The area involved - 12th annual report



MARINE AGGREGATE DREDGING 2009



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An industry committed to responsible management through continual development

In March 1999, The Crown Estate and the British Marine Aggregate Producers Association (BMAPA) issued a statement of intent committing to reviewing all dredging licences over a rolling five-year period. Included was a commitment to surrender areas no longer containing useful resources of sand and gravel and to publish an annual report detailing the extent of dredging within the licensed areas.

This year's report is the twelfth in an ongoing series. Its content reflects the continued commitment to this initiative by both The Crown Estate and the members of BMAPA.

This report contains summary information relating to The Crown Estate area of seabed licensed, dredged and surrendered during 2009, based on data from its Offshore Marine GIS and from analysis of dredger Electronic Monitoring System records.

Information on dredged area and intensity has been derived from variable grid analysis.

A set of regional charts has been prepared to show the extent and intensity of dredging operations. Additional facts and figures on marine aggregate dredging activity by region are also presented.

The figures for the active dredge area - the area actually available to be

dredged at any one time – have been updated for 2009. While the limits of these areas are not presented on the charts associated with this report, detailed regional zoning plans (updated on a bi-annual basis) are available from either The Crown Estate or BMAPA websites, or by contacting the addresses on the reverse of this report.



Summary information

- A total of 20.10 million tonnes of sand and gravel were dredged from Crown Estate licences in England and Wales during 2009 (21.24 million tonnes in 2008)
- The total area of seabed licensed in 2009 increased to 1,286km² (1,278km² in 2008)



- Dredging took place within 123.6km², 9.6 per cent of the licensed area, compared to 137.9km² (10.8 per cent) in 2008
- The area of seabed dredged for more than 1 hr 15 minutes per year (high intensity red on charts) decreased to 6.83km² (9.28km² in 2008)
- 90 per cent of dredging from Crown Estate licences took place from an area of 43.45km² (48.22km² in 2008).





02: Summary statistics for 2009







Summary statistics for 2009

Region	Total area licensed during 2009 (km²)	Total active dredge area for 2009 (km²) '1	Total area dredged during 2009 (km²)	
Humber	469.89	146.99	20.94 47.26 12.03	
East Coast	266.52	158.17		
Thames Estuary	52.99	49.94		
East English Channel	107.96	29.16	9.31	
South Coast	204.46	90.20	24.08 8.74	
South West	129.22	41.12		
North West	54.95	19.96	1.27	
Total (km ²) ^{*2}	1286.01	535.54	123.63	

*1 Total area actually available to be dredged during 2009, calculated on a cumulative basis

*2 Totals are rounded from the correct total rather than a summation of the regional figures

Area of seabed licensed increased by 8km² during 2009

Area of seabed licensed (km²), 2005-2009

Year ' ³	2005	2006	2007	2008	2009
0-6nm *4	385	428	431	384	376
6-12nm *4	449	493	492	458	462
>12nm *4	345	395	421	436	448
Total area licensed (km²)	1,179	1,316	1,344	1,278	1,286
Total active dredge area (km²)	596	576	556	570	536

*3 Annual figures are calculated as of end of the 31st December, and therefore incorporate any changes that may have occurred through the year

*4 Based on a standardised 6 and 12nm (UKHO 01/01/05) to allow for accurate comparison between years

Area of seabed dredged decreased by 14km² during 2009

Year	2005	2006	2007	2008	2009
0-6nm *4	67	73	67	71	61
6-12nm *4	43	44	43	41	37
>12nm *4	28	24	25	26	26
Total (km²)	138	141	135	138	124
Area dredged >1 hr 15 mins (km²)	9.50	8.66	10.16	9.28	6.83
90 per cent of dredging (area in km ²)	45.42	49.19	49.95	48.22	43.45

*4 Based on a standardised 6 and 12nm (UKHO 01/01/05) to allow for accurate comparison between years







Humber region

Background

- The Humber region has 10 production licences, operated by British Dredging Ltd, Hanson Aggregates Marine Ltd, Tarmac Marine Dredging Ltd, Van Oord Ltd and Westminster Gravels Ltd for both sand and gravel, principally for use in the construction industry
- During 2009, 2.5 million tonnes of construction aggregate were dredged from a permitted licensed tonnage of 5.05 million. In addition 0.55 million tonnes were specifically dredged for a beach nourishment scheme
- Of the total marine aggregate dredged for construction from the Humber region, 0.6 million tonnes were landed at wharves in the North East, located on the Tyne, Tees and Humber rivers. Some 0.09 million tonnes were landed elsewhere in England and 1.84 million tonnes were landed at wharves in mainland Europe.

Regional statistics

- The licensed area in the Humber region was 469.89km²
- The total area actually available to be dredged within the Humber region was 146.99km²
- Dredging took place within 20.94km², 4.46 per cent of the licensed area
- High-intensity dredging (greater than 1 hour 15 minutes) is equal to 0.80km², representing 30.62 per cent of regional dredging activity
- 90 per cent of regional dredging effort took place from 8.21km²
- During 2009, the area licensed for marine aggregate extraction increased by 15.27km².







East Coast region

Background

- The East Coast region has 14 production licences, operated by British Dredging Ltd, CEMEX UK Marine Ltd, Hanson Aggregates Marine Ltd, Tarmac Marine Dredging Ltd and Volker Dredging Ltd for both sand and gravel, principally for use in the construction industry
- During 2009, 5.64 million tonnes of construction aggregate were dredged from a permitted licensed tonnage of 10.85 million. In addition 1.30 million tonnes were specifically dredged for a contract fill scheme
- Of the total marine aggregate dredged for construction from the East Coast region, 0.02 million tonnes were landed at wharves on the East Coast. 3.01 million tonnes were landed at wharves along the Thames and Medway rivers. Some 0.14 million tonnes were landed elsewhere in England and a further 2.47 million tonnes were landed at wharves in mainland Europe.

Regional statistics

- The licensed area in the East Coast region was 266.52km²
- The total area actually available to be dredged within the East Coast region was 158.17km²
- Dredging took place within 47.26km², 17.73 per cent of the licensed area
- High intensity dredging (greater than 1 hour 15 minutes) is equal to 2.52km², representing 48.25 per cent of regional dredging activity
- 90 per cent of regional dredging effort took place from 16.38km²
- During 2009, the area licensed for marine aggregate extraction decreased by 1.46km².



Area licensed Area surrendered Area surrendered



Thames Estuary region

Background

- The Thames region has 5 production licences, operated by Britannia Aggregates Ltd, CEMEX UK Marine Ltd, Hanson Aggregates Marine Ltd and Tarmac Marine Dredging Ltd for both sand and gravel, principally for use in the construction industry
- During 2009, 0.41 million tonnes of construction aggregate were dredged from a permitted licensed tonnage (excluding allowed rollover) of 1.85 million. In addition 1.89 million tonnes were specifically dredged for a contract fill scheme
- Of the total marine aggregate dredged for construction from the Thames Estuary region, 0.33 million tonnes were landed at wharves along the Thames and Medway rivers. Some 0.02 million tonnes were landed elsewhere in England and a further 0.06 million tonnes were landed at wharves in mainland Europe.

Regional statistics

- The licensed area in the Thames region was 52.99km²
- The total area actually available to be dredged within the Thames region was 49.94km²
- Dredging took place within 12.03km², 22.70 per cent of the licensed area
- High intensity dredging (greater than 1 hour 15 minutes) is equal to 0.02km², representing 1.49 per cent of regional activity
- 90 per cent of regional dredging effort took place from 5.94km²
- During 2009, the area licensed for marine aggregate extraction remained unchanged.





Area of seabed licensed and surrendered

Area of seabed licensed and dredged



East English Channel region

Background

- The East English Channel region has 11 production licences, operated by British Dredging Ltd, CEMEX UK Marine Ltd, DEME Building Materials Ltd, Hanson Aggregates Marine Ltd, Tarmac Marine Dredging Ltd and Volker Dredging Ltd for sand and gravel, principally for use in the construction industry
- During 2009, 2.26 million tonnes of construction aggregate were dredged from a permitted licensed tonnage of 10.12 million
- Of the total marine aggregate dredged for construction from the East English Channel region, 0.07 million tonnes were landed at wharves in the East English Channel and 1.35 million tonnes were landed at wharves along the Thames and Medway rivers. Some 0.03 million tonnes were landed elsewhere in England and a further 0.81 million tonnes were landed at wharves in mainland Europe.

Regional statistics

- The licensed area in the East English Channel region was 107.96km²
- The total area actually available to be dredged within the East English Channel region was 29.96km²
- Dredging took place within 9.31km², 8.62 per cent of the licensed area
- High intensity dredging (greater than 1 hour 15 minutes) is equal to 1.06km², representing 60.35 per cent of regional activity
- 90 per cent of regional dredging effort took place from 3.25km²
- During 2009, the area licensed for marine aggregate extraction remained unchanged.







South Coast region

Background

- The South Coast region has 18 production licences, operated by CEMEX UK Marine Ltd, Hanson Aggregates Marine Ltd, Kendall Bros (Portsmouth) Ltd, Northwood (Fareham) Ltd, Tarmac Marine Dredging Ltd, Volker Dredging Ltd and Westminster Gravels Ltd for sand and gravel, principally for use in the construction industry.
- During 2009, 3.49 million tonnes of construction aggregate were dredged from a permitted licensed tonnage of 10.5 million. In addition 0.28 million tonnes were specifically dredged for beach nourishment schemes
- Of the total marine aggregate dredged for construction from the South Coast region, 1.79 million tonnes were landed at wharves along the South Coast and 1.22 million tonnes were landed elsewhere in England and a further 0.48 million tonnes were landed at wharves in mainland Europe.

Regional statistics

- The licensed area in the South Coast region was 204.46km²
- The total area actually available to be dredged within the South Coast region was 90.02 km²
- Dredging took place from within 24.08 km2, 11.78 per cent of the licensed area
- High intensity dredging (greater than 1 hour 15 minutes) is equal to 1.37km², representing 40.40 per cent of regional dredging activity
- 90 per cent of regional dredging effort took place from 10.17km²
- During 2009, the area licensed for marine aggregate extraction decreased by 5.86km².



Area of seabed licensed and surrendered



Area of seabed licensed and dredged



South West region

Background

- The South West region has 12 production licences (plus 1 awaiting commencement), operated by British Dredging Ltd, CEMEX UK Marine Ltd, Hanson Aggregates Marine Ltd, Llanelli Sand Dredging Ltd and Tarmac Marine Dredging Ltd for sand, principally for use in the construction industry
- During 2009, 1.02 million tonnes of material were dredged from a permitted licensed tonnage of 3.45 million
- Of the total material dredged in the South West region, only approximately 1,000 tonnes were landed at wharves outside the region. Some 0.40 million tonnes were landed at English wharves and 0.62 million tonnes were landed at Welsh wharves.

Regional statistics

- The licensed area in the South West region was 129.22km²
- The total area actually available to be dredged within the South West region was 41.12km²
- Dredging took place from within 8.74km², 6.76 per cent of the licensed area
- High intensity dredging (greater than 1 hour 15 minutes) is equal to 0.93km², representing 66.94 per cent of regional dredging activity
- 90 per cent of regional dredging effort took place from 2.69km²
- During 2009, the area licensed for marine aggregate extraction remained unchanged.







North West region

Background

- The North West region has 6 production licences, operated by CEMEX UK Materials Ltd, Norwest Sand and Ballast Co. and Tarmac Marine Dredging Ltd for sand, principally for use in the construction industry
- During 2009, 0.27 million tonnes of material were dredged from a permitted licensed tonnage of 1.26 million. In addition 0.48 million tonnes were specifically dredged for a contract fill scheme
- Of the total material dredged in the North West region 0.23 million tonnes were landed at wharves in North West England and 0.03 million tonnes were landed at wharves in North Wales. Only approximately 12,000 tonnes were landed at wharves outside of the region.

Regional statistics

- The licensed area in the North West was 54.95km²
- The total area actually available to be dredged within the North West region was 19.96km²
- Dredging took place from within 1.27km², 2.31 per cent of the licensed area
- High intensity dredging (greater than 1 hour 15 minutes) is equal to 0.15km², representing 74.75 per cent of regional dredging activity
- 90 per cent of regional dredging effort took place from 0.38km²
- During 2009, the area licensed for marine aggregate extraction remained unchanged.



Area of seabed licensed and surrendered



Area of seabed licensed and dredged



THE CROWN ESTATE manages a highly diverse £6 billion property portfolio across the UK, comprising of four estates: urban, marine, rural and Windsor. The Crown Estate's marine properties include around half the UK's foreshore (17,000km) and almost the entire seabed out to the 12 nautical mile (nm) territorial limit around the UK. It also includes the rights to the natural resources in the UK Continental Shelf, with the exception of oil, coal and gas

The responsibilities of The Crown Estate are to maintain and enhance the value of the estate and its income over the long term and to do this having regard to good management. All surplus revenue (profit) is paid to the Treasury for the benefit of the nation every year: The Crown Estate is a successful business organisation guided by our core values – commercialism, integrity and stewardship.

THE BRITISH MARINE AGGREGATE PRODUCERS ASSOCIATION (BMAPA) was formed in 1992 and comprises members of the Mineral Products Association with a marine interest. Marine sand and gravel is supplied to home markets, as well as contributing to the balance of payments through exports to Continental Europe. In addition, marine aggregates are fulfilling an increasingly important role by supporting beach replenishment schemes. The marine aggregates industry operated over 25 vessels on 76 production licences (plus 1 awaiting commencement) around the UK during 2009.

BMAPA membership is comprised of: Brett Group Ltd, Britannia Aggregates Ltd, CEMEX UK Marine Ltd, DEME Building Materials Ltd, Hanson Aggregates Marine Ltd, Kendall Bros. (Portsmouth) Ltd, Lafarge Aggregates Ltd, Northwood (Fareham) Ltd, Sea Aggregates Ltd, Tarmac Marine Dredging Ltd and Volker Dredging Ltd.



The Crown Estate 16 New Burlington Place London W1S 2HX

T 020 7851 5080E enquiries@thecrownestate.co.ukW www.thecrownestate.co.uk



bmapa

British Marine Aggregate Producers Association

Gillingham House 38-44 Gillingham Street London SW1V 1HU

T 020 7963 8000 E bmapa@mineralproducts.org W www.bmapa.org