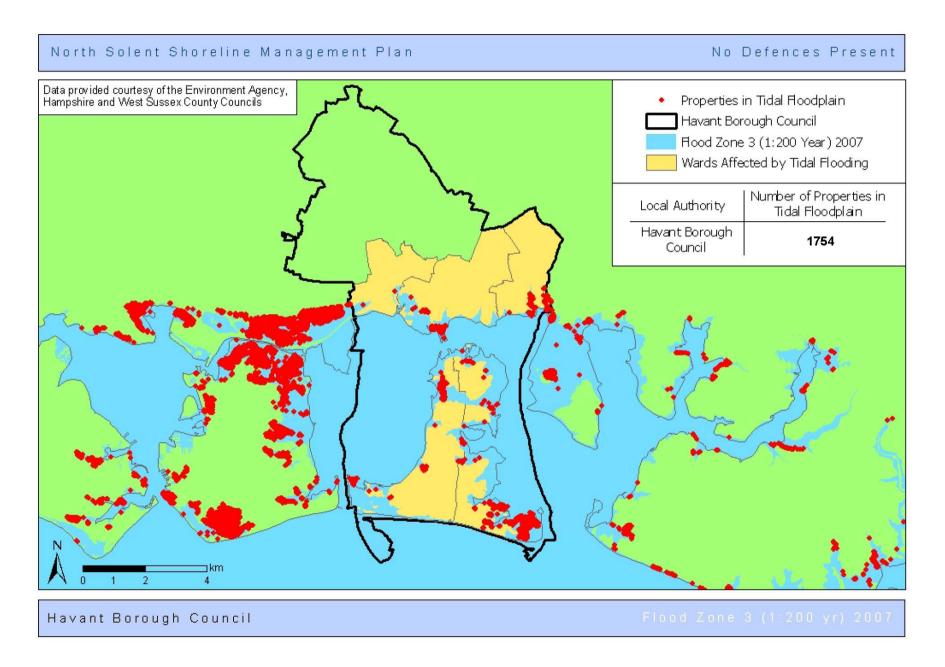
Table C5.8: Total number and type of properties per Gosport Borough Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115

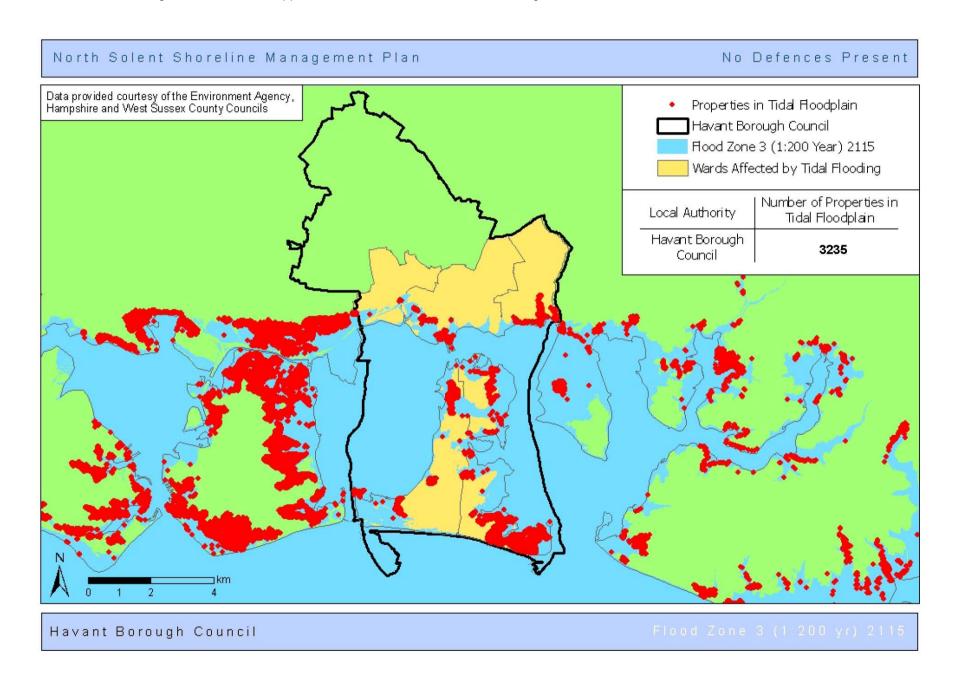




Local Authority	Electoral Ward	Number of properties in tidal flood-plain from a 1 in 200 year event		Commercial		Residential	
		2007	2115	2007	2115	2007	2115
	Baffins	1213	3832	60	87	1153	3745
	Central Southsea	10	185	5	35	5	150
	Charles Dickens	140	483	16	70	124	413
	Copnor	1144	1879	219	288	925	1591
	Cosham	2243	2711	74	124	2169	2587
Portsmouth City Council	Drayton and Farlington	1616	1858	176	184	1440	1674
Council	Eastney and Craneswater	1877	3646	96	170	1781	3476
	Fratton	0	25	0	15	0	10
	Hilsea	2005	2999	207	225	1798	2774
	Milton	154	1120	13	43	141	1077
	Nelson	673	1433	38	82	635	1351
	Paulsgrove	652	894	39	56	613	838
	St Jude	3244	5618	309	486	2935	5132
	St. Thomas	785	1806	88	145	697	1661

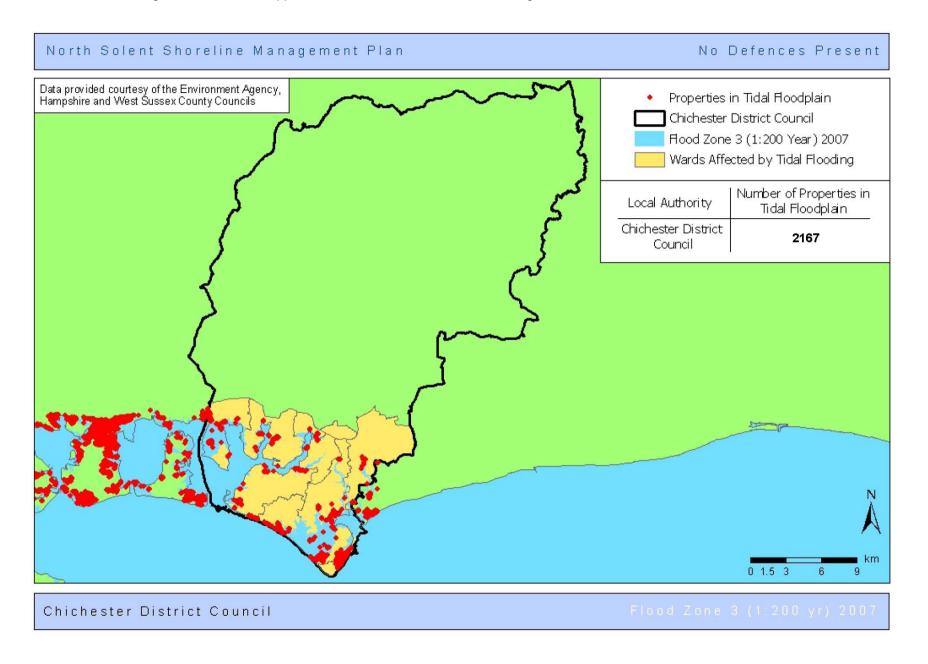
Table C5.9: Total number and type of properties per Portsmouth City Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115

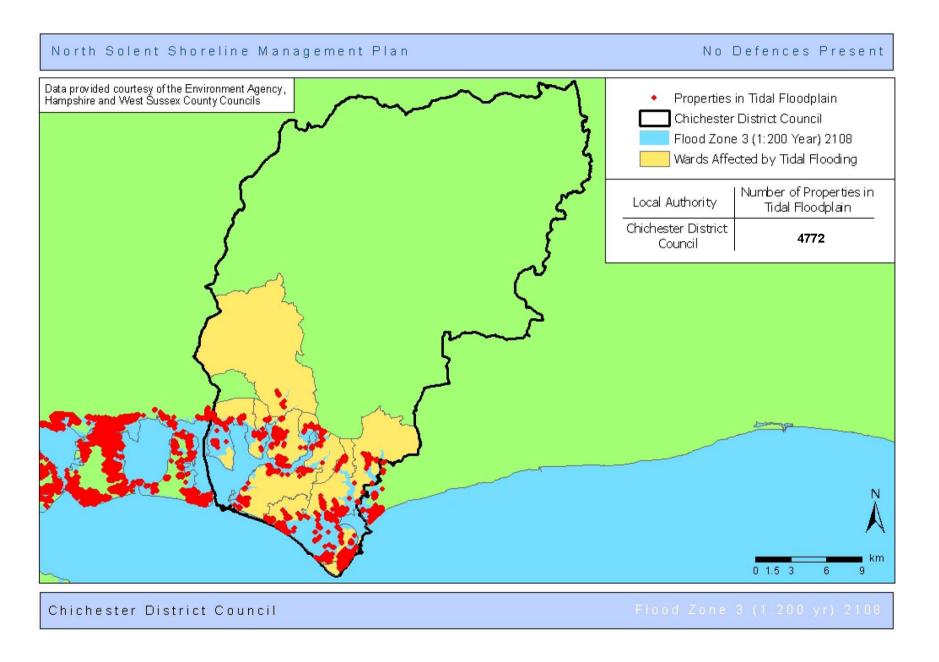




Local Authority	Electoral Ward	in tidal floo	properties d-plain from year event	Commercial		Resid	ential
		2007	2115	2007	2115	2007	2115
	Bedhampton	24	41	1	1	23	40
Havant	Emsworth	227	362	16	21	211	341
Borough Council	Hayling East	1139	2156	51	81	1088	2075
Couricii	Hayling West	207	506	12	12	195	494
	St. Faith's	157	170	56	51	101	119

Table C5.10: Total number and type of properties per Havant Borough Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2115





Local Authority	Electoral Ward	Number of properties in tidal flood-plain from a 1 in 200 year event		Commercial		Residential	
		2007	2108	2007	2108	2007	2108
Chichester District Council	Southbourne	294	356	16	20	278	336
	Selsey South	5	129	0	1	5	128
	Selsey North	1331	1977	40	47	1291	1930
	East Wittering	226	728	0	3	226	725
	West Wittering	130	331	15	26	155	305
	Sidlesham	107	432	15	32	92	400
	Donnington	7	17	4	12	3	5
	Chichester South	0	0	0	0	0	0
	Fishbourne	7	105	1	4	6	101
	North Mundham	15	98	1	10	14	88
	Bosham	45	599	2	34	43	565

Table C5.11: Total number and type of properties per Chichester District Council Ward, potentially within tidal floodplain, assuming No Defences, for 2007 and 2108