



## NORTH WEST REGIONAL AGGREGATES WORKING PARTY

Cheshire • Cumbria • Greater Manchester  
Halton • Lancashire • Merseyside • Warrington

**ANNUAL MONITORING REPORT 2010**  
[Incorporating 2009 statistics]

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[http://www.cheshirewestandchester.gov.uk/planning\\_and\\_building\\_control/spatial\\_planning/minerals\\_and\\_waste/nwrawp.aspx](http://www.cheshirewestandchester.gov.uk/planning_and_building_control/spatial_planning/minerals_and_waste/nwrawp.aspx)

<http://www.communities.gov.uk/planningandbuilding/planningbuilding/planningresearch/researchreports/mineralswasteresearch/aggregateworkingparties/awpannualreports/northwestawp/>

**April 2011**

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## **EXECUTIVE SUMMARY**

- i. The North West Regional Aggregate Working Party (NWRAWP) is one of nine similar working parties throughout England and Wales established in the 1970's, the core functions of which are set out in the Terms of Reference detailed in Appendix A.
- ii. The Annual Monitoring report 2010 represents the eighteenth annual report and provides data relating to sales and reserves during the period 1 January 2009 to 31 December 2009. The report provides data gathered during the BGS Annual Minerals Survey (AM) 2009 which was carried out during March to August 2010.
- iii. Total primary aggregate sales fell during the monitoring period by 24.9% from 11.17mt in 2008 to 8.39mt. Sales of primary crushed rock have fallen significantly by 26.6% from 8.02mt to 5.89mt, whilst sales of land-won sand and gravel fell by 20.6% from 3.15mt to 2.50mt. This sustained period of declining sales is largely a result of the financial crisis experienced in 2007 leading to continued recession during 2008/09.
- iv. Total permitted primary aggregate reserves increased slightly by 0.35% from 367.88mt as at the end of 2008 to 369.16mt. This stabilisation of reserves is likely to be due to the reclassification of reserves at a number of sites across the North West RAWP area. A small increase was seen in reserves of crushed rock where figures rose by 1.7% from 321.91 as at the end of 2008 to 327.39mt. Reserves of sand and gravel decreased by 9.1% from 45.97mt to 41.79mt.
- v. Landbanks for the region have remained relatively stable across the previous two monitoring periods, the total landbank for crushed rock as at the end of 2009 was 31.48 years which is a reduction of 0.5 years as at the end of 2008. The landbank for land-won sand and gravel has reduced by 1.22 years to 12.18 years as at the end of 2009.
- vi. Some significant planning applications for extensions to existing quarries were determined during the monitoring period which saw a total of 8.05mt in aggregate reserve being released; details are contained within Chapter 9 of the main report. One new quarry was granted permission retrospectively during 2009 at Greystoke Forest, although this is solely for the purposes of resurfacing footpaths within Greystoke Forest and is therefore not considered to be a commercial operation.
- vii. Revised apportionments were also agreed upon during the monitoring period in light of the release of the 'National and regional guidelines for aggregate provision in England 2005-2020'. The newly adopted apportionments are outlined in Chapter 12 and associated documents can be found on the North West RAWP webpage on the Cheshire West and Chester website.

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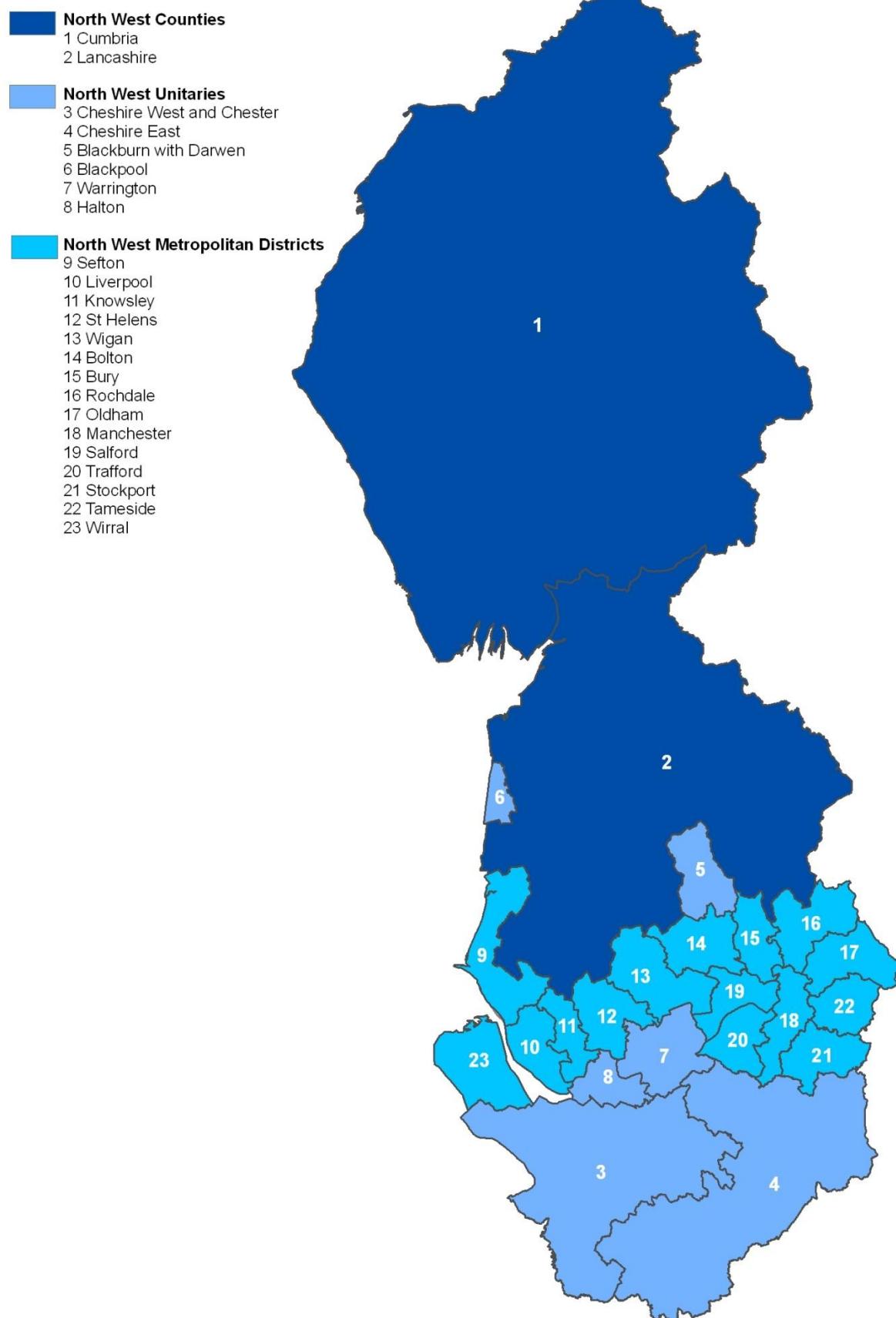
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## **1 INTRODUCTION**

- 1.1 The North West Regional Aggregates Working Party (NWRAWP) is one of nine similar working parties in England and Wales established in the 1970's. The core functions of the NWRAWP are set out in the Terms of Reference in Appendix A. The North West RAWP is comprised of the Mineral Planning Authorities (MPAs) of Cheshire East, Cheshire West and Chester, Cumbria (including the Lake District National Park), Halton, Lancashire (including Blackburn with Darwen and Blackpool) and Warrington. The Metropolitan Boroughs of Greater Manchester are represented by the Greater Manchester Geological Unit and the Metropolitan Boroughs of Merseyside are represented by the Merseyside Environment Advisory Service. Those parts of the Peak District National Park which fall within Cheshire East and Greater Manchester are represented by the East Midlands RAWP; and those parts of the Yorkshire Dales National Park which fall within Cumbria are represented by the Yorkshire and Humberside RAWP. The geographical coverage of the North West RAWP is illustrated in Map 1. For the purposes of confidentiality, the authorities of Cheshire East and Cheshire West and Chester are treated as one sub-region and the authorities within Greater Manchester, Merseyside, Halton and Warrington are included within a single sub-region, Map 2 provides a geographical illustration of the North West sub-regions.
- 1.2 Membership of the North West RAWP is drawn from the constituent MPAs, as outlined above, central government departments and representatives from the aggregate industry. Current membership is detailed in Appendix F.
- 1.3 The Annual Monitoring Report 2010 (AM2010) represents the eighteenth annual report and provides data relating to land and marine won primary aggregate sales and reserves throughout the North West for the period 1 January 2009 to 31 December 2009. The report incorporates data collected during the BGS Annual Minerals Survey 2009, which was carried out during the period March to August 2010, and includes primary aggregate sales flows for each sub-region. Maps are also included to illustrate the spatial distribution of primary aggregate sites, wharfs and licensed marine dredging areas within the North West.

## MAP 1: North West RAWP Mineral Planning Authorities (MPAs)

### Mineral Planning Authorities



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## MAP 2: North West RAWP sub-regions

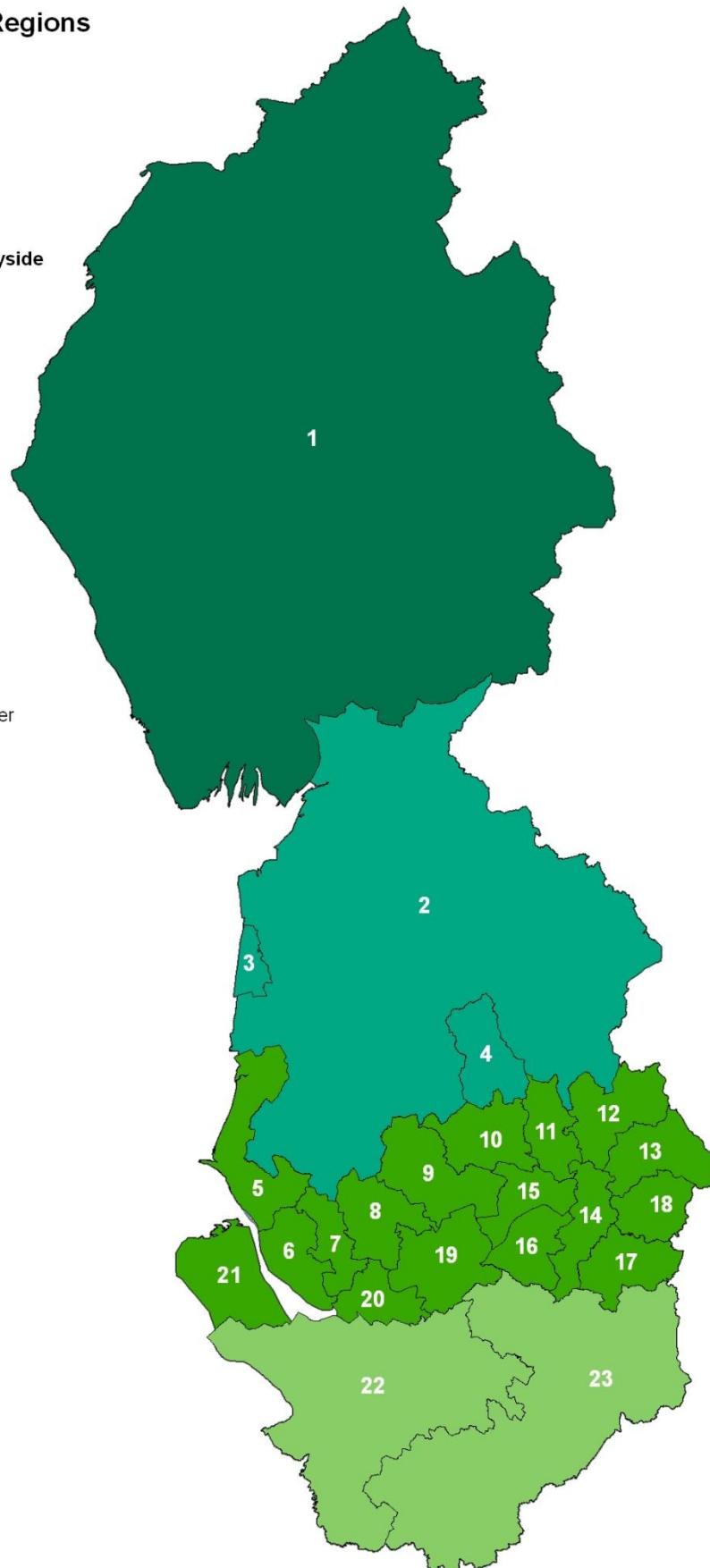
### North West RAWP Sub-Regions

**Cumbria**  
1 Cumbria

**Lancashire**  
2 Lancashire  
3 Blackpool  
4 Blackburn with Darwen

**Greater Manchester/Merseyside and Warrington**  
5 Sefton  
6 Liverpool  
7 Knowsley  
8 St Helens  
9 Wigan  
10 Bolton  
11 Bury  
12 Rochdale  
13 Oldham  
14 Manchester  
15 Salford  
16 Trafford  
17 Stockport  
18 Tameside  
19 Warrington  
20 Halton  
21 Wirral

**Cheshire**  
22 Cheshire West and Chester  
23 Cheshire East



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## **2 MEMBERSHIP CHANGES**

- 2.1 The current membership of the North West RAWP is detailed in Appendix F. Since 1 January 2010 the following membership changes have taken place:
- Mr S Denny has replaced Mr K Frost as representative of CEMEX for the North West RAWP;
  - The North West Regional Leaders Board (4NW) is no longer represented due to the abolition of regional government by the new coalition government.

## **3 MEETINGS**

- 3.1 An Annual North West RAWP meeting was held on 7 December 2009 at County Hall, Chester. The main points of discussion were the key findings of the Annual Monitoring Survey 2009 (incorporating 2008 statistics), the revised 'National and regional guidelines for aggregate provision in England 2005-2020' and the Communities and Local Government (CLG) review of the Regional Aggregate Working Party's. A further meeting was held on 27 July 2010 where discussions included the final sub-regional apportionments and the sustainability appraisal requirements for this.
- 3.2 The minutes from both meetings can be found on the North West Regional Aggregates Working Party webpage via the following link and outlined in brief in Appendix C.

[http://www.cheshirewestandchester.gov.uk/planning/spatial\\_planning/minerals\\_and\\_waste/nrawp.aspx](http://www.cheshirewestandchester.gov.uk/planning/spatial_planning/minerals_and_waste/nrawp.aspx)

## **4 NORTH WEST RAWP AGGREGATE SITES**

- 4.1 There are currently eighty nine aggregate sites with planning permission within the North West region with reserves of a wide variety of material including sand, gravel, sandstone (including gritstone), igneous rock, limestone and High Specification Aggregate (HSA). The spatial distribution of these sites (including active and inactive sites) is illustrated in Map 3; Map 4 illustrates the distribution of those sites which were active during the monitoring period. Details of these sites and their operators are included within the spatial portraits for each sub-region and the directory of sites in Appendix B.
- 4.2 The region also has seven permitted wharfs (including Penrhyn) which accept landings of both marine dredged aggregate and imported material. These are illustrated in Map 5 along with the four licensed marine dredging areas located off the North West coast. A more detailed overview of marine dredged aggregate is included in Chapter 8.

### MAP 3: North West aggregate sites 2009

#### Aggregate Type

- ▲ High Specification Aggregate
- ▲ Igneous Rock
- ▲ Limestone
- ▲ Sandstone
- ★ Sand
- ★ Sand and Gravel



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## MAP 4: North West active aggregate sites 2009

### Aggregate Type

- ▲ High Specification Aggregate
- ▲ Igneous Rock
- ▲ Limestone
- ▲ Sandstone
- ★ Sand
- ★ Sand and Gravel



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MAP 5: North West wharfs and licensed dredging areas 2009

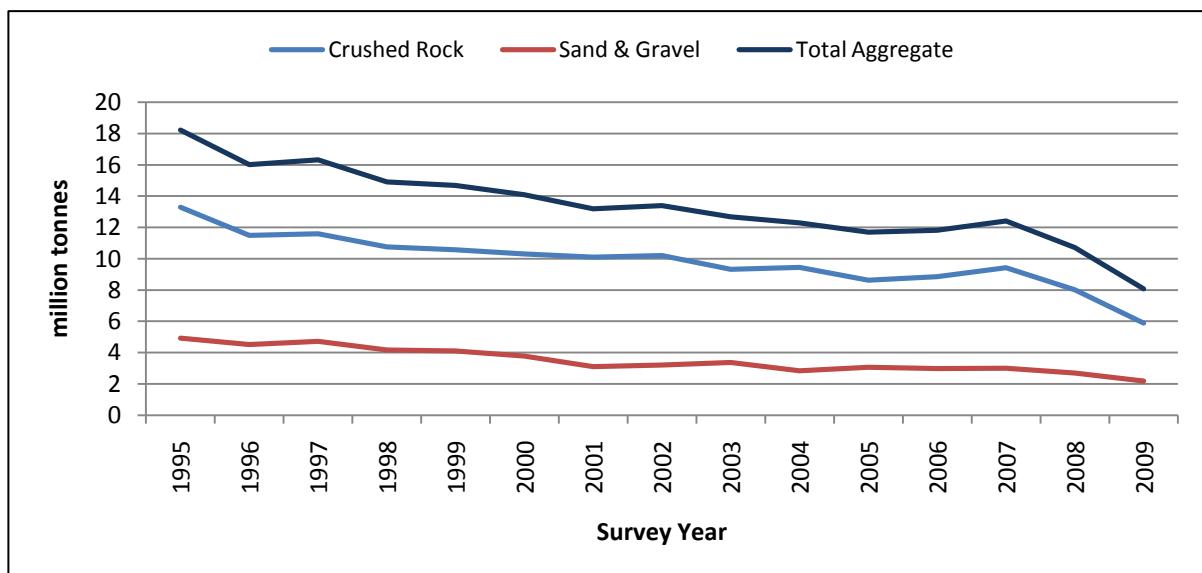


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## 5 MONITORING OF PRIMARY LAND-WON AGGREGATE SALES AND RESERVES

- 5.1 From March to August 2010 the North West RAWP, in conjunction with its member MPAs, carried out the BGS Annual Minerals Survey 2009. The survey covered the monitoring period 1 January to 31 December 2009 for all aggregates in England and Wales.
- 5.2 The following chapter should be read in conjunction with Tables 1-6, which provide sales and reserve figures for primary aggregates throughout the North West region for the 2009 monitoring period. Figures for the previous fourteen years have been included for comparison. To maintain commercial confidentiality, the authorities of Greater Manchester, Merseyside, and Warrington are treated as a single sub-region. Figure 1 provides a graphical illustration of sales patterns in the region between 1995-2009.

**FIGURE 1: Primary aggregate sales in the North West 1995-2009**



### Total primary aggregate sales and reserves

- 5.3 During the 2009 monitoring period, primary aggregate sales declined considerably by 24.9% from 11.17mt in 2008 to 8.39mt. This continues the downward trend in aggregate sales since 2006 and is the largest dip in sales for over 16 years. Sales fell during the 2008 monitoring period by 14.6% which marked a change in overall sales patterns when sales began to fall more dramatically than the more general decline in sales experienced since 1997.
- 5.4 This extended period of decline is largely due to the financial crisis experienced in 2007 leading to the continued recession during 2008-2009. Major infrastructure projects and house building has been largely reduced since 2007 leading to a fall in demand for primary aggregates. Whilst the wider economy continues to struggle it

is unlikely that sales of primary aggregate will increase, however, it should be noted that primary aggregate supply will play a pivotal role in the recovering economy.

- 5.5 The Aggregates Levy and landfill tax continue to influence sales of primary aggregate. The Aggregates Levy currently stands at £2.00 per tonne but is due to rise to £2.10 per tonne in April 2011. Both have lead to an increase in the use and sale of secondary and recycled aggregate e.g. Construction Demolition and Excavation (CD&E) waste.
- 5.6 In contrast, primary aggregate reserves have increased marginally by 0.35% from 367.88mt in 2008 to 369.16mt as 31 December 2009. This rise in reserves is largely due to the reclassification of non-aggregate reserves at a number of limestone quarries in the region.

#### **Aggregate crushed rock sales, reserves and landbanks**

- 5.7 Sales of primary land-won crushed rock have fallen significantly during 2009 by 26.6%, from 8.02mt in 2008 to 5.89mt. This is the lowest recorded figure for over 16 years and is approximately 50% less than the figure recorded at the turn of the century. Sales had been relatively stable since 2003 at an average of approximately 9mt per annum. This reduction in sales is likely to be the result of the fall in construction activity and the continued wider economic crisis experienced during 2009. The percentage reduction in sales in the North West is broadly in line with the other English regions.
- 5.8 Cheshire and the Greater Manchester/Merseyside/Warrington sub-region recorded the highest percentage drop in sales during the monitoring period. Sales from Cheshire fell by 95% from 0.02mt in 2008 to 0.001mt, whilst sales from the Greater Manchester/Merseyside/Warrington sub region fell by 56.5% from 0.69mt in 2008 to 0.3mt.
- 5.9 Sales of limestone fell by 27.2% from 5.18mt in 2008 to 3.77mt, whilst reserves increased by 5.5% from 162.65mt to 171.53 as at 31 December 2009, bringing reserve figures back in to line with those recorded for 2000. This increase is largely a result of the reclassification of reserves at a number of quarries in the region.
- 5.10 Sales of sandstone and igneous rock (including HSA) also fell during 2009 by 25.4% from 2.84mt in 2008 to 2.12mt. Reserves have remained relatively stable, falling by only 2.13% from 159.26mt in 2008 to 155.86mt.
- 5.11 Total crushed rock reserves increased slightly by 1.7% from 321.91mt in 2008 to 327.39mt. Reserves have remained relatively stable since 2001 apart from two periods of decline in 2005 and 2008 when reserves fell by 5.9% and 6.9% respectively.
- 5.12 Landbanks have been calculated using the guidelines published on 10 June 2003 ('National and Regional Guidelines for Aggregate Provision in England 2001-2016').

Sub-regional apportionments are yet to be confirmed by the North West RAWP as a result of the revised ‘National and regional guidelines for aggregate provision in England 2005-2020’. Both guidelines are included in Appendix D and E.

- 5.13 The total landbank for primary land-won crushed rock as at 31 December 2009 has reduced by 0.5 years to 31.48 years. A more detailed overview of landbanks and annual apportionment requirements is set out in Chapter 7.

#### **Aggregate sand and gravel sales, reserves and landbanks**

- 5.14 Sales of primary sand and gravel fell during the monitoring period by 20.6%, from 3.15mt in 2008 to 2.50mt, the lowest recorded figure for over 16 years. The most significant decline was in sales of marine dredged sand and gravel from Lancashire and harbour authorities sand and gravel from Cumbria, where no sales were recorded in either location during 2009.
- 5.15 Sales of land-won sand and gravel decreased by 18.9% from 2.69mt in 2008 to 2.18mt. Cumbria recorded the largest decline, where sales fell by 32.5% from 0.77mt in 2008 to 0.52mt. The only area to record an increase in sales was Lancashire, where sales increased by 35.5% from 0.31mt in 2008 to 0.42mt.
- 5.16 Landings of marine dredged aggregate fell by 27.3% from 0.44mt in 2008 to 0.32mt, which returns sales figures to levels recorded in 1999-2000. This decrease is largely due to the temporary closure of Heysham wharf and Glasson Dock, where no aggregate was landed during the monitoring period. Although landings are used as an indicator of sales, figures recorded may not necessarily equate to actual sales levels at each landing point.
- 5.17 Reserves of land-won sand and gravel decreased by 9.1% from 45.97mt as at 31 December 2009 to 41.79mt, which is broadly in line with what would be expected given sales figures recorded for the monitoring period.
- 5.18 As stated above, landbanks are calculated using the guidelines published in 2003. The landbank for primary land-won sand and gravel as at 31 December 2009 has reduced by 1.22 years to 12.18 years.

**TABLE 1: Primary aggregate sales 1995-2009 (million tonnes)**

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>Total Primary Aggregate Sales</b>															
Limestone	7.3	6.1	6.5	5.9	6.0	6.1	5.6	5.6	5.2	5.5	5.1	5.3	5.8	5.18	3.77
Sandstone & Igneous Rock <sup>1</sup>	6.0	5.37	5.06	4.90	4.58	4.2	4.5	4.6	4.12	3.95	3.53	3.55	3.62	2.84	2.12
Land-won Sand & Gravel	4.93	4.51	4.72	4.16	4.1	3.78	3.1	3.2	3.36	2.84	3.06	2.97	3.0	2.69	2.18
Marine Dredged Sand & Gravel <sup>2</sup>	0.22	0.25	0.25	0.23	0.29	0.29	0.46	0.50	0.47	0.6	0.66	0.64	0.66	0.44	0.32
Harbour Authorities Sand & Gravel	~	~	~	~	~	~	~	0.1	0.03	~	~	0.02	~	0.02	~
<b>TOTAL PRIMARY AGGREGATE SALES</b>	<b>18.45</b>	<b>16.23</b>	<b>16.53</b>	<b>15.14</b>	<b>14.92</b>	<b>14.37</b>	<b>13.66</b>	<b>14.0</b>	<b>13.18</b>	<b>12.89</b>	<b>12.35</b>	<b>12.48</b>	<b>13.08</b>	<b>11.17</b>	<b>8.39</b>

**TABLE 2: Primary aggregate reserves 1995-2009 (million tonnes)**

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>Total Primary Aggregate Reserves</b>															
Limestone	209.5	175.5	185.4	151.1	168.6	170.8	159.9	161.3	156.7	150.8	148.2	174.7	173.9	162.65	171.53
Sandstone & Igneous Rock <sup>1</sup>	245.6	228.0	215.4	196.65	191.9	179.3	172.8	166.6	158.9	168.4	152.9	164.8	172.2	159.26 <sup>3</sup>	155.86
Land-won Sand & Gravel	56.0	51.1	49.7	46.64	46.27	43.2	47.9	47.3	41.34	39.24	43.02	45.59	38.7	45.97	41.77
<b>TOTAL PRIMARY AGGREGATE RESERVES</b>	<b>500.4</b>	<b>454.6</b>	<b>450.5</b>	<b>394.4</b>	<b>406.77</b>	<b>393.3</b>	<b>380.6</b>	<b>375.2</b>	<b>356.9</b>	<b>358.6</b>	<b>343.5</b>	<b>385.1</b>	<b>384.8</b>	<b>367.88</b>	<b>369.16</b>

<sup>1</sup> Includes High Specification Aggregate (HSA)

<sup>2</sup> Marine sand and gravel sales are indicative only and are equal to landings recorded at each location

<sup>3</sup> Correction made to 2008 figures

**TABLE 3: Aggregate crushed rock sales 1995-2009 (million tonnes)**

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>LIMESTONE</b>															
Cumbria	3.8	3.2	3.5	3.2	3.4	3.4	3.0	2.9	2.6	2.8	2.6	2.7	2.8	2.7	1.91
Lancashire	3.5	2.9	3.0	2.7	2.6	2.7	2.6	2.7	2.6	2.7	2.5	2.6	3.0	2.48	1.86
<b>TOTAL LIMESTONE</b>	<b>7.3</b>	<b>6.1</b>	<b>6.5</b>	<b>5.9</b>	<b>6.0</b>	<b>6.1</b>	<b>5.6</b>	<b>5.6</b>	<b>5.2</b>	<b>5.5</b>	<b>5.1</b>	<b>5.3</b>	<b>5.8</b>	<b>5.18</b>	<b>3.77</b>
<b>SANDSTONE &amp; IGNEOUS ROCK</b>															
Cumbria	0.8	0.7	0.7	0.8	0.8	1	1.1	1.1	1.1	1.1	0.36	0.27	0.53	0.4	0.38
Cumbria - High Specification Aggregate (HSA)	~	~	~	~	~	~	~	~	~	~	0.74	0.69	0.7	0.75	0.78
Lancashire	2.8	2.63	2.17	2.1	1.8	1.7	1.9	2.2	1.6	1.3	1.2	1.0	1.26	0.98	0.66
Cheshire <sup>1/2</sup>	0.6	0.44	0.29	0.1	0.1	0.1	0.1	0.01	0.02	0.05	0.03	0.05	0.03	0.02	0.001
Greater Manchester/Merseyside/Warrington <sup>3</sup>	1.8	1.6	1.9	1.9	1.8	1.4	1.4	1.3	1.4	1.5	1.2	1.54	1.1	0.69	0.30
<b>TOTAL SANDSTONE &amp; IGNEOUS ROCK</b>	<b>6.0</b>	<b>5.37</b>	<b>5.06</b>	<b>4.9</b>	<b>4.58</b>	<b>4.2</b>	<b>4.5</b>	<b>4.6</b>	<b>4.12</b>	<b>3.95</b>	<b>3.53</b>	<b>3.55</b>	<b>3.62</b>	<b>2.84</b>	<b>2.12</b>
<b>TOTAL CRUSHED ROCK SALES</b>	<b>13.3</b>	<b>11.5</b>	<b>11.6</b>	<b>10.75</b>	<b>10.58</b>	<b>10.3</b>	<b>10.1</b>	<b>10.2</b>	<b>9.32</b>	<b>9.45</b>	<b>8.63</b>	<b>8.85</b>	<b>9.42</b>	<b>8.02</b>	<b>5.89</b>

**TABLE 4: Aggregate crushed rock reserves 1995-2009 (million tonnes)**

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>LIMESTONE</b>															
Cumbria	143.9	111.7	121.9	91.7 <sup>3</sup>	111.8	116.7	106.0	102.0	99.2	96.1	97.9	97.7	102.5	110.05	103.90
Lancashire	65.9	63.8	63.5	59.4	56.8	54.1	53.9	59.3	57.5	54.7	50.32	77.0	71.4	52.6	67.63
<b>TOTAL LIMESTONE</b>	<b>209.5</b>	<b>175.5</b>	<b>185.4</b>	<b>151.1</b>	<b>168.6</b>	<b>170.8</b>	<b>159.9</b>	<b>161.3</b>	<b>156.7</b>	<b>150.8</b>	<b>148.22</b>	<b>174.7</b>	<b>173.9</b>	<b>162.65</b>	<b>171.53</b>
<b>SANDSTONE &amp; IGNEOUS ROCK</b>															
Cumbria	76.3	69.6	67.7	66.8	67.5	66.5	65.0	63.0	62.0	60.9	48.85	49.2	48.69	47.75	47.81
Cumbria - High Specification Aggregate (HSA)	~	~	~	~	~	~	~	~	~	~	9.85	9.55	19.0	18.2 <sup>4</sup>	17.26
Lancashire	125.0	112.7	105.7	86.0	84.0	73.5	71.1	70.3	68.7	79.8	64.5	75.1	74.1	70.35	69.14
Cheshire <sup>1/2</sup>	9.4	10.2	9.6	8.52	8.4	8.36	6.5	5.6	5.6	5.4	5.4	5.35	5.52	5.6	4.42
Greater Manchester/Merseyside/Warrington <sup>3</sup>	34.9	35.5	32.4	35.33	32.0	30.9	30.2	27.7	22.6	22.5	23.69	25.54	24.86	17.36	17.23
<b>TOTAL SANDSTONE &amp; IGNEOUS ROCK</b>	<b>245.6</b>	<b>228.0</b>	<b>215.4</b>	<b>196.65</b>	<b>191.9</b>	<b>179.3</b>	<b>172.8</b>	<b>166.6</b>	<b>158.9</b>	<b>168.4</b>	<b>152.92</b>	<b>164.77</b>	<b>172.17</b>	<b>159.26</b>	<b>155.86</b>
<b>TOTAL CRUSHED ROCK RESERVES</b>	<b>444.4</b>	<b>403.5</b>	<b>400.8</b>	<b>347.75</b>	<b>360.5</b>	<b>350.1</b>	<b>332.7</b>	<b>327.9</b>	<b>315.6</b>	<b>319.4</b>	<b>300.51</b>	<b>339.47</b>	<b>346.07</b>	<b>321.91</b>	<b>327.39</b>

<sup>1</sup> Prior to 1998 figures include Peak Park within Cheshire

<sup>2</sup> Prior to 1998 figures include Halton and Warrington within Cheshire

<sup>3</sup> Prior to 1998 figures exclude Halton and Warrington

<sup>4</sup> Correction made to 2008 figures

TABLE 5: Aggregate sand and gravel sales 1995-2009 (million tonnes)

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>LAND-WON SAND &amp; GRAVEL</b>															
Cumbria	0.9	0.8	0.8	0.9	0.9	0.8	0.7	0.9	1.0	0.8	0.7	0.79	0.87	0.77	0.52
Lancashire	0.8	0.8	0.91	0.66	0.48	0.34	0.5	0.5	0.46	0.44	0.38	0.34	0.33	0.31	0.42
Cheshire <sup>1/2</sup>	2.9	2.65	2.56	2.3	2.48	2.33	1.7	1.4	1.4	1.1	1.58	1.44	1.51	1.17	0.87
Greater Manchester/Merseyside/Warrington <sup>3</sup>	0.33	0.26	0.5	0.3	0.24	0.31	0.23	0.4	0.5	0.5	0.4	0.4	0.3	0.44	0.37
<b>TOTAL LAND-WON SAND &amp; GRAVEL</b>	<b>4.93</b>	<b>4.51</b>	<b>4.72</b>	<b>4.16</b>	<b>4.1</b>	<b>3.78</b>	<b>3.1</b>	<b>3.2</b>	<b>3.36</b>	<b>2.84</b>	<b>3.06</b>	<b>2.97</b>	<b>3.0</b>	<b>2.69</b>	<b>2.18</b>
<b>MARINE DREDGED SAND &amp; GRAVEL<sup>4</sup></b>															
Cumbria	~	~	~	~	~	~	0.03	0.04	0.04	0.02	0.02	0.02	0.01	0.02	0.02
Lancashire	~	~	~	~	0.05	0.07	0.18	0.13	0.11	0.1	0.12	0.1	0.12	0.01	0
Greater Manchester/Merseyside/Warrington <sup>3</sup>	0.22	0.25	0.25	0.23	0.24	0.22	0.25	0.33	0.32	0.48	0.52	0.49	0.53	0.41	0.30
<b>TOTAL MARINE SAND &amp; GRAVEL</b>	<b>0.22</b>	<b>0.25</b>	<b>0.25</b>	<b>0.23</b>	<b>0.29</b>	<b>0.29</b>	<b>0.46</b>	<b>0.5</b>	<b>0.47</b>	<b>0.6</b>	<b>0.66</b>	<b>0.64</b>	<b>0.66</b>	<b>0.44</b>	<b>0.32</b>
<b>HARBOUR AUTHORITIES SAND &amp; GRAVEL</b>															
Cumbria	~	~	~	~	~	~	~	0.1	0.03	~	~	0.02	~	0.02	~
<b>TOTAL SAND &amp; GRAVEL SALES</b>	<b>5.15</b>	<b>4.76</b>	<b>4.97</b>	<b>4.39</b>	<b>4.34</b>	<b>4.07</b>	<b>3.56</b>	<b>3.8</b>	<b>3.86</b>	<b>3.44</b>	<b>3.72</b>	<b>3.63</b>	<b>3.66</b>	<b>3.15</b>	<b>2.50</b>

TABLE 6: Aggregate sand and gravel reserves 1995-2009 (million tonnes)

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>LAND-WON SAND &amp; GRAVEL</b>															
Cumbria	14.1	12.2	13.5	12.2	12.3	11.8	12.0	12.1	11.4	10.5	9.18	9.19	8.67	13.47	13.95
Lancashire	9.5	9.2	8.6	7.38	7.0	6.4	4.6	4.0	3.54	3.24	4.4	5.21	5.4	10.3	8.98
Cheshire <sup>1/2</sup>	28.3	25.9	24.1	21.7	19.3	17.9	24.6	23.5	19.7	19.2	20.53	21.3	19.52	16.4	12.76
Greater Manchester/Merseyside/Warrington <sup>3</sup>	4.1	3.8	3.5	5.36	7.67	7.1	6.7	7.7	6.7	6.3	8.91	9.89	5.15	5.8	6.1
<b>TOTAL LAND-WON SAND &amp; GRAVEL RESERVES</b>	<b>56.0</b>	<b>51.1</b>	<b>49.7</b>	<b>46.64</b>	<b>46.27</b>	<b>43.2</b>	<b>47.9</b>	<b>47.3</b>	<b>41.34</b>	<b>39.24</b>	<b>43.02</b>	<b>45.59</b>	<b>38.74</b>	<b>45.97</b>	<b>41.79</b>

1 Prior to 1998 figures include Peak Park within Cheshire

2 Prior to 1998 figures include Halton and Warrington within Cheshire

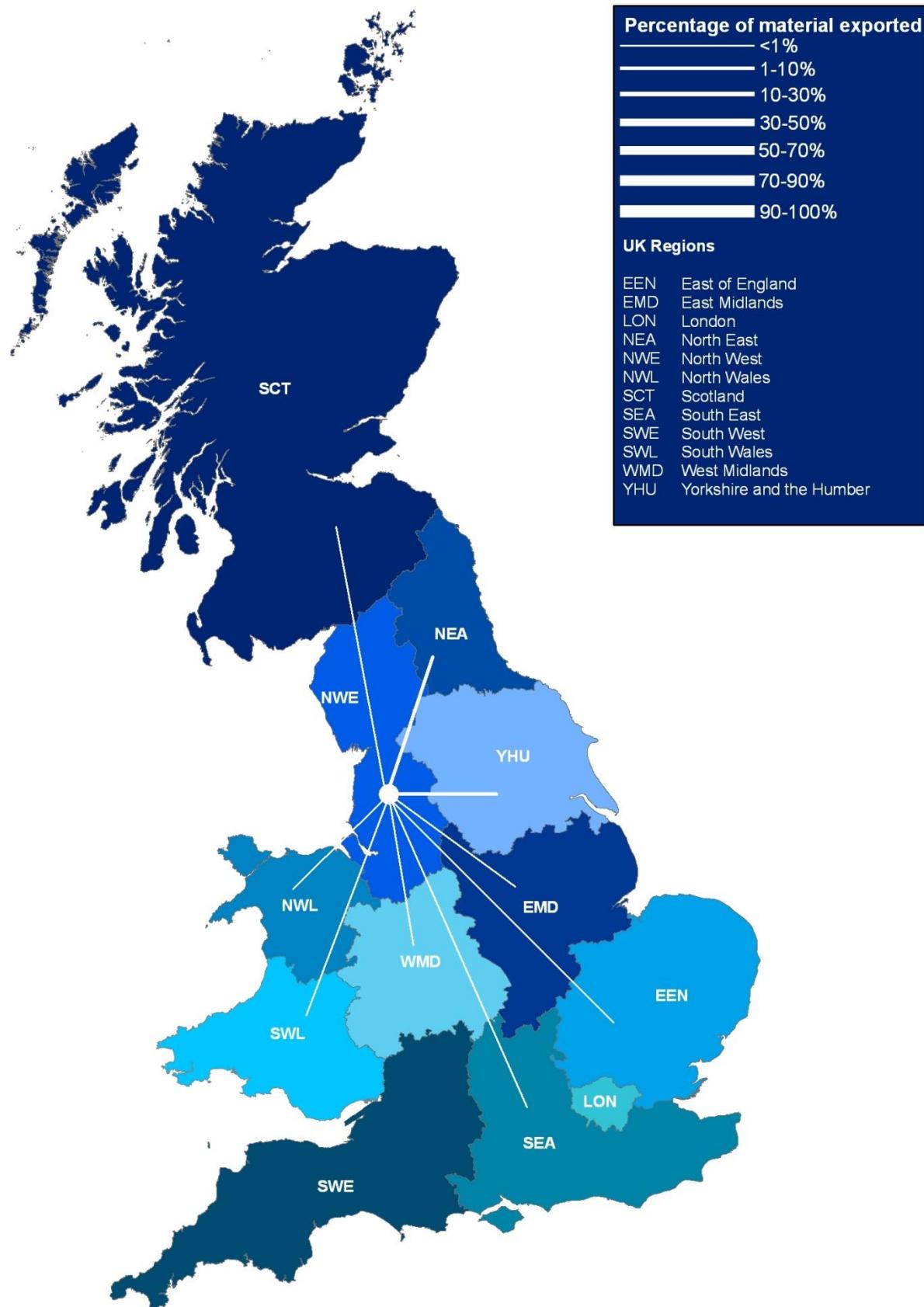
3 Prior to 1998 figures exclude Halton and Warrington

4 Marine sand and gravel sales are indicative only and are equal to landings recorded at each location

## **6 AGGREGATE SALES BY DESTINATION**

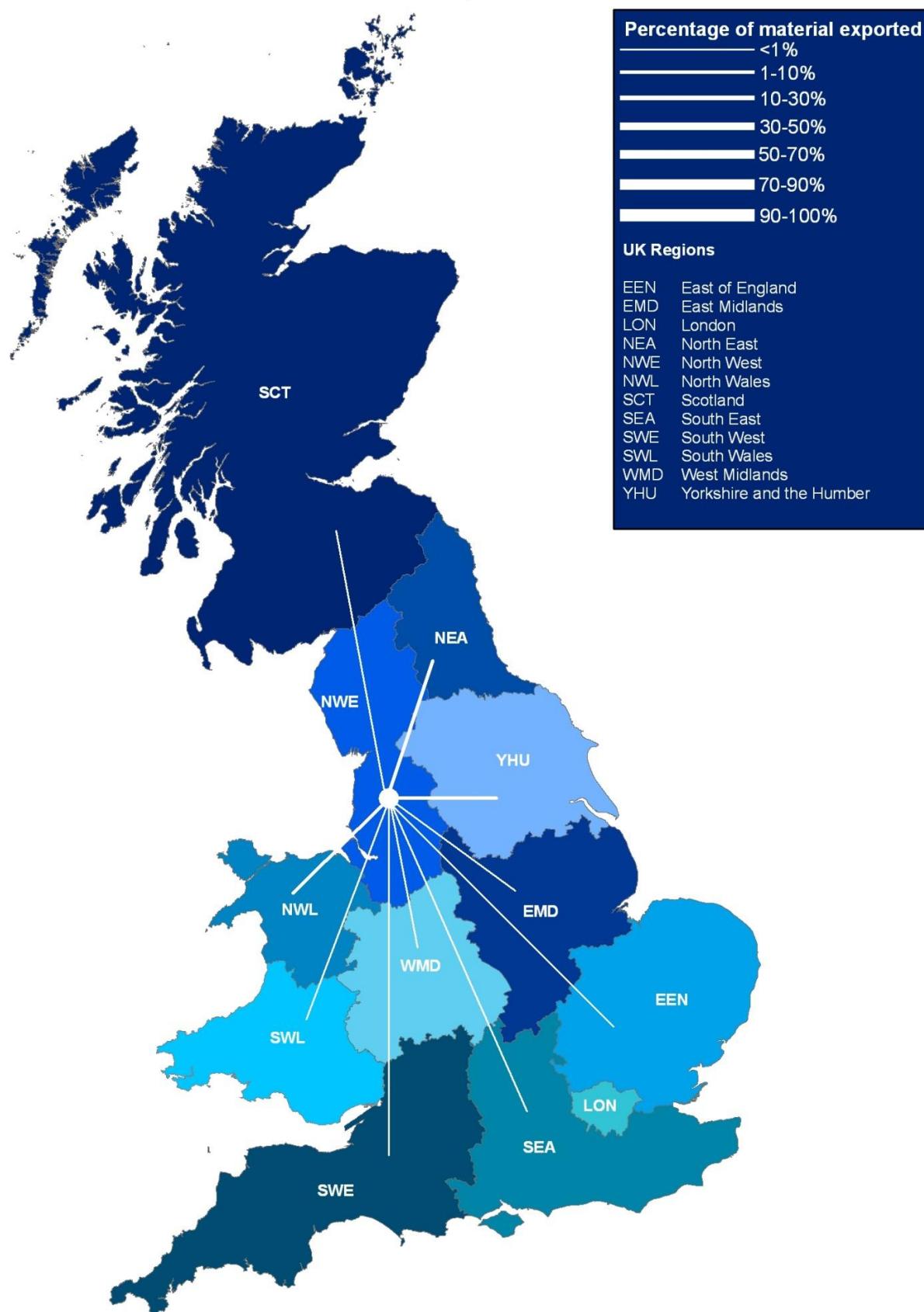
- 6.1 Maps 6 and 7 illustrate the percentage of sales exported to the UK regions during the 2009 monitoring period from the North West, the percentage of sales that remained within the North West are not shown. It should be noted that these movements do not necessarily indicate the location of the end-use and therefore the consumption of aggregates.
- 6.2 92.9% of the total amount of crushed rock sold remained within the North West, 3.2% was exported to Yorkshire and the Humber, 1.6% to the North East. Less than 1% went to each of the following regions: East Midlands, East of England, North Wales, Scotland, South East, South Wales, West Midlands, and unknown destinations.
- 6.3 78.03% of the total amount of sand and gravel (including marine dredged material) sold remained within the North West, 6.62% was exported to Yorkshire and the Humber, 4.5% to the North East, 1.69% to North Wales and 6.53% to unknown destinations within the UK. Less than 1% of material sold went to the following regions: East Midlands, East of England, Northern Ireland, Scotland, South East, South Wales, South West, and the West Midlands.

**MAP 6: North West aggregate crushed rock sales by destination 2009**



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**MAP 7: North West aggregate sand and gravel sales by destination 2009**



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Map produced using data from the BGS Annual Minerals Survey 2009

## 7 PRIMARY AGGREGATE LANDBANKS AND APPORTIONMENT

### Landbanks

- 7.1 On 29 June 2009 the Department for Communities and Local Government (CLG) published revised ‘National and regional guidelines for aggregate provision in England 2005-2020’. These guidelines are yet to be fully adopted in the North West region and therefore landbanks have been calculated using the guidelines published on 10 June 2003, ‘National and Regional Guidelines for Aggregate Provision in England 2001-2016’.
- 7.2 The method for calculating landbanks is set out in Paragraph 70 of ‘Minerals Planning Policy 1: Planning and Minerals’ (MPS1). Paragraph 70 states that ‘The length of the landbank should be calculated using the expected provision (supply in response to demand) included in the development plan expressed on an annual basis’. For the purposes of the North West RAWP these figures are expressed in the North West Regional Spatial Strategy (RSS) ‘North West of England Plan Regional Spatial Strategy to 2021’.
- 7.3 The regional and sub-regional landbanks as at 31 December 2009 have been calculated based upon the above method and are set out in Tables 7 and 8, landbank figures as at 31 December 2008 have been included for comparison.

**TABLE 7: Primary aggregate crushed rock landbanks 2009**

	Landbank as at 31 December 2008	Permitted reserves as at 31 December 2009	2001-2016 Annual apportionment (mt/pa)	Landbank as at 31 December 2009
Cheshire	43.1	4.42	0.13	<b>34.00</b>
Cumbria	45.5	168.97	4.1	<b>41.21</b>
GM/M/W	10.5	17.23	1.65	<b>10.44</b>
Lancashire	26.7	136.77	4.6	<b>29.73</b>
<b>North West total</b>	<b>31.98</b>	<b>327.39</b>	<b>10.4</b>	<b>31.48</b>

**TABLE 8: Primary aggregate sand and gravel landbanks 2009**

	Landbank as at 31 December 2008	Permitted reserves as at 31 December 2009	2001-2016 Annual apportionment (mt/pa)	Landbank as at 31 December 2009
Cheshire	8.3	12.76	1.97	<b>6.48</b>
Cumbria	19.24	13.95	0.7	<b>19.93</b>
GM/M/W	22.3	6.1	0.26	<b>23.46</b>
Lancashire	20.6	8.98	0.5	<b>17.96</b>
<b>North West total</b>	<b>13.4</b>	<b>41.79</b>	<b>3.43</b>	<b>12.18</b>

- 7.4 Table 7 shows that landbank figures for aggregate crushed rock have decreased slightly by 0.5 years. Landbanks have reduced in each of the sub-regions apart from Lancashire, where it has increased by 3.03 years. This is as a result of the reclassification of reserves at a number of quarries.
- 7.5 Table 8 shows that landbank figures for land-won sand and gravel have also decreased by 0.96 years. Landbanks have increased in Cumbria and Greater Manchester/Merseyside/Warrington by 0.69 and 1.16 years respectively, but have decreased in Cheshire and Lancashire by 1.82 and 2.64 years respectively. These reductions are largely due to the reclassification of reserves at one site in Cheshire and one site in Lancashire. The Cheshire sub-region is the only area to have fallen below the minimum 7 year landbank requirement.

#### **Annual apportionment**

- 7.6 As stated in paragraph 6.1, the revised guidelines for aggregate provision are yet to be fully adopted in the North West and therefore apportionments continue to be calculated upon the guidelines published in 2003. Table 9 shows apportionment guidelines for the four sub-regions within the North West, whilst Figures 2 and 3 illustrate sales against apportionment for the period 1995-2009.

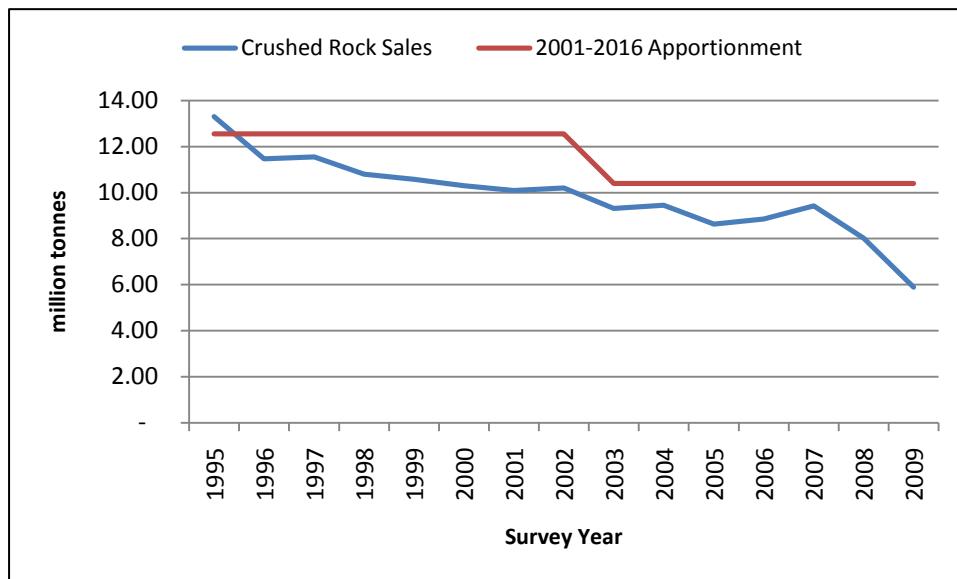
**TABLE 9: Apportionment guidelines for the North West 2001-2016**

North West sub-region	Crushed rock apportionment 2001-2016 (mt/pa)	Sand and gravel apportionment 2001- 2016 (mt/pa)
Cheshire	0.13	1.97
Cumbria	4.1	0.7
Greater Manchester/Merseyside/Warrington	1.65	0.26
Lancashire	4.6	0.5
<b>North West total</b>	<b>10.4</b>	<b>3.43</b>

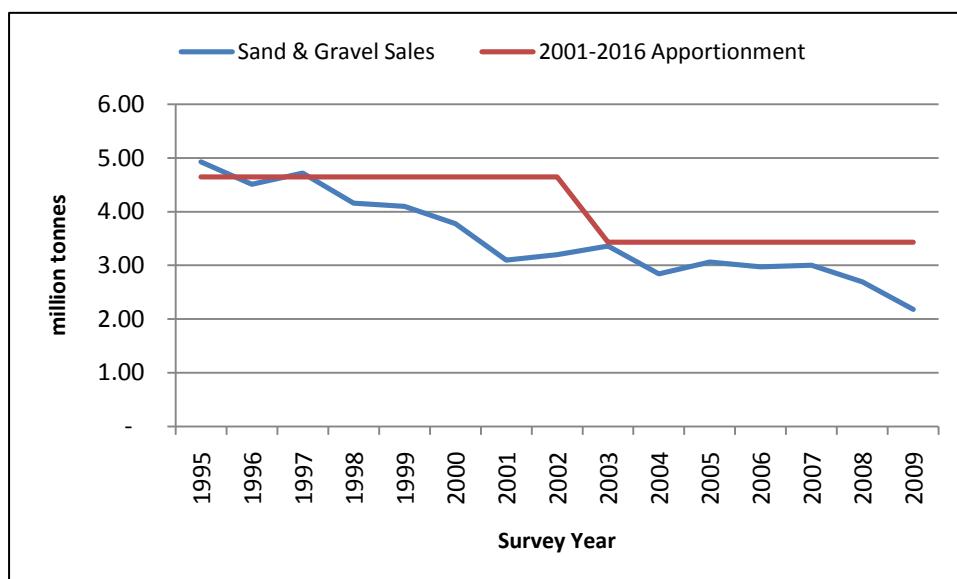
- 7.7 Figure 2 shows that sales of crushed rock have not met or exceeded apportionment requirements since 1995. Annual apportionment guidelines were reduced in 2003 from 12.55mt to 10.4mt per annum which had, until 2008, reflected more closely the sales patterns across the region. Sales of aggregate in general began to fall in 2008 due to the financial crises experienced in the UK. Crushed rock sales during 2009 amounted to 5.89mt which only accounts for just over 50% of the annual requirement of 10.4mt.
- 7.8 Figure 3 shows that sales of land-won sand and gravel rapidly declined during the period 1998-2003 when revised guidelines were introduced which more accurately reflected sales patterns. Sales since 2003 have remained marginally below the annual requirement of 3.43mt per annum and had been relatively stable during the period 2005-2007. However, sales have been in decline since 2008 as a result of the recession

as outlined above. Land-won sand and gravel sales during 2009 amounted to 2.18mt which is 1.25mt below the annual requirement of 3.43mt.

**FIGURE 2: Aggregate crushed rock sales against apportionment 1995-2009**



**FIGURE 3: Aggregate land-won sand and gravel against apportionment 1995-2009**



## **8 MARINE SAND & GRAVEL**

### **Active dredging off the North West coast (including Penrhyn, North Wales)**

- 8.1 During December 2009 The Crown Estate along with the British Marine Aggregates Producers Association (BMAPA) published the reserve and dredge statistics for the period 1 January to 31 December 2009<sup>1</sup>. The figures detailed within this report are taken from the above publication. It should be noted that these figures illustrate landings of marine dredged aggregate and do not necessarily reflect sales.
- 8.2 During the 2009 monitoring period there were 9 licenses operating across 4 dredge areas off the North West coast. A further licence (Area 457) in Liverpool Bay was permitted and became operational in July 2010. Details of these licences, the geographical distribution of dredge areas and the licence owners are contained in Table 12 and Map 5.
- 8.3 A total of 840,051 tonnes of material was removed from off the North West coast during the 2009 monitoring period, the highest recorded level of removal since 1995; Figure 4 illustrates the sharp rise in removal. Of the 840,051 tonnes, 271,598 tonnes was primary aggregate, 92,263 tonnes was removed from the River Mersey and 476,190 tonnes was secondary aggregate (contract fill). The total amount of material removed from off the North West coast has increased during 2009 from 728,182 tonnes in 2008, this increase is largely as a result of a significant contract being underway during the monitoring period. However the total amount of aggregate has considerably reduced from 432,889 tonnes in 2008 to 271,598. This reduction is likely to be as a result of the increased use of secondary resources and the general slowdown in the wider economy as a result of the recession. Again, the fulfilment of a contract for large quantities of contract fill have contributed to the increase in sales of secondary marine dredged aggregate. The increase in the total amount of material removed reflects a one-off contract which was delivered directly from off the North West coast. The rise may also be an indication of wider use of secondary resources and the implantation of the new Area 457 license.
- 8.4 The authorised limit of removal, from off the North West coast, per annum currently stands at 1.26mt. This has been reduced from an authorised limit of 1.38mt for 2008. The total amount of material removed during 2009 represents 67% of the total permitted amount. It is therefore clear that the current level of removal remains below the authorised limit and that ample reserves remain.

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<sup>1</sup> Marine Aggregates, The Crown Estate Licences, Summary of Statistics 2009, The Crown Estate

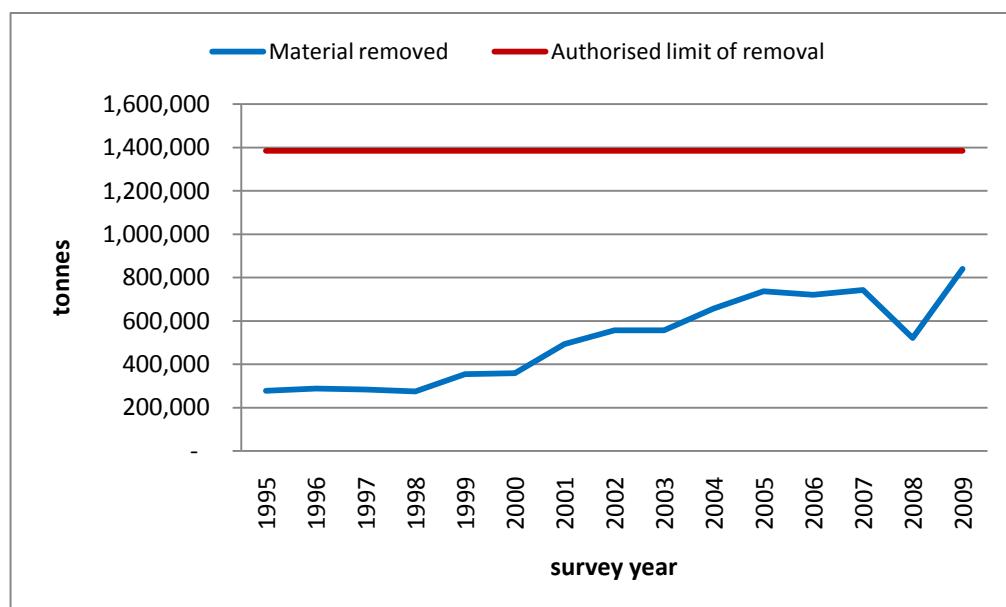
## **Landings**

- 8.5 Due to the presence of wider market forces the total amount of material removed from off the North West coast does not equate to the total amount of material landed at permitted landing points within the North West. During the 2009 monitoring period 42% of the material removed from off the North West coast was landed at landing points on the North West coastline (including Penrhyn, North Wales), amounting to 352,273 tonnes. This figure is 152,758 tonnes less than during 2008 and could be an indication of decreased demand for material in the region and the wider economic problems in the UK. As stated above, landings do not necessarily reflect the level of sales from landing points and it should therefore not be assumed that this amount was ultimately sold.

## **Reserves**

- 8.6 Reserves of marine aggregate as at 1<sup>st</sup> September 2008 off the North West coast amounted to 12.38mt of sand with a small proportion (<20%) of gravel. Material grades vary from fine sands to building and concreting sand. Secondary aggregate is also present on the seabed but is not included in reserve figures above as it has limited economic viability in the wider market given the high levels of land-won secondary and recycled aggregate.

**FIGURE 4: Material removed from off the North West coast 2000-2009**



**NB:** The increase in removal in 2009 is partly due to a significant contract being underway in 2009.

**TABLE 10: Marine dredged aggregate removed from off the North West coast 1995-2009 (tonnes)**

North West Region (inc Penrhyn N Wales)		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Primary	Primary Aggregates removed		~	~	~	~	~	~	~	~	~	611,983	608,134	633,405	432,889	271,598
	Rivers and Miscellaneous removed		~	~	~	~	~	~	~	~	~	124,506	111,687	109,399	87,787	92,263
Secondary	Beach Nourishment removed		~	~	~	~	~	~	~	~	~	0	0	0	0	0
	Contract Fill removed		~	~	~	~	~	~	~	~	~	0	0	0	207,506	476,190
<b>Total Aggregates Removed</b>		~	~	~	~	~	~	~	~	~	~	<b>736,489</b>	<b>720,001</b>	<b>742,804</b>	<b>728,182</b>	<b>840,051</b>
<b>Authorised limit of removal (mt) pa</b>		~	~	~	~	~	~	~	~	~	~	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>

**TABLE 11: Marine dredged aggregate landed from off the North West coast 1995-2005 (tonnes)**

Landing Point		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
England	Barrow	~	~	~	~	~	~	30,000	42,835	42,835	21,049	20,206	22,321	14,890	23,319	23,111
	Eastham	~	~	~	~	~	43,046	71,615	74,055	75,000	99,079	124,506	111,687	109,399	87,787	92,263
	Heysham	~	~	~	~	53,848	75,376	105,982	129,719	105,812	95,550	95,285	138,088	119,767	11,930	0
	Liverpool	222,610	247,197	246,598	231,072	243,882	179,444	253,382	260,258	237,262	385,886	428,842	373,812	428,635	327,094	209,766
Wales	Penrhyn	54,483	40,054	36,939	43,510	57,314	61,270	44,951	66,334	51,311	52,307	47,257	46,091	46,002	54,901	27,133
<b>Total landed from off North West coast</b>		<b>277,093</b>	<b>287,251</b>	<b>283,537</b>	<b>274,582</b>	<b>355,044</b>	<b>359,136</b>	<b>505,930</b>	<b>573,201</b>	<b>512,220</b>	<b>653,871</b>	<b>716,096</b>	<b>691,999</b>	<b>718,693</b>	<b>505,031</b>	<b>352,273</b>
<b>Total landed excluding Penrhyn (N Wales)</b>		<b>222,610</b>	<b>247,197</b>	<b>246,598</b>	<b>231,072</b>	<b>297,730</b>	<b>297,866</b>	<b>460,979</b>	<b>506,867</b>	<b>460,909</b>	<b>601,564</b>	<b>668,839</b>	<b>645,908</b>	<b>672,691</b>	<b>450,130</b>	<b>325,140</b>

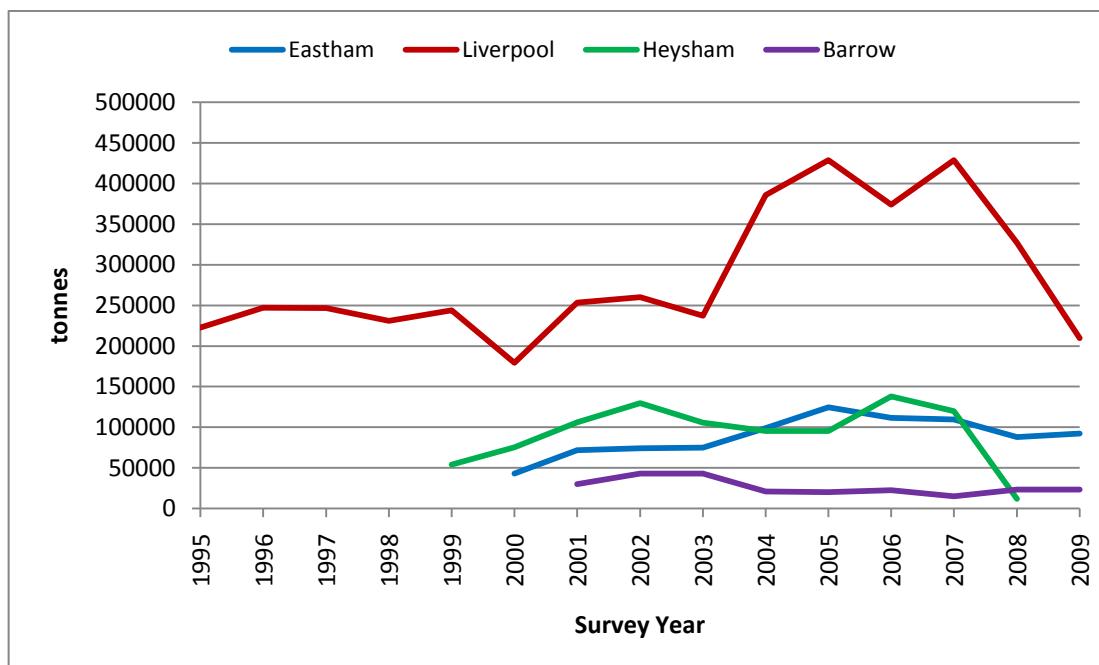
~ Data not available

\*\*\*All data is compiled from the report 'Marine Aggregates, The Crown Estate Licences, Summary of Statistics 2009' The Crown Estate

### **Landings from off the North West coast (excluding Penrhyn, North Wales)**

- 8.7 Landings from off the North West coast (excluding Penrhyn, North Wales) during the 2009 monitoring period amounted to 352,273 tonnes. This is a decline of approximately 21.7% from 450,130 tonnes in 2008 and is the lowest recorded figure since 2001. This reduction is in comparison to the increase in the levels of material removed from the seabed and is therefore an indication of increased demand elsewhere in the UK and a reduction in the North West. This reduction can also be attributed to the temporary closure of the landing point at Heysham and Glasson Dock during 2009.
- 8.8 There are a number of permitted landing points distributed along the North West coastline at Barrow, Eastham, Heysham, and Liverpool, the locations of which are detailed in Map 5 and Map 6. Detail of the amount of material landed at each of these locations is outlined below and in Table 12 and Figure 5.

**FIGURE 5: Marine dredged aggregate landings from off the North West coast 1995-2009**



#### **Barrow**

- 8.9 During the 2009 monitoring period 23,111 tonnes of marine dredged sand and gravel was landed at Barrow from off the North West coast. Landings have remained fairly stable since 2004 at an average rate of 21,000 tonnes per annum, with the exception of 2007 when 14,890 tonnes was landed.

### **Eastham**

- 8.10 Landings at Eastham had been declining since 2005 but have increased by 2.1% during the 2009 monitoring period to 92,263 tonnes, bringing figures broadly back in line with those recorded in 2004 (99,079 tonnes).

### **Heysham and Glasson Dock**

- 8.11 Landings at Heysham and Glasson Dock temporarily ceased during 2009, this could be attributed to the slowing of the wider economy and a reduction in demand for primary marine dredged aggregate.

### **Liverpool**

- 8.12 Landings at the permitted landing stations in Liverpool (Bramley Moore and Garston Docks) have continued to decline during the 2009 monitoring period from 327,094 in 2008 to 209,766, a decrease of 35.9%. This continues the downward trend in landings experienced since 2007 when a figure of 428,635 tonnes was recorded.

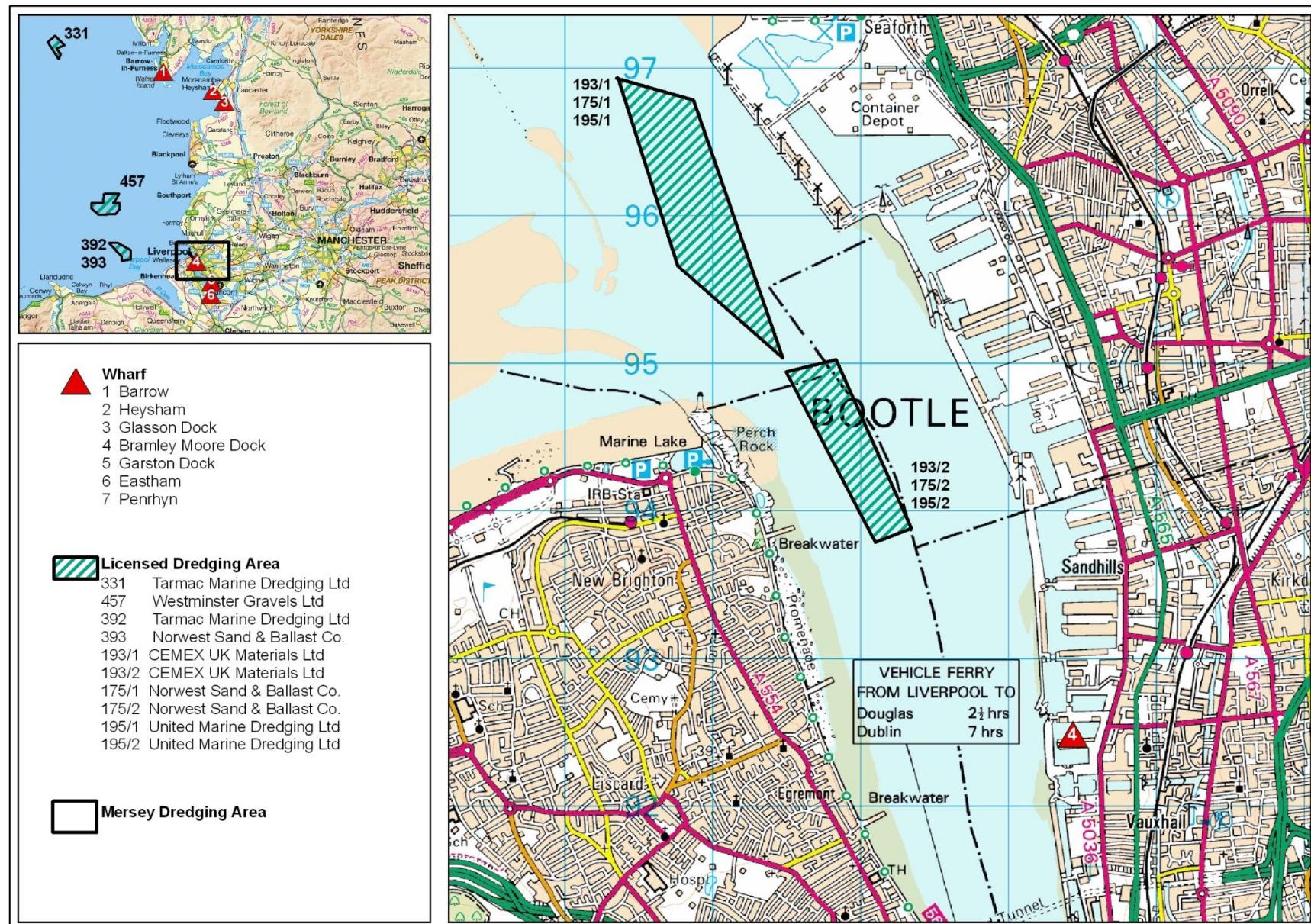
### **Summary**

- 8.13 Table 10 summarises the quantities of marine dredged sand and gravel, categorised by aggregate type, removed from off the North West coast during the 2009 monitoring period. Table 11 details landings by port location and Table 12 provides details of the licenses in operation during the monitoring period.

**TABLE 12: Dredge area license holders**

Nº	Operator	Approximate centre point co-ordinates	2009 Operational status
<b>175/1</b>	Norwest Sand & Ballast Co. Ltd	03 02.6151 W 53 27.1463 N	Active
<b>193/1</b>	CEMEX UK Materials Ltd	03 02.6151 W 53 27.1463 N	Active
<b>195/1</b>	United Marine Dredging Ltd	03 02.6151 W 53 27.1463 N	Active
<b>175/2</b>	Norwest Sand & Ballast Co. Ltd	03 01.7218 W 53 26.3069 N	Active
<b>193/2</b>	CEMEX UK Materials Ltd	03 01.7218 W 53 26.3069 N	Active
<b>195/2</b>	United Marine Dredging Ltd	03 01.7218 W 53 26.3069 N	Active
<b>331</b>	United Marine Dredging Ltd	03 52.2050 W 54 12.1980 N	Active
<b>392</b>	United Marine Dredging Ltd	03 26.2040 W 53 27.4050 N	Active
<b>393</b>	Norwest Sand & Ballast Co. Ltd	03 26.2040 W 53 27.4050 N	Active
<b>457</b>	Westminster Gravels Ltd	03 32.3590 W 53 36.9250 N	Yet to commence

**MAP 8: North West wharfs and licensed dredging areas (River Mersey inset map)**



## 9 MONITORING OF PLANNING APPLICATIONS

- 9.1 Planning applications continue to be monitored as they provide key information regarding new permissions and reserves; and subsequently regional and sub-regional landbanks. If issues regarding landbanks arise, monitoring of planning applications provides a means of identifying and addressing the potential causes.
- 9.2 Table 13 provides an overview of planning applications determined for primary aggregate extraction in the North West region for the period 1 January 2009 to 31 December 2009, Table 14 provides an overview of those applications pending as at 31 December 2009. These do not include permissions for the extension of time or variation of conditions. A more detailed summary of all planning applications received during the monitoring period is included in Table 15; Table 16 details all those applications pending as at 31 December 2009.

**TABLE 13: Planning applications for primary aggregate extraction determined 1 January 2009 to 31 December 2009**

	Crushed rock			Land-won sand and gravel		
	Granted (mt)	Refused (mt)	No. Applications	Granted (mt)	Refused (mt)	No. Applications
Cheshire	~	~	~	3.0 <sup>1</sup>	~	1
Cumbria	0.04	~	1	1.79	~	2
GM/M/W	1.06	1.4	2	~	~	~
Lancashire	~	~	~	0.76	~	1
<b>Total</b>	<b>1.1</b>	<b>1.4</b>	<b>3</b>	<b>5.55</b>		<b>4</b>

<sup>1</sup> Proportion of aggregate reserve currently unknown

**TABLE 14: Planning applications for primary aggregate extraction pending as at 31 December 2009**

	Crushed rock		Land-won sand and gravel	
	Resource (mt)	No. Applications	Resource (mt)	No. Applications
Cheshire	~	~	7.52 <sup>1</sup>	2
Cumbria	5.2	1	~	~
GM/M/W	22.9	2	~	~
Lancashire	~	~	~	~
<b>Total</b>	<b>28.1</b>	<b>3</b>	<b>7.52</b>	<b>2</b>

<sup>1</sup> Proportion of aggregate reserve currently unknown

**TABLE 15: Planning applications for primary aggregate extraction determined 1 January 2009 – 31 December 2009**

MPA	Site Name	Applicant	Application number	Mineral	Area of application (ha)	Resource	Extension/New quarry	Decision date	Decision
Bolton Metropolitan Borough Council	Pilkington Quarry	Armstrongs	80931/08	Sandstone	8.6ha	1.4mt	Extension	04.11.2009	Refused
Cheshire East Council	Bent Farm Quarry	Sibelco UK	8/08/0375/CPO	Sand	11.8ha	3.0mt <sup>1</sup>	Extension	17.12.2009	Approved
Cumbria County Council	Kirkhouse Quarry	Lakeland Minerals Limited	1/09/9016	Sand	7.1ha	0.69mt	Extension	28.07.2009	Approved
Cumbria County Council	Low Gelt Quarry	Hanson Quarry Products Europe Ltd	1/09/9033	Sand and gravel	7ha	1.1mt	Extension	15.12.2009	Approved
Cumbria County Council	Greystoke Forest	M-Sport Limited	3/09/9026	Limestone	0.9ha	0.04mt	New quarry	17.12.2009	Approved
St Helens Council	Bold Heath Quarry	D Morgan PLC	P/2008/0914	Sandstone	40ha <sup>2</sup>	1.06mt	Extension	22.01.2009	Approved on appeal
Lancashire County Council	Bradleys Sandpit	J A Jackson	06/071197	Sand and gravel	12ha	0.76mt	Extension	16.07.2009	Approved

**TABLE 16: Planning applications for primary aggregate extraction pending as at 31 December 2009**

MPA	Site Name	Applicant	Application number	Mineral	Area of application (ha)	Resource	Extension/New quarry	Submission date
Cheshire East Council	Mere Farm Quarry	Hanson Quarry Products Europe Ltd	09/2806/W	Sand	3.5ha	0.5mt	Extension (Lateral)	01.09.2009
Cheshire East Council	South Arclid	Archibald Bathgate Group Ltd	09/2291W	Sand	45ha	7.02mt <sup>1</sup>	Extension (Lateral)	23.07.2009
Cumbria County Council	Shapfell Quarry	Chorus Construction and Industrial Business	3/08/9020	Limestone	25.8ha	5.2mt	Extension (Depth)	01.12.2008
Rochdale Borough Council	Ding Quarry	D P Williams Holdings	07/D49980	Gritstone	34ha	22.5mt	ROMP (Determination of Conditions)	31.08.2007
Tameside Borough Council	Harrop Edge	Chartrange (Quarry Products)	K00029/02	Gritstone	5.8ha	0.4mt	Extension (Lateral)	17.12.2001

<sup>1</sup> Proportion of aggregate reserve currently unknown

<sup>2</sup> Total site area

## **10 SECONDARY AND RECYCLED AGGREGATE**

- 10.1 Monitoring of the production and sales of secondary and recycled aggregate is problematic and previous attempts to monitor sales have only produced crude approximations. The very nature of construction demolition and excavation (CD&E) waste means that movements are less likely to be recorded and sales figures are vague estimates at best. The following chapter utilises CD&E waste management data to provide an illustration of the potential amounts of CD&E recycled and re-used as secondary aggregate during the monitoring period. It should be noted, however, that these figures only provide data from licensed sites and do not include data from mobile screens and crushers and therefore arisings are likely to be far higher than is indicated. Figures provided should not be interpreted as sales figures.

### **CD&E waste managed in the North West**

- 10.2 During the 2009 monitoring period a total of 1.87mt of construction, demolition and excavation waste arose in the North West, a summary of the destination of this waste is outlined in Table 17, as stated above this data only covers waste managed at licensed sites within the North West.

**TABLE 17: Fate of CD&E waste managed in the North West 2009**

<b>Waste management facility</b>	<b>Tonnes</b>
Incinerator	23,704
Landfill	212,349
Recycling	3,417
Reprocessing	1,017,205
Transfer Station	31,687
Treatment	6,558
Unknown	578,723
<b>Total</b>	<b>1,873,642</b>

- 10.3 Table 17 shows that of the 1,873,642 tonnes of CD&E waste managed in the North West 56.5% had the potential to be recycled and re-used as secondary aggregate. 12.6% of the total arisings was sent to incinerators or to landfill which potentially means that the material would not be re-used or recycled, whilst 30.9% was sent to unknown facility types.
- 10.4 Previous reports have attempted to provide a clearer picture of CD&E waste recycling but have also not taken account of mobile crushers and screens and therefore continued to have wide evidence gaps. In 2006 the Regional Technical Advisory Body (RTAB) and the North West Counties Group commissioned a study to fill these gaps for CD&E waste streams in the North West. This report was discussed in detail in the 2007 annual monitoring report and remains the most comprehensive

review of CD&E waste recycling in the region. Without the provision of data being made mandatory these evidence gaps will remain and data will continue to be considered unreliable at best.

### **Alternative arisings**

- 10.5 During the 2009 monitoring period data was gathered for the arisings of secondary aggregate including clay, shale, slate waste, Pulverised Fuel Ash (PFA) and Furnace Bottom Ash (FBA). Table 18 illustrates the amount of secondary aggregate sold and recorded by the AM2009 survey during the period 1 January 2009 to 31 December 2009.

**TABLE 18: Arisings of secondary aggregate in the North West 2009**

Sub-region	Clay and shale	Slate waste	Pulverised Fuel Ash (PFA)	Furnace Bottom Ash (FBA)
Cheshire	~	~	~	~
Cumbria	~	~	~	~
GM/M/W	~	~	~	~
Lancashire	79,253	~	~	~
<b>Total</b>	<b>79,253</b>	<b>0</b>	<b>0</b>	<b>0</b>

- 10.6 Unfortunately, due to non-participation the figures above do not cover the whole of the North West and therefore do not necessarily translate to actual sales of secondary aggregate. On average a total of 476,000 tonnes of secondary aggregate is sold within the North West each year, only a fraction of overall aggregate sales. This illustrates the continued reliance upon primary aggregate and emphasises the need for continued managed aggregate supply to ensure adequate future resources across the region.
- 10.7 However, during October 2010 the ninth Quality Protocol (QP) was launched by the Waste & Resources Action Programme (WRAP), the Environment Agency and industry representatives which covers Pulverised Fuel Ash (The Pulverised Fuel Ash Quality Protocol). The launch of this QP means that FBA produced to the QP standards will no longer be defined as a waste under the European Union Waste Framework Directive and will have increased potential to be used as a secondary aggregate. The Aggregates and Recycling Information Network reported that 'according to WRAP, an estimated 3,128,000 tonnes of waste will now be diverted from landfill and increased use of this alternative recycled material produced in accordance with the new QP will save an estimated 4,410,000 tonnes of virgin material from being excavated' [Agg-Net, New Quality Protocol for Pulverised fuel ash, 15 October 2010].
- 10.8 This new QP and an increase in the demand for environmentally sustainable and affordable aggregates could see a huge rise in the use of alternatives as opposed to primary aggregate in the near future. Currently Fiddlers Ferry Power station in

Warrington is the only coal fired power station in the region creating FBA, all of which already goes into breeze blocks and similar items.

## 11 SUB-REGIONAL SUMMARIES

- 11.1 The sub-regions in the North West region, as defined during 2009, are made up of the following Mineral Planning Authorities (Map 2 on page 7 provides a geographical illustration of the North West RAWP sub-regions):

<b>Cheshire</b>	Cheshire East Council Cheshire West and Chester Council
<b>Cumbria</b>	Cumbria County Council Lake District National Park Authority
<b>Greater Manchester, Merseyside, and Warrington</b>	Bolton Council Bury Metropolitan Borough Council Halton Borough Council Knowsley Metropolitan Borough Council Liverpool City Council Manchester City Council Oldham Metropolitan Borough Council Rochdale Borough Council Salford City Council Sefton Metropolitan Borough Council St Helens Council Stockport Metropolitan Borough Council Tameside Metropolitan Borough Council Trafford Council Warrington Borough Council Wigan Council Wirral Metropolitan Borough Council
<b>Lancashire</b>	Lancashire County Council Blackburn with Darwen Council Blackpool Council

- 11.2 The following chapter provides details of sales, reserves, landbanks, significant infrastructure projects and aggregate producing sites within each of the four sub-regions as detailed above; and should be read in conjunction with Chapters 4, 5 and 6, which provide a regional overview of those issues discussed in the following sections.
- 11.3 Each section provides primary aggregate sales and reserve figures for each of the sub-regions for the period 1 January to 31 December 2009, figures for the previous fourteen years have been included for comparison. A graphical illustration of sales and sales against apportionment is also included.

## **CHESHIRE**

- 11.4 On the 1 April 2009, as a result of Local Government Reorganisation (LGR), Cheshire County Council and the six district councils were replaced by the two new unitary authorities of Cheshire East and Cheshire West and Chester, at this point in time the two authorities continue to be treated as a single sub-region for the purposes of the North West RAWP.

### **Primary aggregate sales and reserves**

- 11.5 Tables 19 and 20 provide primary aggregate sales and reserve figures for the Cheshire sub-region and Figure 6 provides a graphical illustration of sales patterns over the past fifteen years.
- 11.6 Total aggregate sales declined during 2009 by 26.8% from 1.19mt in 2008 to 0.871mt, the lowest recorded figure for over twenty years. The most significant fall was in sales of crushed rock aggregate where sales fell by 95% from 0.02mt in 2008 to 0.001mt. This is largely as a result of the closure of one of the larger crushed rock sites in Cheshire during 2008. Sales of land-won sand and gravel also fell during 2009 by 25.6% from 1.17mt in 2008 to 0.87mt; this is broadly in line with the decline experienced in the region as a whole.
- 11.7 Total aggregate reserves fell by 21.9% over the monitoring period from 22.0mt in 2008 to 17.18mt. Reserves of crushed rock reduced by 21.1% from 5.6mt in 2008 to 4.42mt. This reduction is much larger than would have been expected given the small amount of sales during 2009 and is mainly as a result of reclassification of reserves at one quarry. Sand and gravel reserves fell by 22.2% from 16.4mt in 2008 to 12.76mt. Again this is larger than would have been expected given sales levels for 2009 and is the result of the incorrect classification, in previous years, of reserves at one quarry as 100% aggregate where a significant percentage of reserve is allocated for non-aggregate uses.

**FIGURE 6: Primary aggregate sales in Cheshire 1995-2009**

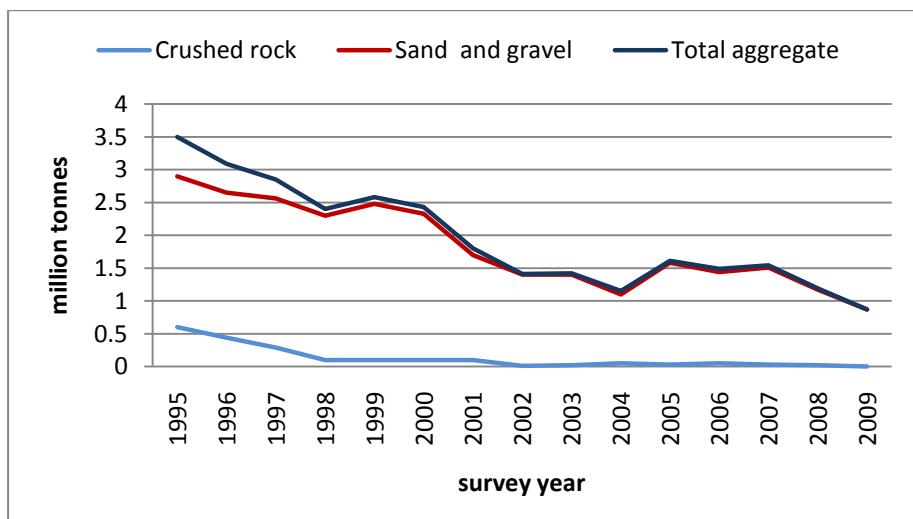


TABLE 19: Primary aggregate sales 1995-2009 – Cheshire sub-region (million tonnes)

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>CRUSHED ROCK</b>															
Sandstone	0.6	0.44	0.29	0.1	0.1	0.1	0.1	0.01	0.02	0.05	0.03	0.05	0.03	0.02	0.001
<b>TOTAL CRUSHED ROCK</b>	<b>0.6</b>	<b>0.44</b>	<b>0.29</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.01</b>	<b>0.02</b>	<b>0.05</b>	<b>0.03</b>	<b>0.05</b>	<b>0.03</b>	<b>0.02</b>	<b>0.001</b>
<b>SAND AND GRAVEL</b>															
Land-won sand and gravel	2.9	2.65	2.56	2.3	2.48	2.33	1.7	1.4	1.4	1.1	1.58	1.44	1.51	1.17	0.87
<b>TOTAL SAND AND GRAVEL</b>	<b>2.9</b>	<b>2.65</b>	<b>2.56</b>	<b>2.3</b>	<b>2.48</b>	<b>2.33</b>	<b>1.7</b>	<b>1.4</b>	<b>1.4</b>	<b>1.1</b>	<b>1.58</b>	<b>1.44</b>	<b>1.51</b>	<b>1.17</b>	<b>0.87</b>
<b>TOTAL AGGREGATE SALES</b>	<b>3.5</b>	<b>3.09</b>	<b>2.85</b>	<b>2.4</b>	<b>2.58</b>	<b>2.43</b>	<b>1.8</b>	<b>1.41</b>	<b>1.42</b>	<b>1.15</b>	<b>1.61</b>	<b>1.49</b>	<b>1.54</b>	<b>1.19</b>	<b>0.871</b>

TABLE 20: Primary aggregate reserves 1995-2009 – Cheshire sub-region (million tonnes)

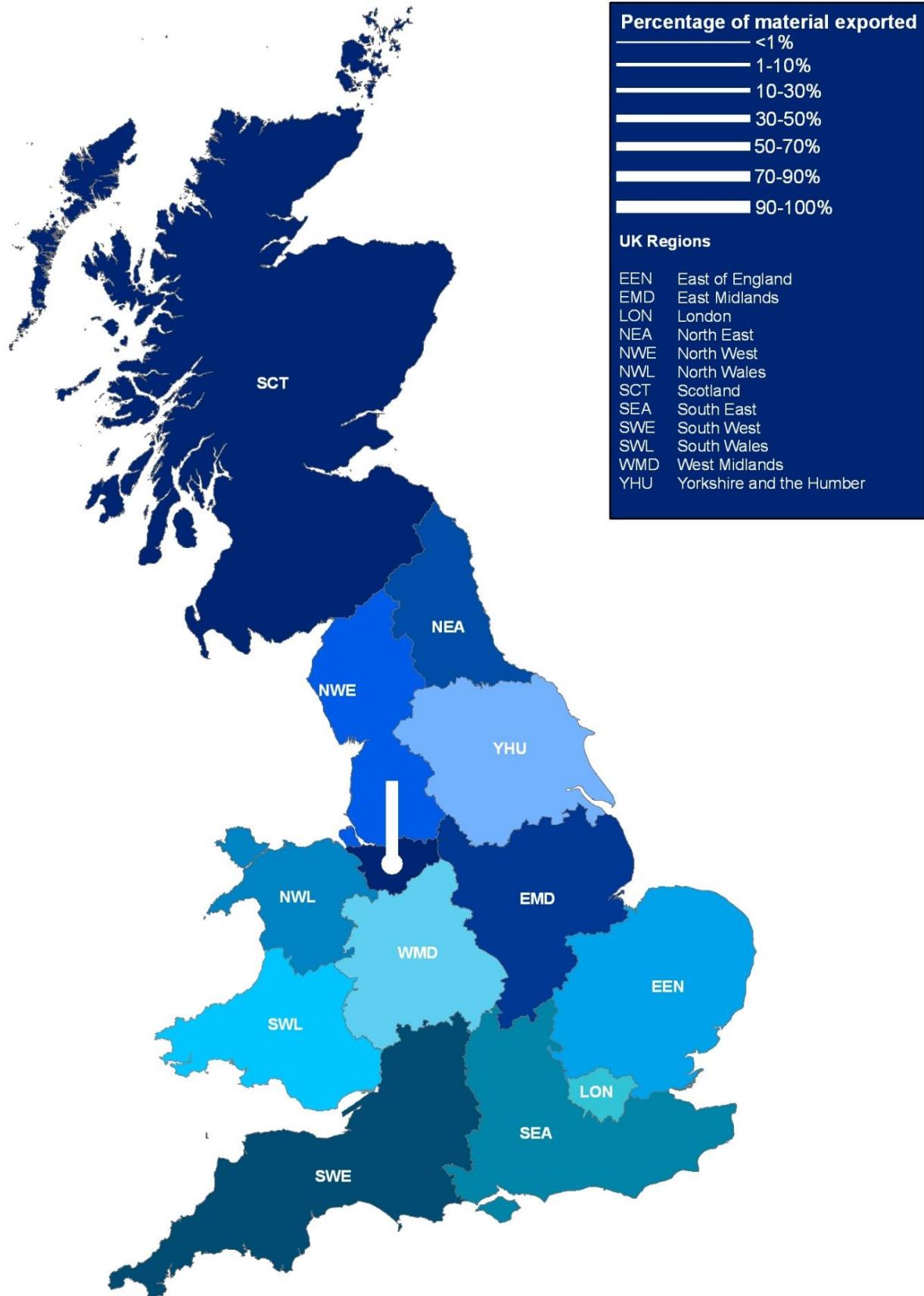
	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>CRUSHED ROCK</b>															
Sandstone	9.4	10.2	9.6	8.52	8.4	8.36	6.5	5.6	5.6	5.4	5.4	5.35	5.52	5.6	4.42
<b>TOTAL CRUSHED ROCK</b>	<b>9.4</b>	<b>10.2</b>	<b>9.6</b>	<b>8.52</b>	<b>8.4</b>	<b>8.36</b>	<b>6.5</b>	<b>5.6</b>	<b>5.6</b>	<b>5.4</b>	<b>5.4</b>	<b>5.35</b>	<b>5.52</b>	<b>5.6</b>	<b>4.42</b>
<b>SAND AND GRAVEL</b>															
Land-won sand and gravel	28.3	25.9	24.1	21.7	19.3	17.9	24.6	23.5	19.7	19.2	20.53	21.3	19.52	16.4	12.76
<b>TOTAL SAND AND GRAVEL</b>	<b>28.3</b>	<b>25.9</b>	<b>24.1</b>	<b>21.7</b>	<b>19.3</b>	<b>17.9</b>	<b>24.6</b>	<b>23.5</b>	<b>19.7</b>	<b>19.2</b>	<b>20.53</b>	<b>21.3</b>	<b>19.52</b>	<b>16.4</b>	<b>12.76</b>
<b>TOTAL AGGREGATE RESERVES</b>	<b>37.7</b>	<b>36.1</b>	<b>33.7</b>	<b>30.22</b>	<b>27.7</b>	<b>26.26</b>	<b>31.1</b>	<b>29.1</b>	<b>25.3</b>	<b>24.6</b>	<b>25.93</b>	<b>26.65</b>	<b>25.04</b>	<b>22.0</b>	<b>17.18</b>

NB: Data up to and including AM98 includes Halton, Warrington and the areas of the Peak Park that fall within Cheshire.

### **Primary aggregate sales by destination**

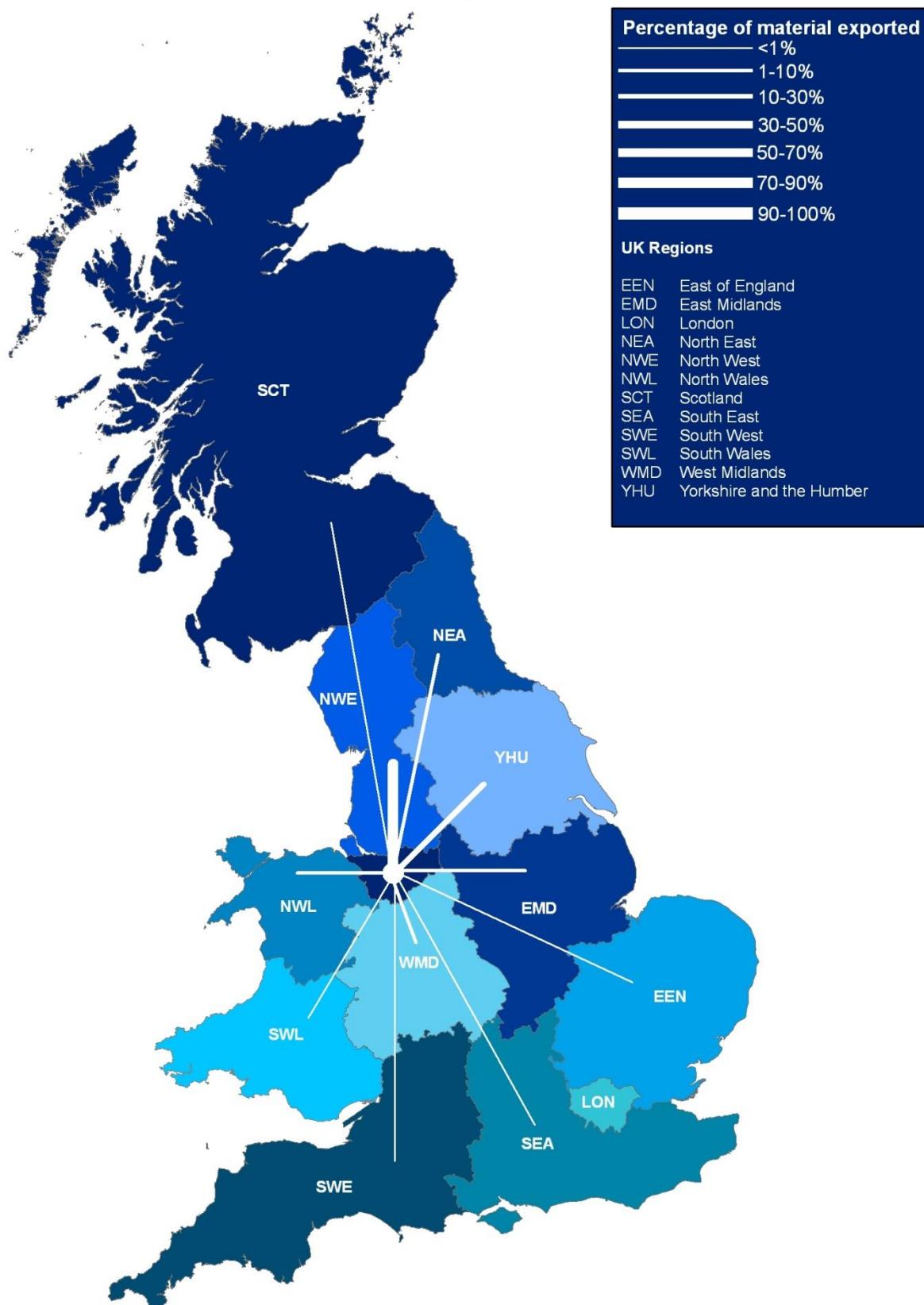
- 11.8 Maps 9 and 10 illustrate the percentage of sales exported from the Cheshire sub-region to the UK regions during the 2009 monitoring period. It should be noted that these movements do not necessarily indicate the location of the end-use and therefore the consumption of aggregates.
- 11.9 One hundred percent of crushed rock aggregate sold within Cheshire remained within the North West region. The material produced in Cheshire is of a low quality and serves a relatively limited local market, therefore other materials from elsewhere in the North West are used.
- 11.10 Just over seventy six percent (76.4) of the total amount of sand and gravel remained within the North West region, 10.5% was exported to Yorkshire and the Humber, 6.5% to the North East, 2.3% to the East Midlands, 1.7% to the West Midlands, 1.8% to North Wales and less than 1% was exported to the following regions: East of England, Northern Ireland, Scotland, South East, South West, South Wales and unknown destinations. Whilst the material extracted from Cheshire appears to cover a wide market area it is only in relatively small quantities and may be an indication of the demand for specialised products.

**MAP 9: Cheshire aggregate crushed rock sales by destination 2009**



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**MAP 10: Cheshire aggregate sand and gravel sales by destination 2009**



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### **Primary aggregate apportionment**

- 11.11 Figures 7 and 8 provide a graphical illustration of sales against apportionment guidelines for Cheshire for the period 2004-2009. Current apportionments continue to be based upon the 'National and Regional Guidelines for Aggregate Provision in England 2001-2016' as the revised guidelines are yet to be fully adopted by the North West RAWP.
- 11.12 Current apportionment figures require Cheshire to contribute 0.13mt of crushed rock aggregate and 1.97mt of land-won sand and gravel per annum to the overall sales in the North West. Cheshire has never met its apportionment for either crushed rock or land-won sand and gravel.
- 11.13 Sales of crushed rock fell to the lowest recorded figure for over twenty years during 2009, taking figures 0.129mt below the annualised requirement of 0.13mt. This has been caused by the closure of one site in Cheshire, which provided large-scale infrastructure projects in Manchester and the surrounding area. The remaining sites are smaller in nature and provide relatively minor quantities of aggregate to much smaller projects.
- 11.14 Sales of land-won sand and gravel, during the 2009 monitoring period, were 1.1mt below the annualised requirement of 1.97mt. This is also the lowest recorded figure for over twenty years but is more likely to be as a result of the slowing down of the wider market during the recession experienced during 2009.

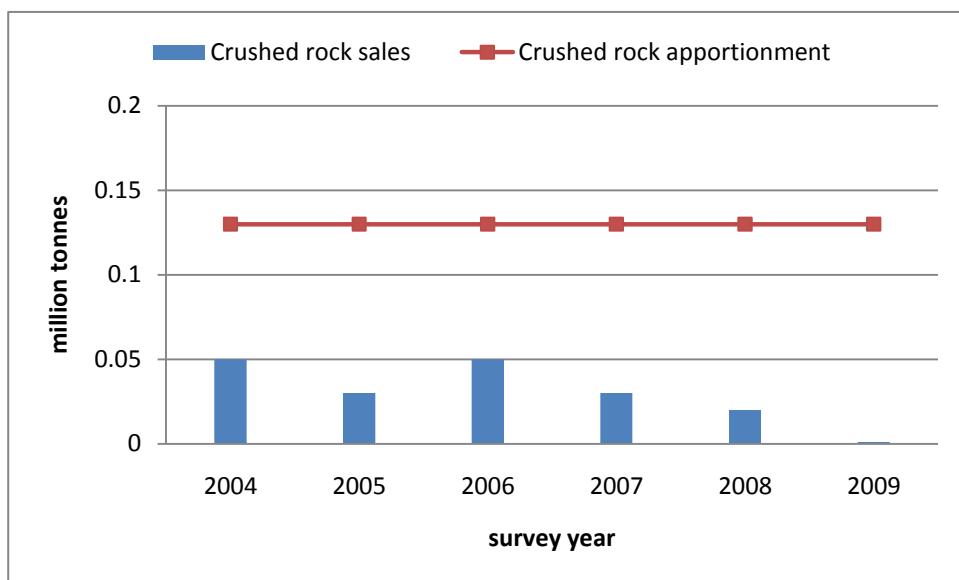
### **Primary aggregate landbanks**

- 11.15 Landbank requirements are set out in MPS1 as 'at least 7 years for sand and gravel and at least 10 years for crushed rock'. Landbanks in Cheshire as at 31 December 2009 were as follows:
- Crushed rock aggregate: 34 years
  - Land-won sand and gravel: 6.48 years
- 11.16 Landbank figures for crushed rock remain far higher than the 10 year minimum requirement at 34 years. However, the landbank for land-won sand and gravel is currently 0.52 years below the minimum requirement of 7 years.

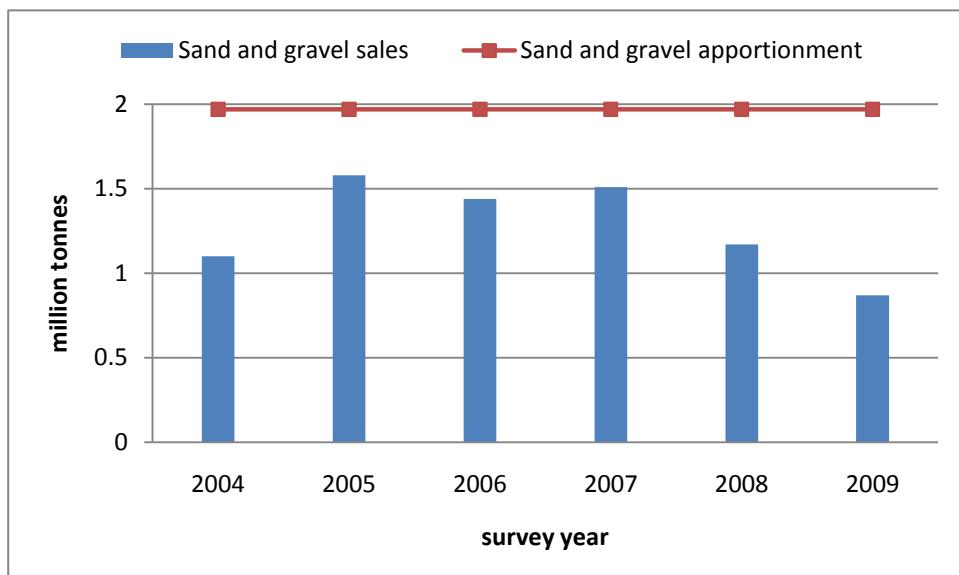
### **Aggregate producing sites**

- 11.17 There are currently twenty one permitted aggregate sites within the Cheshire sub-region, producing varying grades of material including silica sand, construction sand, gravel, sandstone and gritstone. Details of these sites are included in Map 11 and in the directory of sites in Appendix B.

**FIGURE 7: Aggregate crushed rock sales against apportionment in Cheshire 2004-2009**



**FIGURE 8: Land-won sand and gravel sales against apportionment in Cheshire 2004-2009**



**MAP 11: Cheshire aggregate sites 2009**

Aggregate Type

★ Sand and Gravel

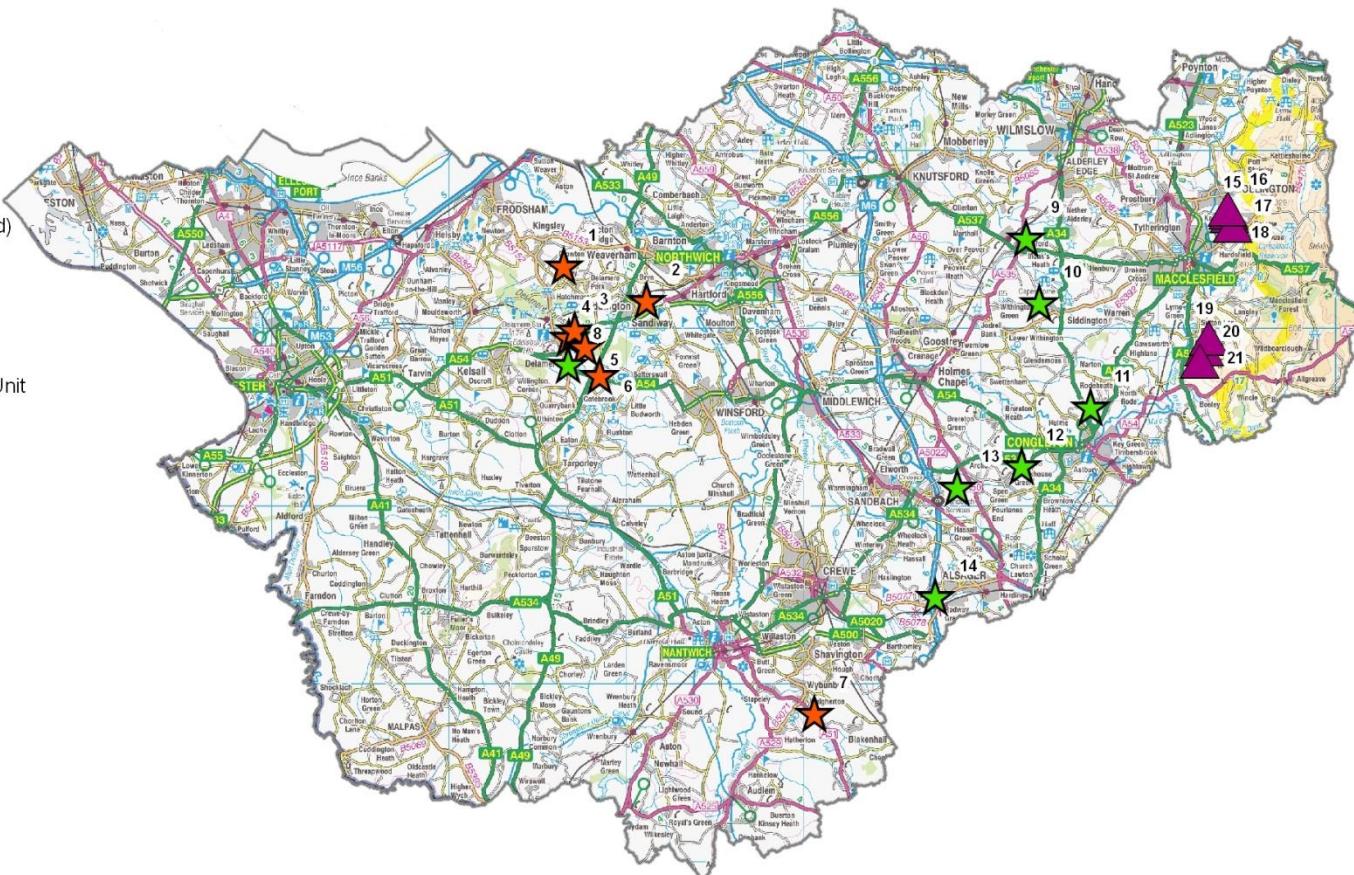
- 1 Town Farm Quarry
- 2 Forest Hill Quarry
- 3 Crown Farm
- 4 Delamere (Station Road)
- 5 Fourways
- 6 Cobden Farm
- 7 Hough Mill

★ Sand

- 8 Cherry Orchard Sand Unit
- 9 Mere Farm
- 10 Dingle Bank
- 11 Eaton Hall
- 12 Bent Farm
- 13 Arclid Quarry
- 14 White Moss Quarry

▲ Sandstone

- 15 Bridge Quarry
- 16 Sycamore Quarry
- 17 Marksенд Quarry
- 18 Endon Quarry
- 19 Lee Hills
- 20 Gawsworth Quarry
- 21 Rough Hey Quarry



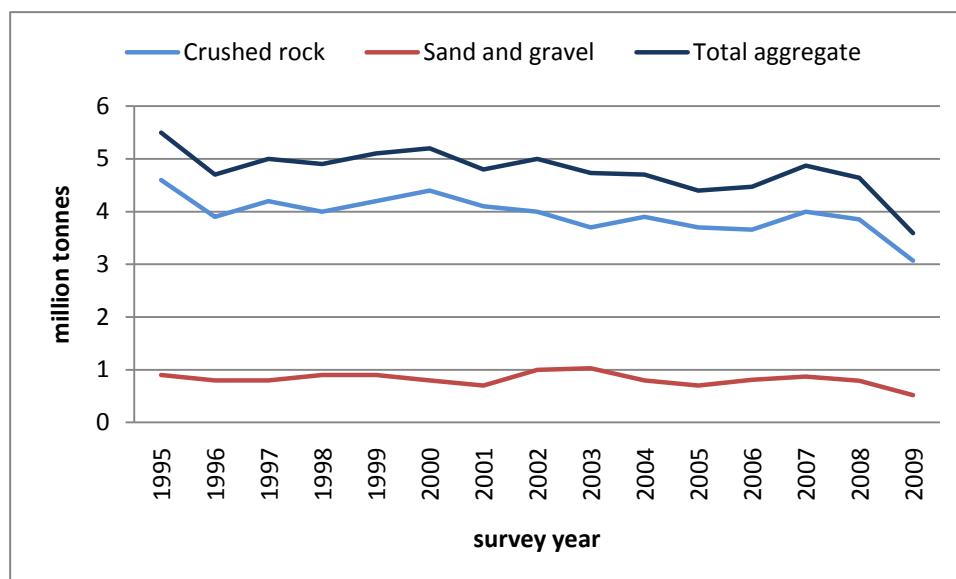
## CUMBRIA

- 11.18 For the purposes of annual monitoring, the Lake District National Park is included within the Cumbria sub-region.

### Primary aggregate sales and reserves

- 11.19 Tables 21 and 22 provide primary aggregate sales and reserve figures for the Cumbria sub-region and Figure 9 provides a graphical illustration of sales patterns over the past fifteen years.
- 11.20 Total aggregate sales fell during 2009 by 22.6% from 4.64mt in 2008 to 3.59mt. The most significant decline was in sales of land-won sand and gravel which fell by 34.2% from 0.79mt in 2008 to 0.52mt, approximately 50% less than sales figures recorded for 2002 and 2003 when sales stood at 1.0mt and 1.03mt respectively. The wider economic crisis continues to influence sales of primary aggregates across the region and in particular sand and gravel sales, where construction end-uses are the primary markets.
- 11.21 Sales of crushed rock aggregate fell by 20.3% during 2009 from 3.85mt in 2008 to 3.07mt which is marginally below the previous six year average of 3.8mt. Whilst this decline is certainly less significant than the drop in sand and gravel sales, it remains to be an indicator of the overall fall in sales both in this sub-region and the wider North West region.

**FIGURE 9: Primary aggregate sales in Cumbria 1995-2009**



- 11.22 The presence of High Specification Aggregate (HSA) in the sub-region has provided a certain level of stability in sales of crushed rock aggregate as it has very specific end-uses and continues to be required even through times of economic instability. Sales of HSA have been monitored separately since 2005 and include sandstone and

igneous rock. Sales have remained steady since 2005 with an average of 0.73mt sold per annum; sales during the monitoring period were above average at 0.78mt and is the highest recorded sales figure since 2005.

- 11.23 Total aggregate reserves fell by 8.6% over the monitoring period from 200.17mt as at 31 December 2008 to 182.92mt. This is 13.7mt less than would have been expected given sales levels during 2009 and is likely to be the result of the reassessment of reserves at one site. Reserves of crushed rock fell from 186.7mt in 2008 to 168.97mt, whilst this is a decline of 9.5%, reserves remain higher than figures recorded for the period 2002-2006 which is largely the result of 1.79mt of reserve being granted planning permission during the monitoring period.
- 11.24 Reserves of sand and gravel continued to increase during 2009, by 3.6% from 13.47mt in 2008 to 13.95mt. This rise is the result of a number of permissions being granted for extensions to existing sites during the monitoring period and is the highest recorded figure since 1995 when a figure of 14.1mt was recorded.

**TABLE 21: Primary aggregate sales 1995-2009 – Cumbria sub-region (million tonnes)**

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>CRUSHED ROCK</b>															
Limestone	3.8	3.2	3.5	3.2	3.4	3.4	3.0	2.9	2.6	2.8	2.6	2.7	2.8	2.7	1.91
Sandstone and igneous rock	0.8	0.7	0.7	0.8	0.8	1.0	1.1	1.1	1.1	1.1	0.36	0.27	0.53	0.4	0.38
High Specification Aggregate (HSA)	~	~	~	~	~	~	~	~	~	~	0.74	0.69	0.7	0.75	0.78
<b>TOTAL CRUSHED ROCK</b>	<b>4.6</b>	<b>3.9</b>	<b>4.2</b>	<b>4.0</b>	<b>4.2</b>	<b>4.4</b>	<b>4.1</b>	<b>4.0</b>	<b>3.7</b>	<b>3.9</b>	<b>3.7</b>	<b>3.66</b>	<b>4.0</b>	<b>3.85</b>	<b>3.07</b>
<b>SAND AND GRAVEL</b>															
Land-won sand and gravel	0.9	0.8	0.8	0.9	0.9	0.8	0.7	0.9	1.0	0.8	0.7	0.79	0.87	0.77	0.52
Harbour authority sand and gravel	~	~	~	~	~	~	~	0.1	0.03	~	~	0.02	~	0.02	~
<b>TOTAL SAND AND GRAVEL</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>	<b>0.7</b>	<b>1.0</b>	<b>1.03</b>	<b>0.8</b>	<b>0.7</b>	<b>0.81</b>	<b>0.87</b>	<b>0.79</b>	<b>0.52</b>
<b>TOTAL AGGREGATE SALES</b>	<b>5.5</b>	<b>4.7</b>	<b>5.0</b>	<b>4.9</b>	<b>5.1</b>	<b>5.2</b>	<b>4.8</b>	<b>5.0</b>	<b>4.73</b>	<b>4.7</b>	<b>4.4</b>	<b>4.47</b>	<b>4.87</b>	<b>4.64</b>	<b>3.59</b>

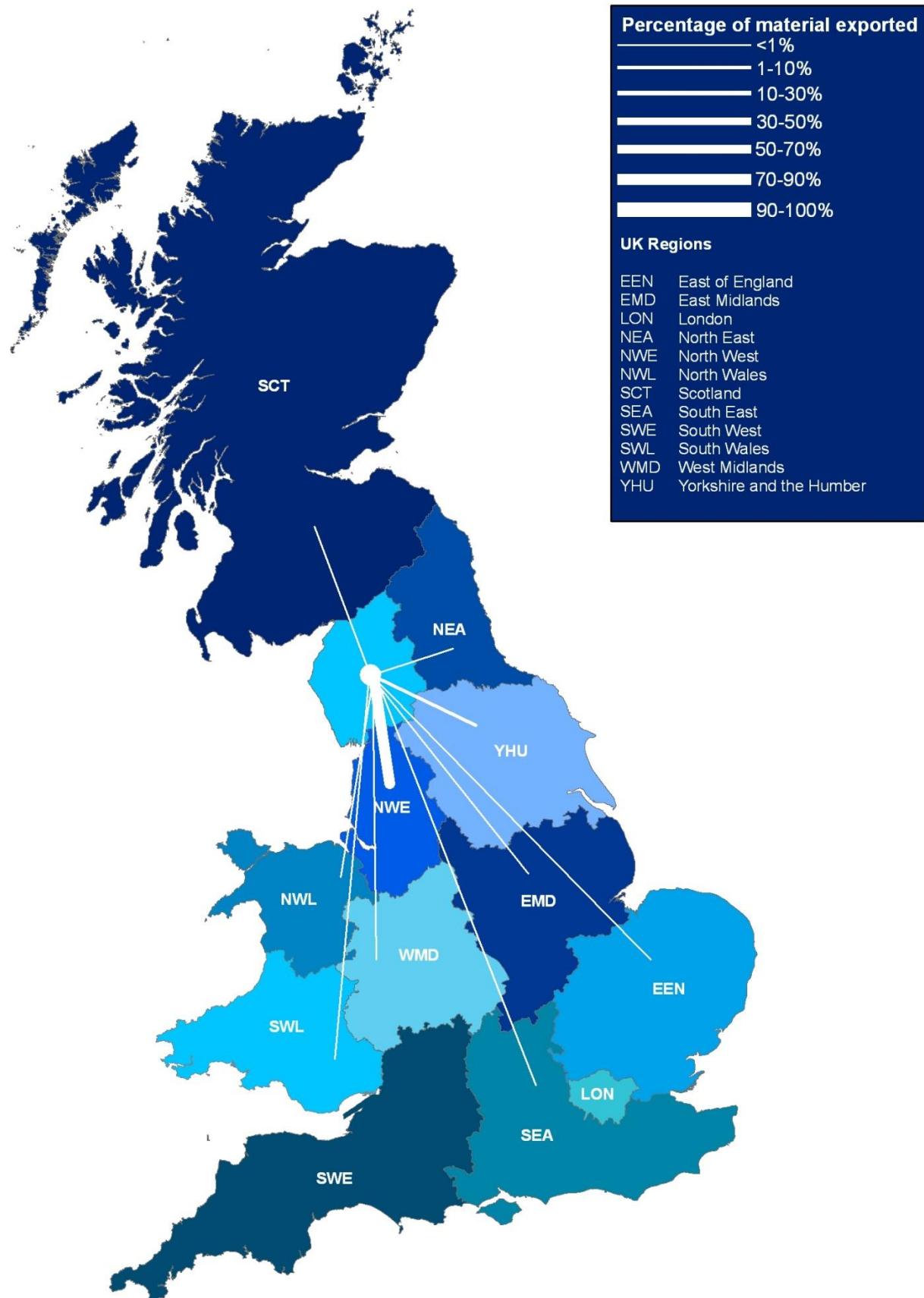
**TABLE 22: Primary aggregate reserves 1995-2009 – Cumbria sub-region (million tonnes)**

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>CRUSHED ROCK</b>															
Limestone	143.9	111.7	121.9	91.7	111.8	116.7	106.0	102.0	99.2	96.1	97.9	97.7	102.5	110.05	103.9
Sandstone and igneous rock	76.3	69.6	67.7	66.8	67.5	66.5	65.0	63.0	62.0	60.9	48.85	49.2	48.69	47.75	47.81
High Specification Aggregate (HSA)	~	~	~	~	~	~	~	~	~	~	9.85	9.55	19.0	18.2	17.26
<b>TOTAL CRUSHED ROCK</b>	<b>220.2</b>	<b>181.3</b>	<b>189.6</b>	<b>158.5</b>	<b>179.3</b>	<b>183.2</b>	<b>171.0</b>	<b>165.0</b>	<b>161.2</b>	<b>157.0</b>	<b>156.6</b>	<b>156.5</b>	<b>170.2</b>	<b>186.7</b>	<b>168.97</b>
<b>SAND AND GRAVEL</b>															
Land-won sand and gravel	14.1	12.2	13.5	12.2	12.3	11.8	12.0	12.1	11.4	10.5	9.18	9.19	8.67	13.47	13.95
<b>TOTAL SAND AND GRAVEL</b>	<b>14.1</b>	<b>12.2</b>	<b>13.5</b>	<b>12.2</b>	<b>12.3</b>	<b>11.8</b>	<b>12.0</b>	<b>12.1</b>	<b>11.4</b>	<b>10.5</b>	<b>9.18</b>	<b>9.19</b>	<b>8.67</b>	<b>13.47</b>	<b>13.95</b>
<b>TOTAL AGGREGATE RESERVES</b>	<b>234.3</b>	<b>193.5</b>	<b>203.1</b>	<b>170.7</b>	<b>191.6</b>	<b>195.0</b>	<b>183.0</b>	<b>177.1</b>	<b>172.6</b>	<b>167.5</b>	<b>165.78</b>	<b>165.64</b>	<b>178.86</b>	<b>200.17</b>	<b>182.92</b>

### **Primary aggregate sales by destination**

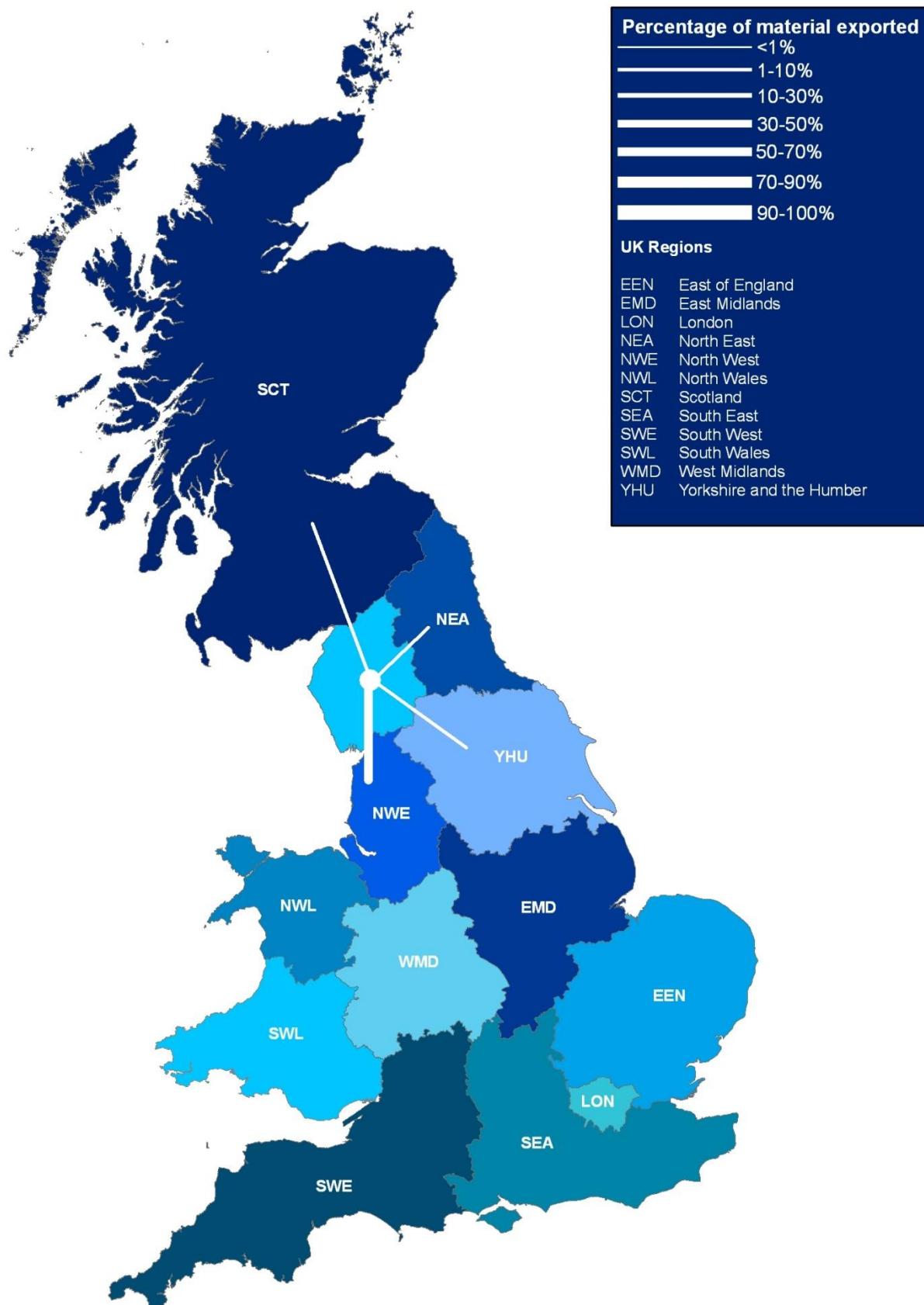
- 11.25 Maps 12 and 13 illustrate the percentage of sales of crushed rock aggregate and sand and gravel, exported from the Cumbria sub-region to the UK regions during the 2009 monitoring period. It should be noted that these movements do not necessarily indicate the location of the end-use and therefore the consumption of aggregates.
- 11.26 Eighty six percent of crushed rock aggregate sold within Cumbria remained within the North West region, 6.02% was exported to Yorkshire and the Humber. Less than 1% was exported to each the following regions: East Midlands, East of England, North East, North Wales, Scotland, South East, South Wales, West Midlands, and 2.5% went to unknown destinations. The wide geographic coverage of sales may well be an indication of the demand for specialised material such as High Specification Aggregate supplied from quarries within Cumbria. Whilst the coverage is wide the material sold is in relatively small quantities apart from exports to neighbouring regions, for example Yorkshire and the Humber.
- 11.27 Fifty nine percent of the total amount of sand and gravel removed from Cumbria remained within the North West region, 3.4% was exported to Yorkshire and the Humber, 7.6% to the North East, 3.34% to Scotland and 26.4% to unknown destinations. Material removed from Cumbria appears to cover specific markets and has a narrower geographic coverage which may well relate to quarry ownership and related operations.

## **MAP 12: Cumbria aggregate crushed rock sales by destination 2009**



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**MAP 13: Cumbria aggregate sand and gravel sales by destination 2009**



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### **Primary aggregate apportionment**

- 11.28 Figures 10 and 11 provide a graphical illustration of sales against apportionment guidelines for Cumbria for the period 2004-2009. Current apportionments continue to be based upon the 'National and Regional Guidelines for Aggregate Provision in England 2001-2016' as the revised guidelines are yet to be fully adopted by the North West RAWP.
- 11.29 Current apportionment figures require Cumbria to contribute 4.1mt of crushed rock aggregate and 0.7mt of land-won sand and gravel per annum to the overall sales in the North West. Cumbria has never met its crushed rock apportionment requirements but has exceeded sales requirements for land-won sand and gravel for the previous three years but has not met it for the monitoring period, sales fell 0.18mt below the requirement. Sales of crushed rock also fell below the annual requirement by 1.03mt.

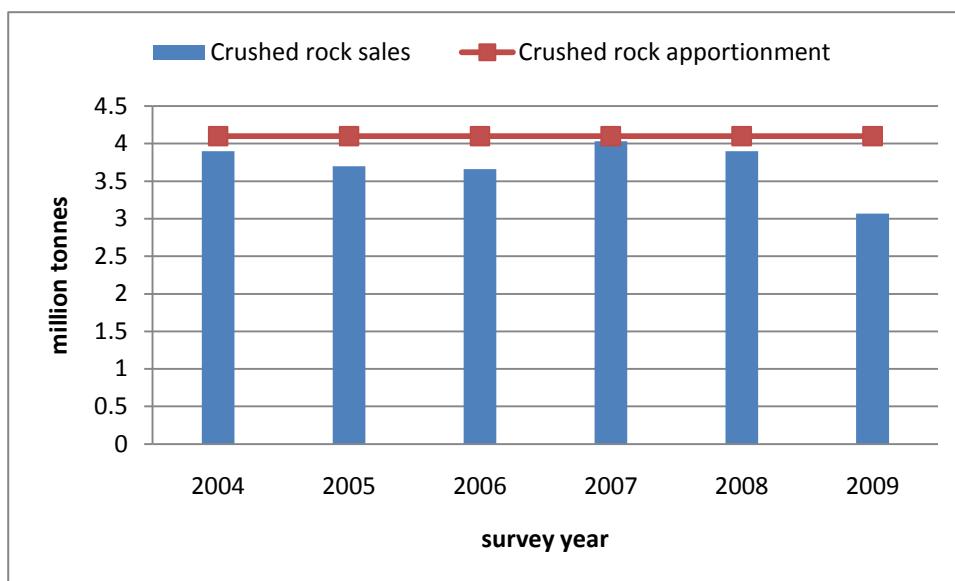
### **Primary aggregate landbanks**

- 11.30 Landbank requirements set out in MPS1 as 'at least 7 years for sand and gravel and at least 10 years for crushed rock'. Landbanks in Cumbria as at 31 December 2009 were as follows:
- Crushed rock aggregate: 41.21 years
  - Land-won sand and gravel: 19.93 years
- 11.31 Landbanks remain well in excess of the minimum requirements for both crushed rock and land-won sand and gravel by 31.21 years and 12.93 years respectively.

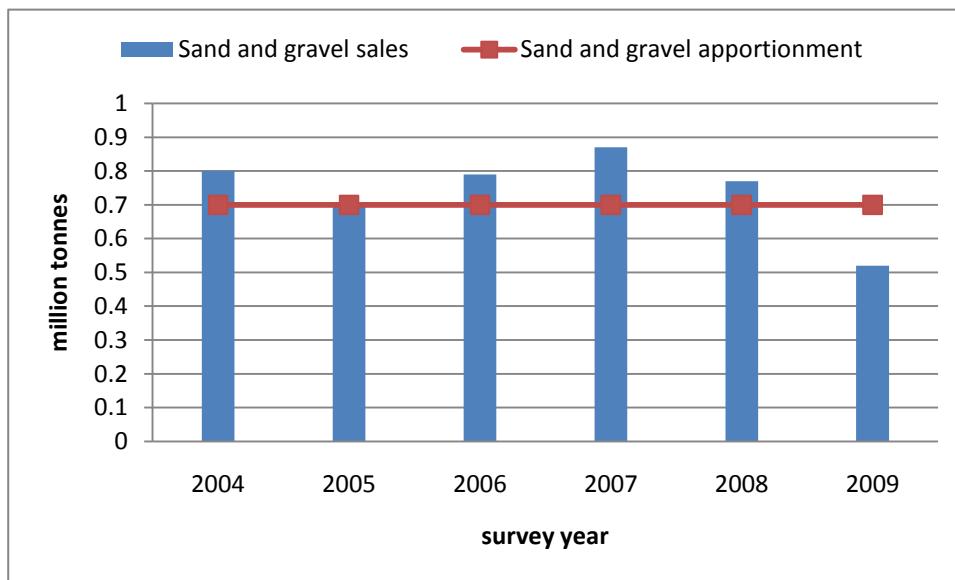
### **Aggregate producing sites**

- 11.32 There are currently thirty three permitted aggregate sites within Cumbria, producing various aggregate materials including limestone, igneous rock, sand, gravel and HSA. Details of these sites are included in Map 14 and in the directory of sites in Appendix B.

**FIGURE 10: Aggregate crushed rock sales against apportionment in Cumbria 2004-2009**



**FIGURE 11: Land-won sand and gravel sales against apportionment in Cumbria 2004-2009**



## MAP 14: Cumbria aggregate sites 2009

### Aggregate Type

#### ▲ Limestone

- 1 Silvertop Quarry
- 2 Snowhill Quarry
- 3 Moota Quarry
- 4 Tendley Quarry
- 5 Flusco Quarry
- 6 Eskett & Rowrah Quarry
- 7 Shap Beck
- 8 Shapfell Limestone Quarry
- 9 Helbeck Quarry
- 10 Hartley Quarry
- 11 Kendal Fell Quarry
- 12 Sandside Quarry
- 13 Holme Park Quarry
- 14 Stainton Quarry
- 15 Goldmire Quarry

#### ★ Sand and Gravel

- 16 Kirkhouse Quarry
- 17 Cardewmires
- 18 Highfield
- 19 Aldoth Quarry
- 20 Low Plains
- 21 Peel Place Quarry
- 22 Roosecote Sand Pit

#### ★ Sand

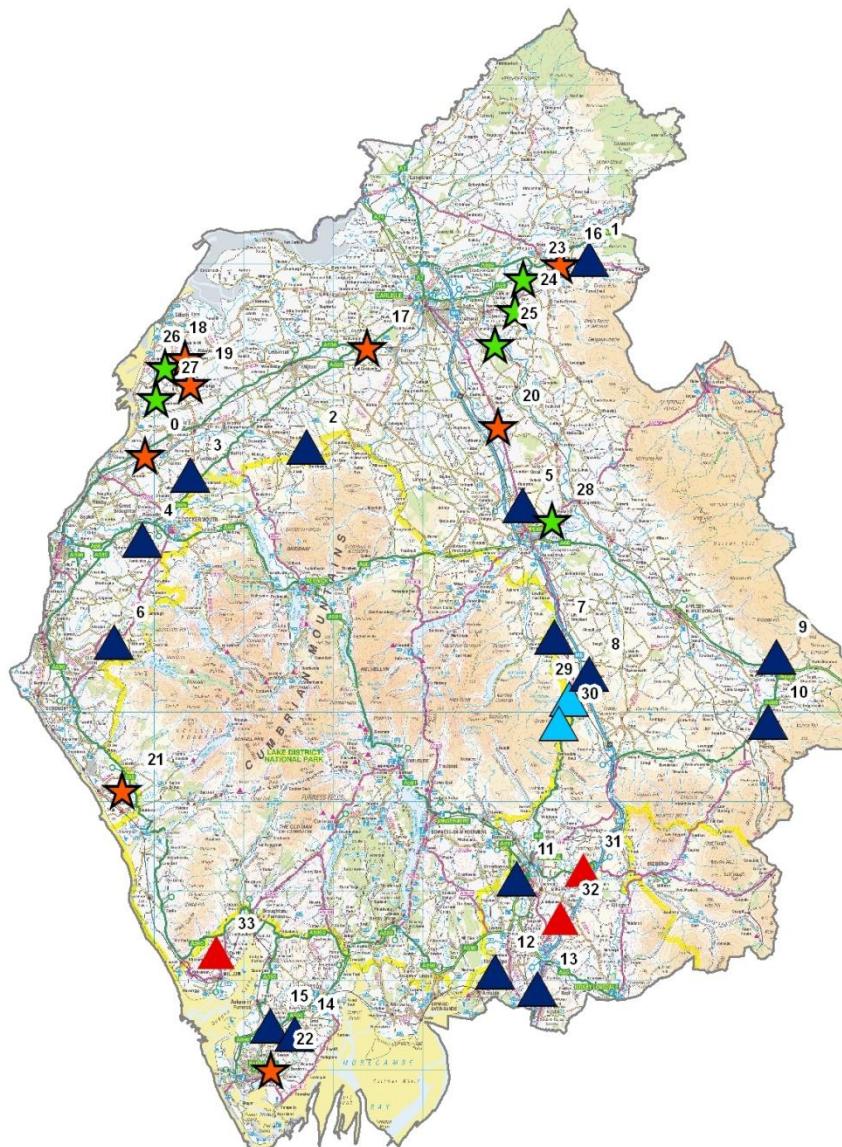
- 23 Low Gelt Quarry
- 24 Faugh No 1 and 2 Sand Pits
- 25 Brocklewath Farm
- 26 Overby No 2 Sand Pit
- 27 New Cowper
- 28 Bonnie Mount Quarry

#### △ Igneous

- 29 Shap Blue Quarry and Works
- 30 Shap Pink Quarry

#### ▲ HSA

- 31 Roan Edge
- 32 Holmescales Quarry
- 33 Ghyll Scaur Quarry



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## **GREATER MANCHESTER, MERSEYSIDE, HALTON AND WARRINGTON**

- 11.33 For the purposes of annual monitoring and to maintain commercial confidentiality, the authorities within Greater Manchester, Merseyside, Halton and Warrington are included as one sub-region.

### **Primary aggregate sales and reserves**

- 11.34 Tables 23 and 24 provide primary aggregate sales and reserve figures for the sub-region and Figure 12 provides a graphical illustration of sales patterns over the past fifteen years.
- 11.35 Total aggregate sales fell significantly during 2009 by 49.3% from 1.13mt in 2008 to 0.67mt. This is the lowest recorded sales figure for over twenty years and is the first monitoring period to record a sales figure of less than 1mt. The largest fall was in sales of crushed rock aggregate where sales fell by 56% from 0.69mt in 2008 to 0.30mt. The unexpected closure of two sites and the reassessment of reserves at an additional site lead to the sharp decline experienced during 2008. Sales fell from an average of 1.35mt per annum to 0.69mt which marked a downturn in sales which has continued into the 2009 monitoring period. In comparison sales of land-won sand and gravel have remained relatively consistent since 2002. Sales fell by 16% during 2009 from 0.44mt in 2008 to 0.37, which is only 11% below the average sales figure over the past eight year period of 0.42mt.
- 11.36 Total aggregate reserves increased marginally by 0.73% from 23.13mt as at 31 December 2008 to 23.33mt. Reserves of crushed rock decreased by 0.75% from 17.36mt in 2008 to 17.23mt, whilst reserves of sand and gravel increased by 5.2% from 5.8mt in 2008 to 6.1mt. Reserves of sand and gravel have remained stable since the sharp decline experienced in 2007 when reserves fell by 48% from 9.89mt to 5.15mt due to the closure of one site within the sub-region.

**FIGURE 12: Primary aggregate sales in the Greater Manchester/Merseyside/Warrington sub-region 1995-2009**

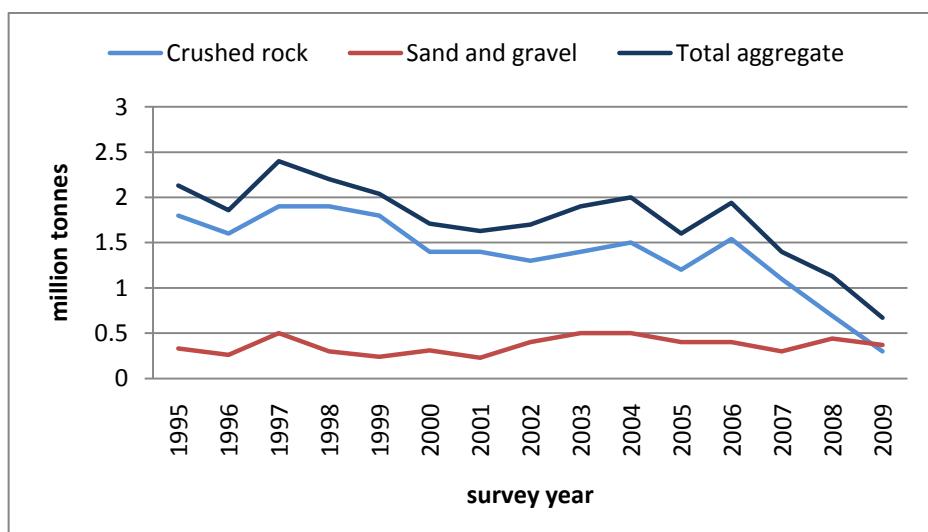


TABLE 23: Primary aggregate sales 1995-2009 – Greater Manchester/Merseyside/Warrington sub-region (million tonnes)

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>CRUSHED ROCK</b>															
Sandstone	1.8	1.6	1.9	1.9	1.8	1.4	1.4	1.3	1.4	1.5	1.2	1.54	1.1	0.69	0.30
<b>TOTAL CRUSHED ROCK</b>	<b>1.8</b>	<b>1.6</b>	<b>1.9</b>	<b>1.9</b>	<b>1.8</b>	<b>1.4</b>	<b>1.4</b>	<b>1.3</b>	<b>1.4</b>	<b>1.5</b>	<b>1.2</b>	<b>1.54</b>	<b>1.1</b>	<b>0.69</b>	<b>0.30</b>
<b>SAND AND GRAVEL</b>															
Land-won sand and gravel	0.33	0.26	0.5	0.3	0.24	0.31	0.23	0.4	0.5	0.5	0.4	0.4	0.3	0.44	0.37
<b>TOTAL SAND AND GRAVEL</b>	<b>0.33</b>	<b>0.26</b>	<b>0.5</b>	<b>0.3</b>	<b>0.24</b>	<b>0.31</b>	<b>0.23</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.44</b>	<b>0.37</b>
<b>TOTAL AGGREGATE SALES</b>	<b>2.13</b>	<b>1.86</b>	<b>2.4</b>	<b>2.2</b>	<b>2.04</b>	<b>1.71</b>	<b>1.63</b>	<b>1.7</b>	<b>1.9</b>	<b>2.0</b>	<b>1.6</b>	<b>1.94</b>	<b>1.4</b>	<b>1.13</b>	<b>0.67</b>

TABLE 24: Primary aggregate reserves 1995-2009 – Greater Manchester/Merseyside/Warrington sub-region (million tonnes)

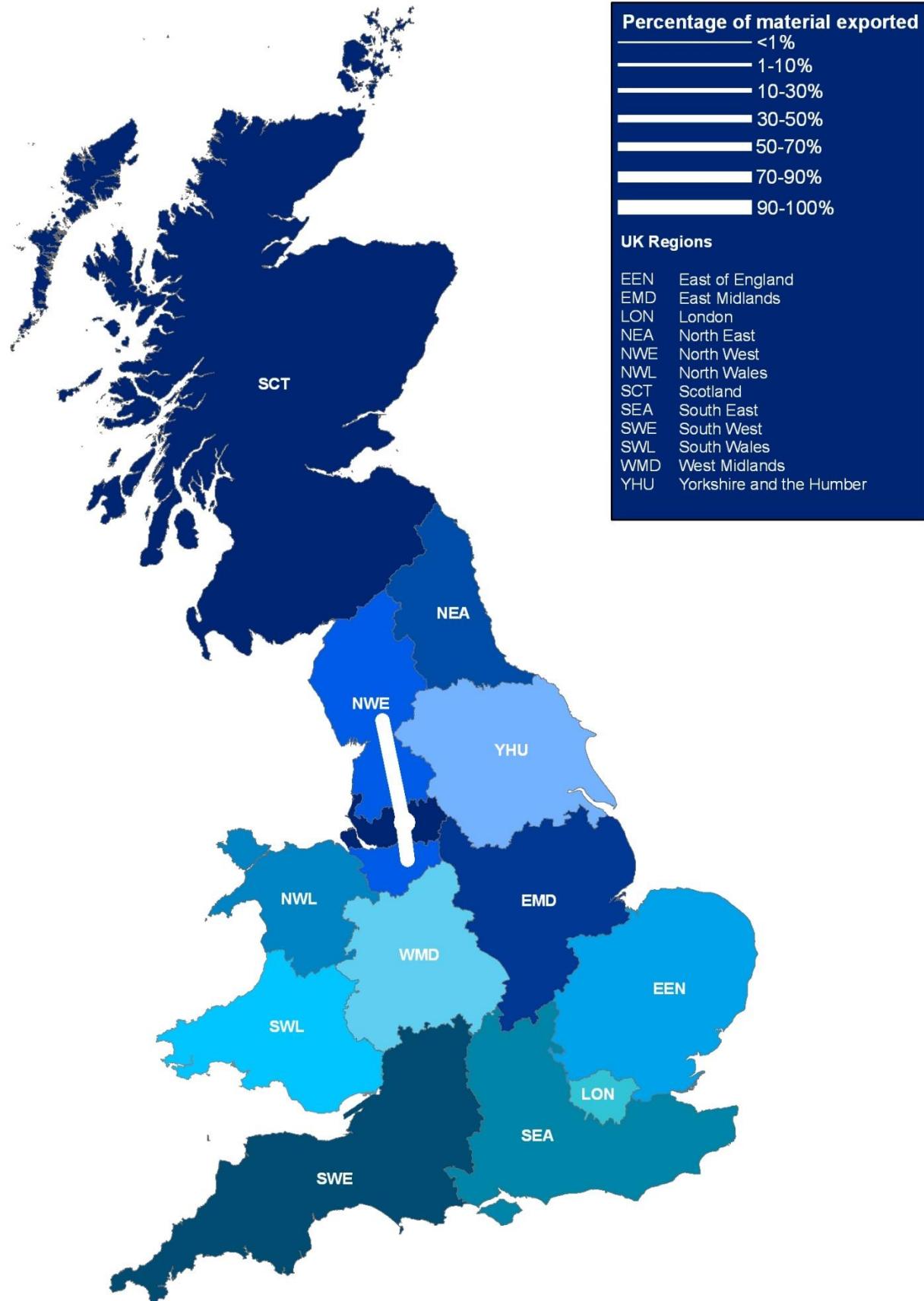
	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>CRUSHED ROCK</b>															
Sandstone	34.9	35.5	32.4	35.33	32.0	30.9	30.2	27.7	22.6	22.5	23.69	25.54	24.86	17.36	17.23
<b>TOTAL CRUSHED ROCK</b>	<b>34.9</b>	<b>35.5</b>	<b>32.4</b>	<b>35.33</b>	<b>32.0</b>	<b>30.9</b>	<b>30.2</b>	<b>27.7</b>	<b>22.6</b>	<b>22.5</b>	<b>23.69</b>	<b>25.54</b>	<b>24.86</b>	<b>17.36</b>	<b>17.23</b>
<b>SAND AND GRAVEL</b>															
Land-won sand and gravel	4.1	3.8	3.5	5.36	7.67	7.1	6.7	7.7	6.7	6.3	8.91	9.89	5.15	5.8	6.1
<b>TOTAL SAND AND GRAVEL</b>	<b>4.1</b>	<b>3.8</b>	<b>3.5</b>	<b>5.36</b>	<b>7.67</b>	<b>7.1</b>	<b>6.7</b>	<b>7.7</b>	<b>6.7</b>	<b>6.3</b>	<b>8.91</b>	<b>9.89</b>	<b>5.15</b>	<b>5.8</b>	<b>6.1</b>
<b>TOTAL AGGREGATE RESERVES</b>	<b>39.0</b>	<b>39.3</b>	<b>35.9</b>	<b>40.69</b>	<b>39.67</b>	<b>38.0</b>	<b>36.9</b>	<b>35.4</b>	<b>29.3</b>	<b>28.8</b>	<b>32.6</b>	<b>35.43</b>	<b>30.01</b>	<b>23.16</b>	<b>23.33</b>

NB: Data up to and including AM98 excludes Halton and Warrington

### **Primary aggregate sales by destination**

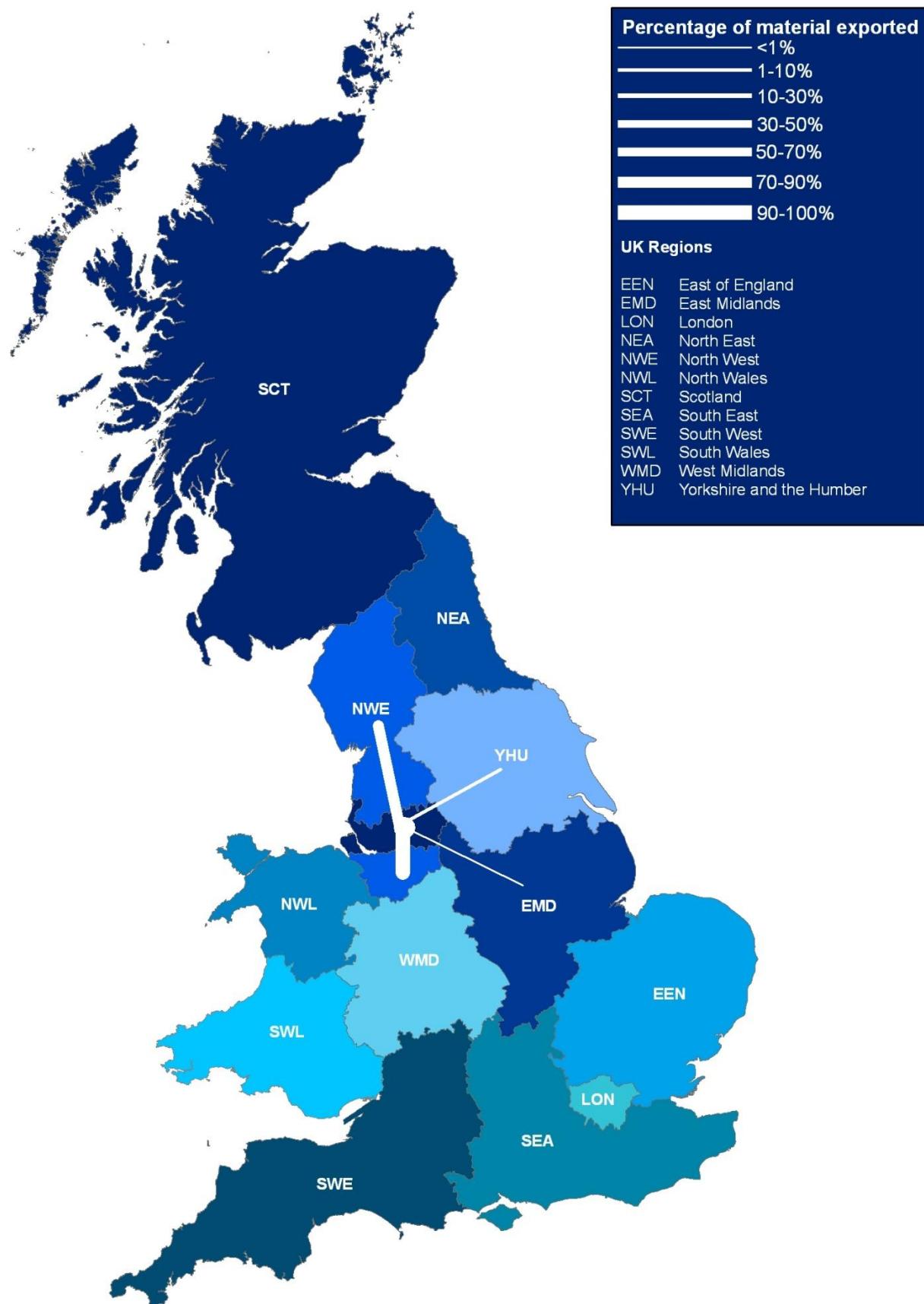
- 11.37 Maps 15 and 16 illustrate the percentage of sales of crushed rock aggregate and sand and gravel, exported from the Greater Manchester/Merseyside/Warrington sub-region to the UK regions during the 2009 monitoring period. It should be noted that these movements do not necessarily indicate the location of the end-use and therefore the consumption of aggregates.
- 11.38 One hundred percent of crushed rock aggregate sold within the Greater Manchester/Merseyside/Warrington sub-region remained within the North West region. The material produced in the sub-region is of a relatively low quality and may be seen to meet a more local need.
- 11.39 Just over seventy percent (70.4%) of the total amount of sand and gravel removed from the sub-region remained within the North West, 2.6% was exported to Yorkshire and the Humber, whilst less than 1% was exported the East Midlands and 27% to unknown destinations. Again, material is of a relatively low grade and generally services more local markets.

**MAP 15: Greater Manchester/Merseyside/Warrington aggregate crushed rock sales by destination 2009**



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Map produced using data from the BGS Annual Minerals Survey 2009

**MAP 16: Greater Manchester/Merseyside/Warrington aggregate sand and gravel sales by destination 2009**



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### **Primary aggregate apportionment**

- 11.40 Figures 13 and 14 provide a graphical illustration of sales against apportionment guidelines for the Greater Manchester/Merseyside/Warrington sub-region for the period 2004-2009. Current apportionments continue to be based upon the 'National and Regional Guidelines for Aggregate Provision in England 2001-2016' as the revised guidelines are yet to be fully adopted by the North West RAWP.
- 11.41 Under current apportionment arrangements the Greater Manchester/Merseyside /Warrington sub-region is required to contribute 1.65mt of crushed rock aggregate and 0.26mt of land-won sand and gravel per annum. The Greater Manchester/Merseyside/Warrington sub-region has never met its apportionment for crushed rock but has consistently exceeded its requirements for land-won sand and gravel.
- 11.42 Sales of crushed rock fell to the lowest recorded level since current apportionments were put in place and indeed for over twenty years. Sales during 2009 were 1.35mt below the annualised requirement of 1.65mt. Reserves in the sub-region are of a relatively low grade material which meets the 'fill' market and as such demand is low where in competition with higher grade materials available elsewhere in the region.
- 11.43 In comparison, sales of land-won sand and gravel exceeded apportionment requirements by 0.11mt and are broadly in line with average sales of 0.40mt since current apportionments were adopted. Continued significant infrastructure developments in the sub-region may well have contributed to the stability of sales over the past 6 years.

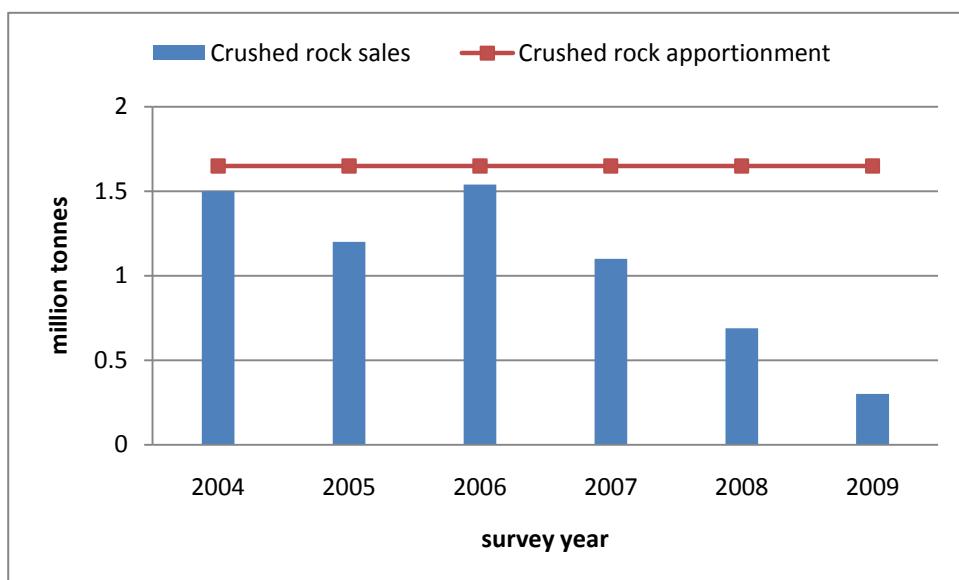
### **Primary aggregate landbanks**

- 11.44 Landbank requirements are set out in MPS1 as 'at least 7 years for sand and gravel and at least 10 years for crushed rock'. Landbanks in the Greater Manchester/Merseyside/Warrington sub-region as at 31 December 2009 were as follows:
- Crushed rock aggregate: 10.44 years
  - Land-won sand and gravel: 23.46 years
- 11.45 Landbank figures for crushed rock remain almost unchanged since 2008 when a landbank of 10.5 years was recorded and are in line with requirements set out in MPS1. Landbanks for land-won sand and gravel have increased by 1.16 years from 22.3 years as at 2008 and remain far higher than the 7 year requirement.

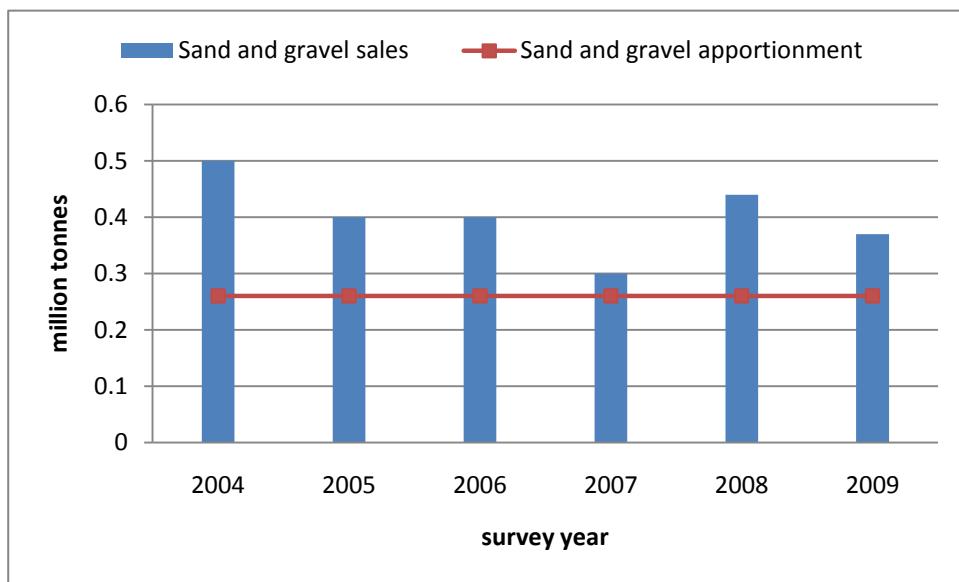
### **Aggregate producing sites**

- 11.46 There are currently fourteen permitted aggregate sites within the Greater Manchester/Merseyside/Warrington sub-region, producing sandstone and sand and gravel of varying quality. Map 17 illustrates the spatial distribution of these sites and details are included in the directory of sites in Appendix B.

**FIGURE 13: Aggregate crushed rock sales against apportionment in Greater Manchester/Merseyside/Warrington sub-region 2004-2009**



**FIGURE 14: Land-won sand and gravel sales against apportionment in Greater Manchester/Merseyside/Warrington sub-region 2004-2009**



**MAP 17: Greater Manchester/Merseyside/Warrington sub-region aggregate sites 2009**

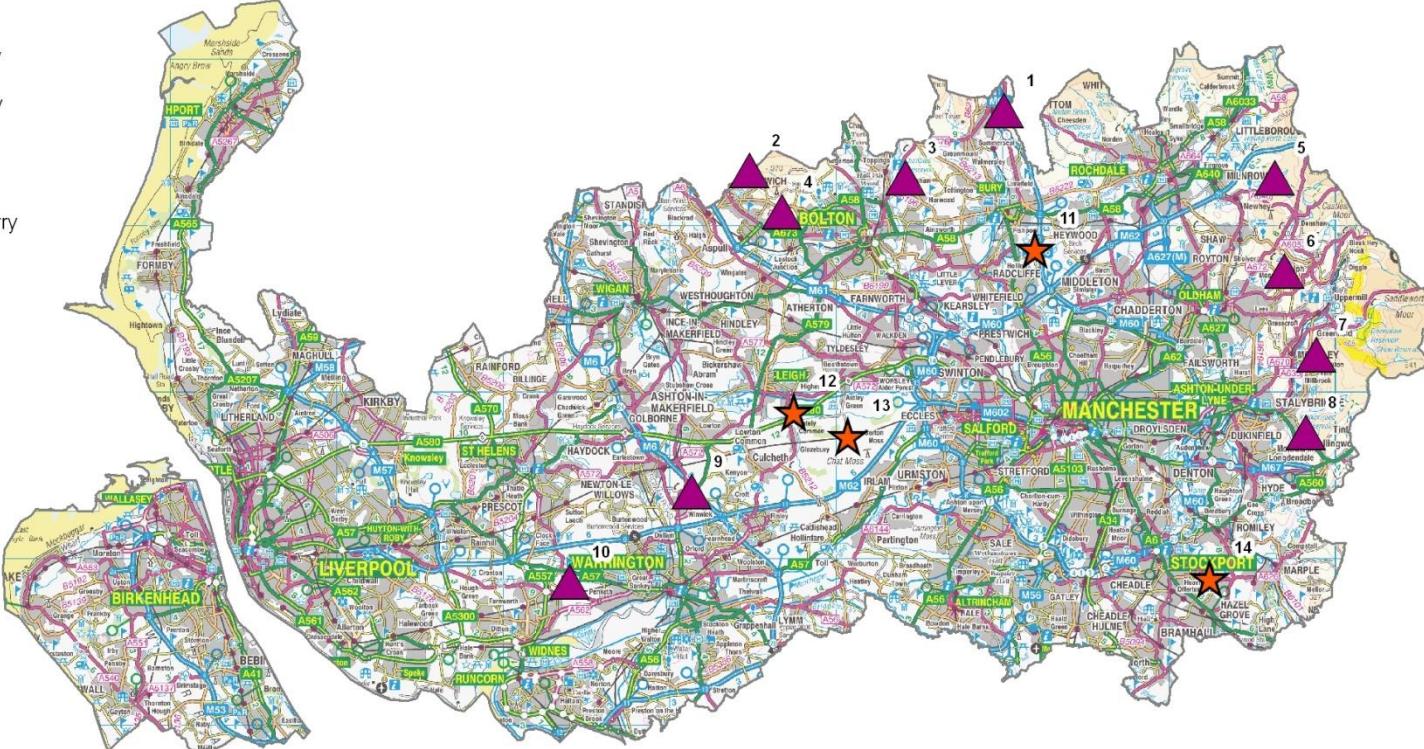
Aggregate Type

▲ Sandstone

- 1 Fletcher Bank
- 2 Montcliffe Quarry
- 3 Harwood Quarry
- 4 Pilkington Quarry
- 5 New Hey
- 6 High Moor
- 7 Buckton Vale
- 8 Harrup Edge
- 9 Southworth Quarry
- 10 Bold Heath

★ Sand and Gravel

- 11 Pilsworth Quarry
- 12 Morley Hall
- 13 Astley Moss
- 14 Offerton Quarry



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## LANCASHIRE

- 11.47 For the purposes of annual monitoring, the authorities of Blackpool and Blackburn with Darwen are included within the Lancashire sub-region.

### Primary aggregate sales and reserves

- 11.48 Tables 25 and 26 provide primary aggregate sales and reserve figures for the Lancashire sub-region and Figure 15 provides a graphical illustration of sales patterns over the past fifteen years.
- 11.49 Total aggregate sales fell during 2009 by 22% from 3.77mt in 2008 to 2.94mt, the lowest recorded figure for over twenty years. Sales of crushed rock aggregate fell by 27.2% from 3.46mt to 2.52mt whilst sales of land-won sand and gravel increased by 35.5% from 0.31mt to 0.42mt, compensating for the lack of availability of marine dredged material due to the closure of Heysham Wharf and Glasson Dock. Whilst sales of crushed rock aggregate have been falling steadily since 1995 and more sharply since 2007, sales of land-won sand and gravel have remained stable since the turn of the century when a figure of 0.34mt was recorded.
- 11.50 Total aggregate reserves increased by 9.4% from 133.25mt in 2008 to 145.75mt. Reserves of crushed rock increased by 11.2% from 122.95mt to 136.77mt. This increase is as a result of the rise in limestone reserves by 28.6% from 52.6mt to 67.63mt which is accounted for by the reallocation of reserves at one quarry which had previously supplied primarily cement works. Reserves of sandstone have decreased slightly by 1.72% from 70.35mt to 69.14mt and are in line with what would have been expected given the fall in sales during 2009. Reserves of sand and gravel have fallen by 12.8% from 10.3mt to 8.98mt which is 0.9mt less than would have been expected given sales figures recorded for the monitoring period.

**Figure 15: Primary aggregate sales in Lancashire 1995-2009**

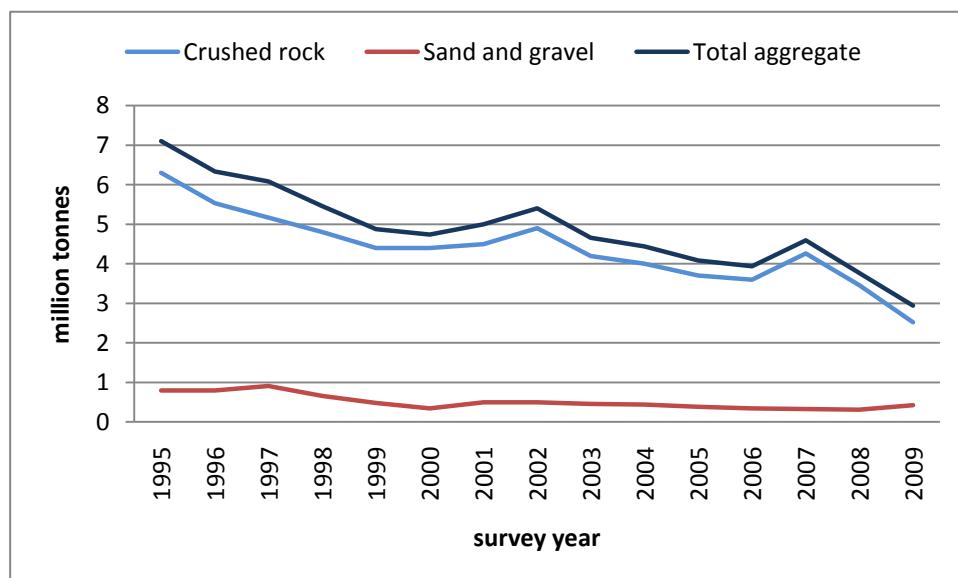


TABLE 25: Primary aggregate sales 1995-2009 – Lancashire sub-region (million tonnes)

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>CRUSHED ROCK</b>															
Limestone	3.5	2.9	3.0	2.7	2.6	2.7	2.6	2.7	2.6	2.7	2.5	2.6	3.0	2.48	1.86
Sandstone	2.8	2.63	2.17	2.1	1.8	1.7	1.9	2.2	1.6	1.3	1.2	1.0	1.26	0.98	0.66
<b>TOTAL CRUSHED ROCK</b>	<b>6.3</b>	<b>5.53</b>	<b>5.17</b>	<b>4.8</b>	<b>4.4</b>	<b>4.4</b>	<b>4.5</b>	<b>4.9</b>	<b>4.2</b>	<b>4.0</b>	<b>3.7</b>	<b>3.6</b>	<b>4.26</b>	<b>3.46</b>	<b>2.52</b>
<b>SAND AND GRAVEL</b>															
Land-won sand and gravel	0.8	0.8	0.91	0.66	0.48	0.34	0.5	0.5	0.46	0.44	0.38	0.34	0.33	0.31	0.42
<b>TOTAL SAND AND GRAVEL</b>	<b>0.8</b>	<b>0.8</b>	<b>0.91</b>	<b>0.66</b>	<b>0.48</b>	<b>0.34</b>	<b>0.5</b>	<b>0.5</b>	<b>0.46</b>	<b>0.44</b>	<b>0.38</b>	<b>0.34</b>	<b>0.33</b>	<b>0.31</b>	<b>0.42</b>
<b>TOTAL AGGREGATE SALES</b>	<b>7.1</b>	<b>6.33</b>	<b>6.08</b>	<b>5.46</b>	<b>4.88</b>	<b>4.74</b>	<b>5.0</b>	<b>5.4</b>	<b>4.66</b>	<b>4.44</b>	<b>4.08</b>	<b>3.94</b>	<b>4.59</b>	<b>3.77</b>	<b>2.94</b>

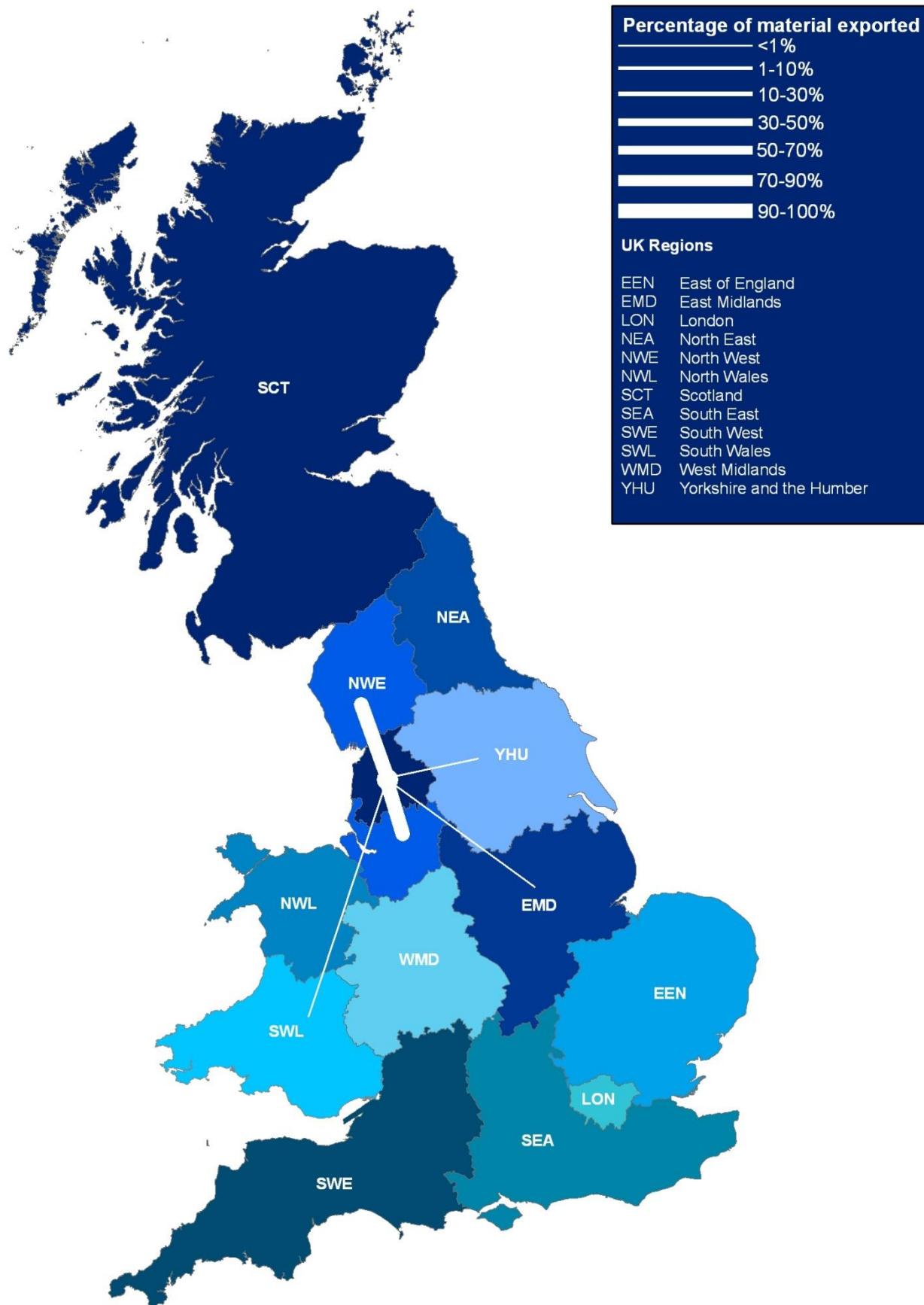
TABLE 26: Primary aggregate reserves 1995-2009 – Lancashire sub-region (million tonnes)

	AM95	AM96	AM97	AM98	AM99	AM00	AM01	AM02	AM03	AM04	AM05	AM06	AM07	AM08	AM09
<b>CRUSHED ROCK</b>															
Limestone	65.9	63.8	63.5	59.4	56.8	54.1	53.9	59.3	57.5	54.7	50.32	77.0	71.4	52.6	67.63
Sandstone	125.0	112.7	105.7	86.0	84.0	73.5	71.1	70.3	68.7	79.8	64.5	75.1	74.1	70.35	69.14
<b>TOTAL CRUSHED ROCK</b>	<b>190.9</b>	<b>176.5</b>	<b>169.2</b>	<b>145.4</b>	<b>140.8</b>	<b>127.6</b>	<b>125.0</b>	<b>129.6</b>	<b>126.2</b>	<b>134.5</b>	<b>114.82</b>	<b>152.1</b>	<b>145.5</b>	<b>122.95</b>	<b>136.77</b>
<b>SAND AND GRAVEL</b>															
Land-won sand and gravel	9.5	9.2	8.6	7.38	7.0	6.4	4.6	4.0	3.54	3.24	4.4	5.21	5.4	10.3	8.98
<b>TOTAL SAND AND GRAVEL</b>	<b>9.5</b>	<b>9.2</b>	<b>8.6</b>	<b>7.38</b>	<b>7.0</b>	<b>6.4</b>	<b>4.6</b>	<b>4.0</b>	<b>3.54</b>	<b>3.24</b>	<b>4.4</b>	<b>5.21</b>	<b>5.4</b>	<b>10.3</b>	<b>8.98</b>
<b>TOTAL AGGREGATE RESERVES</b>	<b>200.4</b>	<b>185.7</b>	<b>177.8</b>	<b>152.78</b>	<b>147.8</b>	<b>134.0</b>	<b>129.6</b>	<b>133.6</b>	<b>130.2</b>	<b>137.74</b>	<b>119.22</b>	<b>157.31</b>	<b>150.9</b>	<b>133.25</b>	<b>145.75</b>

### **Primary aggregate sales by destination**

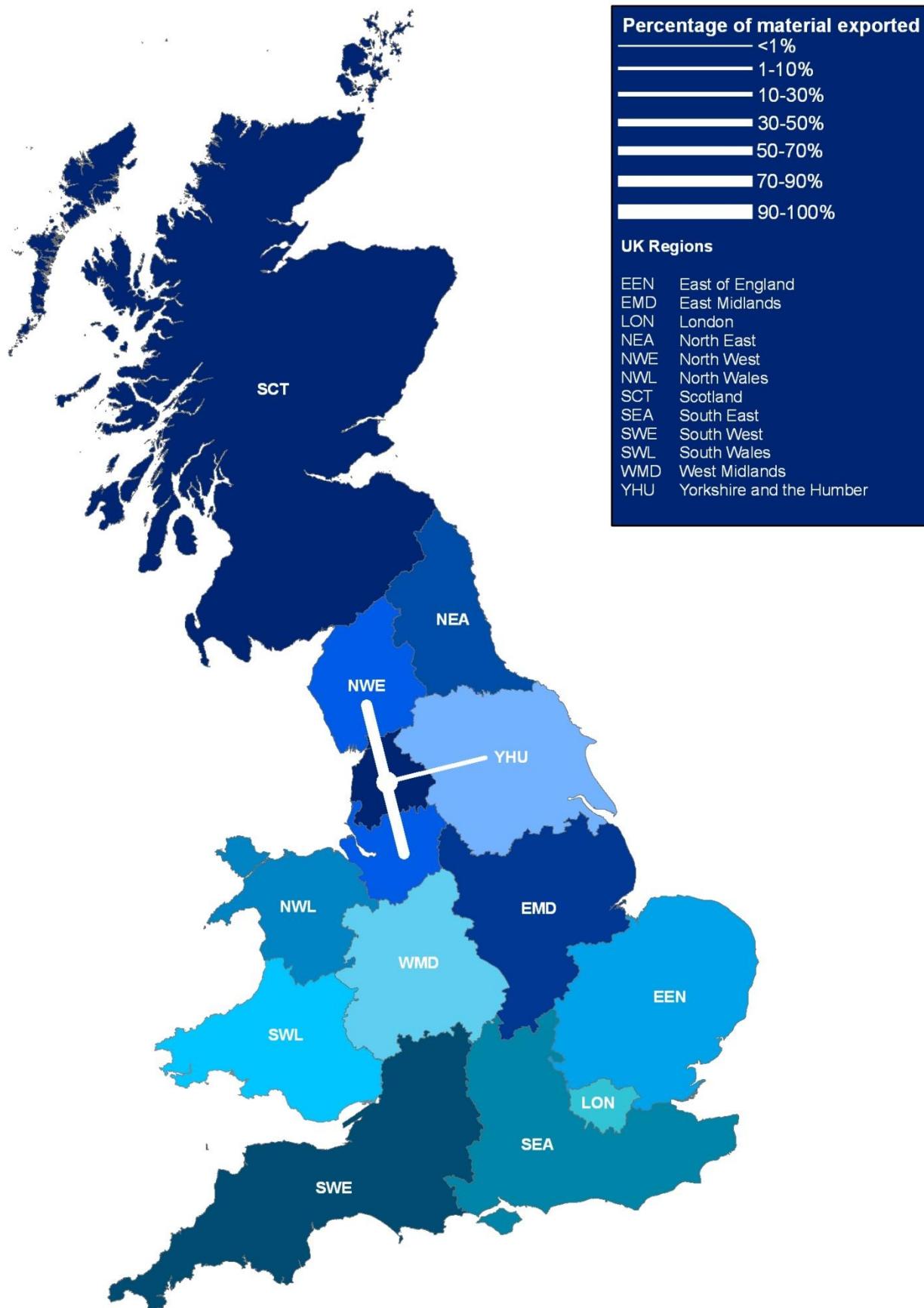
- 11.51 Maps 18 and 19 illustrate the percentage of sales of crushed rock aggregate and sand and gravel, exported from the Lancashire sub-region to the UK regions during the 2009 monitoring period. It should be noted that these movements do not necessarily indicate the location of the end-use and therefore the consumption of aggregates.
- 11.52 Ninety nine percent of crushed rock aggregate sold within Lancashire remained within the North West region, less than 1% was exported to each of the following regions: East Midlands, South Wales and Yorkshire and the Humber. In comparison to the other sub-regions, material extracted in Lancashire has a very small geographic coverage and remains within the North West region supplying broadly local infrastructure projects and cement works etc.
- 11.53 Seventy five percent of sand and gravel removed from Lancashire remained within the North West region and 25% was exported to Yorkshire and the Humber. Again this is in comparison to the other sub-regions within the North West where quantities of material are exported as far as the South East and Northern Ireland. Sand and gravel operations are relatively small and provide smaller quantities of material to local projects.

**MAP 18: Lancashire aggregate crushed rock sales by destination 2009**



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Map produced using data from the BGS Annual Minerals Survey 2009

**MAP 19: Lancashire aggregate sand and gravel sales by destination 2009**



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Map produced using data from the BGS Annual Minerals Survey 2009

### **Primary aggregate apportionment**

- 11.54 Figures 16 and 17 provide a graphical illustration of sales against apportionment guidelines for Lancashire for the period 2004-2009. Current apportionments continue to be based upon the 'National and Regional Guidelines for Aggregate Provision in England 2001-2016' as the revised guidelines are yet to be fully adopted by the North West RAWP.
- 11.55 Current apportionment figures require Lancashire to contribute 4.6mt of crushed rock aggregate and 0.5mt of land-won sand and gravel per annum to the overall sales in the North West. Lancashire has not met its apportionment for crushed rock aggregate since the guidelines were adopted in 2004; however up until 2008 the sub-region had on average achieved 83% of its annual requirements. Sales figures for 2009 only accounted for 55% of the 4.6mt requirement.
- 11.56 Sales of land-won sand and gravel have remained stable throughout the apportionment period and on average Lancashire has achieved 74% of the required 0.5mt, the 2009 monitoring period was no exception and the sub-region achieved 84% of the apportionment.

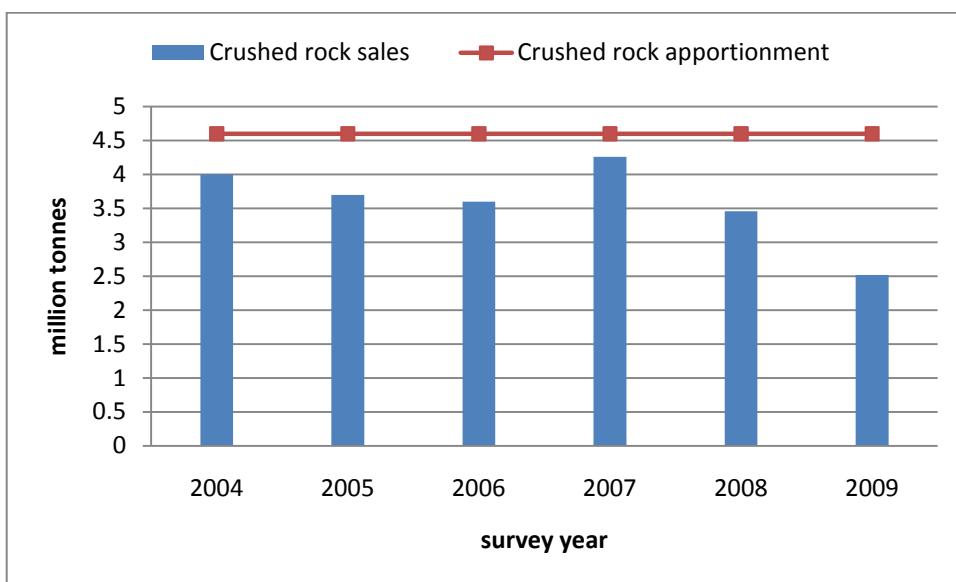
### **Primary aggregate landbanks**

- 11.57 Landbank requirements are set out in MPS1 as 'at least 7 years for sand and gravel and at least 10 years for crushed rock'. Landbanks in the Lancashire sub-region as at 31 December 2009 were as follows:
- Crushed rock aggregate: 29.73 years
  - Land-won sand and gravel: 17.96 years
- 11.58 Landbank figures for both crushed rock and land-won sand and gravel remain far higher than the minimum requirements by 19.73 years and 10.96 years respectively. Landbanks have increased by 3.03 years for crushed rock but have reduced slightly by 2.64 years for sand and gravel from 2008 figures.

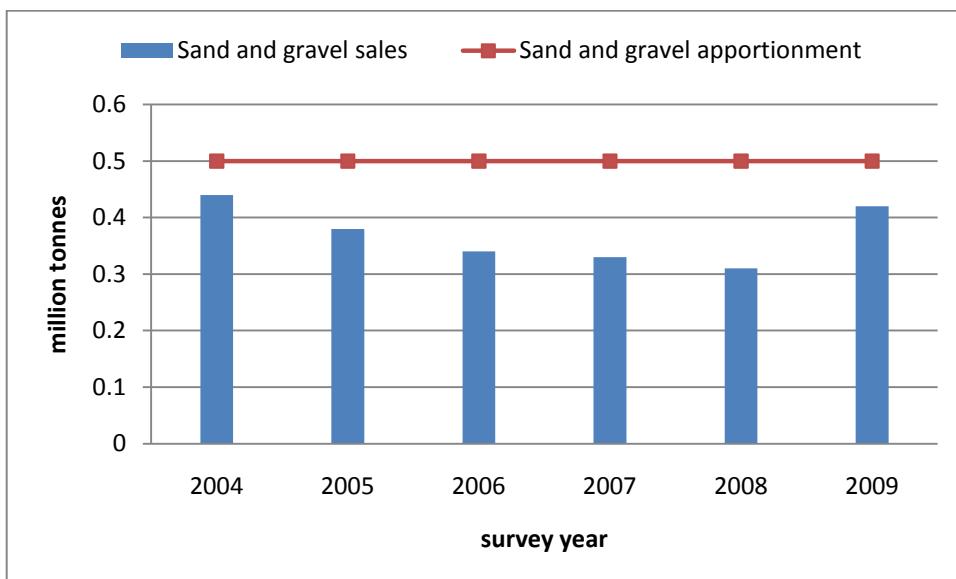
### **Aggregate producing sites**

- 11.59 There are currently twenty one permitted aggregate sites within the Lancashire sub-region, producing varying grades of materials including sand, gravel, sandstone, and limestone. Map 20 illustrates the spatial distribution of these sites, details of which are included in the directory of sites in Appendix B.

**FIGURE 16: Aggregate crushed rock sales against apportionment in Lancashire 2004-2009**



**FIGURE 17: Land-won sand and gravel sales against apportionment in Lancashire 2004-2009**



## MAP 20: Lancashire sub-region aggregate sites 2009

### Aggregate Type



#### Limestone

- 1 Back Lane
- 2 Leapers Wood
- 3 Dunald Mill
- 4 Bankfield
- 5 Lanehead Quarry
- 6 Bellman Quarry



#### Sand and Gravel

- 7 Heysham Wharf
- 8 Foreshore St Annes
- 9 Bradleys Sand Pit
- 10 Lower Brockholes
- 11 Lydiate Lane Quarry
- 12 Sandons Farm



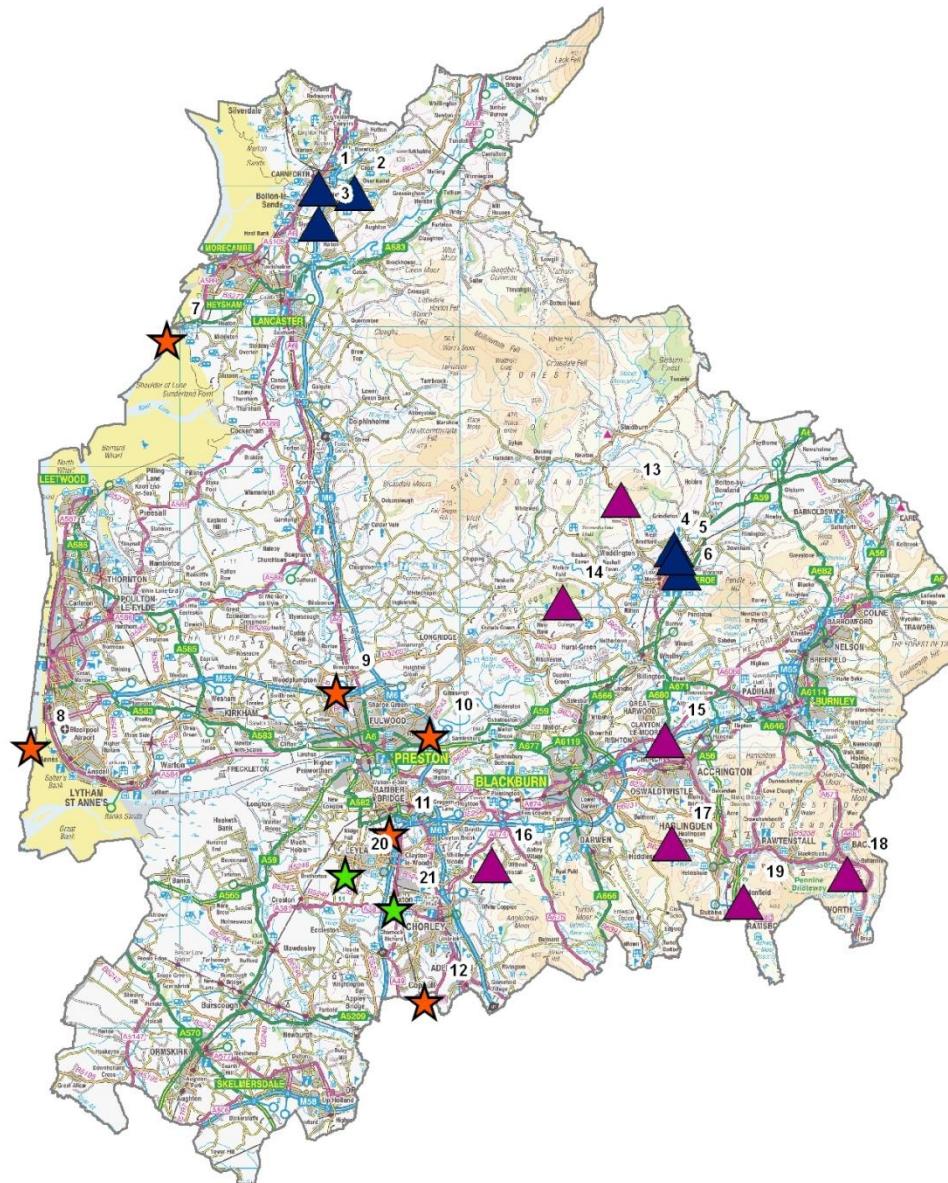
#### Sandstone

- 13 Waddington Fell
- 14 Leeming
- 15 Whinney Hill Quarry
- 16 Brinscall Quarry
- 17 Jamestone
- 18 Whitworth Quarry
- 19 Scout Moor



#### Sand

- 20 Runshaw
- 21 German Lane Quarry



## **12 SUB-REGIONAL APPORTIONMENT 2005-2020**

12.1 In June 2009, Communities and Local Government (CLG) published the 'National & regional guidelines for aggregate provision in England 2005-2020'. The new guidelines replace those published in June 2003. Before these regional guidelines can be used in the preparation of minerals development plans they need to be broken down, as far as possible, to Mineral Planning Authority (MPA) areas. The apportionment of the regional guidelines to sub-regional areas is the responsibility of the North West RAWP taking account of advice from the member MPAs and industry representatives.

### **Methodology**

12.2 During the January to March 2010 a sub-group of the North West RAWP held several meetings to establish the most appropriate method for apportioning the revised guidelines to the sub-regions. Various methods were put forward and considered including:

- Five year average sales 2004 to 2008
- Continuation of 2003 % split of apportionment
- Ten year average sales 1998 to 2008
- Eight year average sales 2001 to 2008 (revision of ten year average method)

12.3 It was decided that an eight year average should be used to apportion the regional guidelines as this method provided the most up to date illustration of supply patterns and resource availability in each of the sub-regions. The figures were calculated using the historic share of sales across the North West region based on an eight year average covering the monitoring periods of 2001 to 2008. This timeframe accurately reflected the sales patterns across each of the sub-regions and excluded years where Halton and Warrington were included within the Cheshire sub-region. The resulting sub-regional apportionments are outlined below.

**TABLE 27: North West Sub-regional apportionments 2005-2020 (mt)**

Sub-region	Sand and gravel apportionment 2005-2020	Total requirement 2005-2020	Crushed rock apportionment 2005-2020	Total requirement 2005-2020
Cheshire	1.51	24.18	0.04	0.66
Cumbria	0.88	14.1	4.02	64.4
Greater Manchester/ Merseyside/Warrington	0.43	7.04	1.32	21.12
Lancashire	0.44	6.86	4.24	67.9
<b>North West Total</b>	<b>3.26mt</b>	<b>52.18mt</b>	<b>9.62mt</b>	<b>154.08mt</b>

- 12.4 At a meeting on the 27 July 2010 the above apportionments were agreed by the authorities of Cheshire, Greater Manchester, Merseyside and Warrington. Cumbria did not agree to the apportionment figures and therefore they were taken forward with Cumbria dissent.**
- 12.5 The revised 2005-2020 apportionments will now form part of the Local Development Frameworks (LDFs) for each of the MPAs and will be tested through Sustainability Appraisals as part of the LDF process. A more detailed report on the apportionments and associated background papers are available on the North West RAWP webpage via the Cheshire West and Chester website.

[http://www.cheshirewestandchester.gov.uk/planning/spatial\\_planning/minerals\\_and\\_waste/nrawp.aspx](http://www.cheshirewestandchester.gov.uk/planning/spatial_planning/minerals_and_waste/nrawp.aspx)

## **13 ENVIRONMENT ACT 1995: REVIEW OF AGGREGATE MINERAL PLANNING PERMISSIONS**

- 13.1 The Environment Act 1995 came into force on 1 November 1995 and requires the review of old mineral planning permissions granted prior to 22 February 1982. The Act also requires Mineral Planning Authorities to carry out periodic reviews of all mineral planning permissions.
- 13.2 The Act classifies sites under three categories: Phase I, Phase II and Dormant sites. Phase I sites are those sites where permission was granted after 30 June 1948 but before 1 April 1969. Sites wholly or partly within a National Park, Site of Special Scientific Interest (SSSI) or Area of Outstanding Natural Beauty (AONB) are also classified as Phase I sites irrespective of the date of permission.
- 13.3 Phase II sites are those sites where permission was granted after 31 March 1969 but before 22 February 1982. Dormant sites are those sites where no minerals development has been carried out to any substantial extent at any time during the period 22 February 1982 to 6 June 1995. It should be noted that any reserves at dormant sites are not included within the landbank or reserve figures detailed in the previous chapters.
- 13.4 Table 27 illustrates the number of Phase I, Phase II and Dormant sites within each sub-region of the North West. There have been no reported changes to any of these sites during the 2009 monitoring period.

**TABLE 28: Environment Act 1995: Summary of aggregate mineral review sites North West 2009**

Mineral Planning Authority	Planning	Phase I						Phase II						Dormant		
		Original	Lapsed	Submitted but not yet determined	Determined	With Secretary of State	In High Court Challenge	Original	Lapsed	Submitted but not yet determined	Determined	With Secretary of State	In High Court Challenge	Original	Submitted but not yet determined	Determined
Cheshire		7			7			1			1			7	1	
Cumbria		10	1 <sup>1</sup>	1	8			2			2			27		1
Greater Manchester/Merseyside/Warrington		10	5 <sup>2</sup>	1	4			1			1			18 <sup>3</sup>		1
Lake District National Park		5		2	3			0						2		
Lancashire		11			11			2	1 <sup>1</sup>		1			8		
<b>North West</b>	<b>43</b>	<b>6</b>	<b>4</b>	<b>33</b>				<b>6</b>	<b>1</b>		<b>5</b>			<b>62</b>	<b>1</b>	<b>2</b>

<sup>1</sup> Permission allowed to lapse as superseded by modern planning application.

<sup>2</sup> Permission allowed to lapse on three sites as working had finished, permission lapsed on two sites due to failure to submit conditions by due date.

<sup>3</sup> Dormant sites within the Greater Manchester sub-region are currently under review.

## 14 MONITORING OF DEVELOPMENT PLAN PROGRESS

Authority		Unitary Development Plan/Minerals Local Plan	Local Development Framework		
			Local Development Scheme	Statement of Community Involvement	Core Strategy/Development Plan Documents
Cheshire	Cheshire County Council	Cheshire Replacement Minerals Local Plan 1999 (Policies saved 2007)	Adopted March 2007	Adopted October 2006	No further Core Strategy work due to LGR in 2009.
	Cheshire East Council	Cheshire Replacement Minerals Local Plan 1999 (Policies saved 2007)	Revised version adopted 31 January 2011	Adopted 23 July 2009	Issues and Options consultation November 2010. Adoption of Core Strategy due November 2013
	Cheshire West and Chester Council	Cheshire Replacement Minerals Local Plan 1999 (Policies saved 2007)	Adopted 2 March 2009	Adopted 14 October 2010	Issues and Options consultation 11 November 2009 to 13 January 2010 – work is currently underway on Preferred Options. Adoption of Core Strategy due December 2013
Cumbria	Cumbria County Council	Cumbria Minerals Local Plan adopted June 2000	Adopted March 2009	Adopted January 2006	Core Strategy adopted 23 April 2009
	Lake District National Park Authority	Lake District Local Plan adopted 1998	Adopted March 2005	Adopted June 2006	Core Strategy adopted October 2010
Lancashire	Blackburn with Darwen Council	Adopted 2002	Adopted 2007	Adopted August 2006	Minerals and Waste Development Framework Core Strategy adopted February 2009 – Site Allocations and Development Management Policies DPD Submission Stage May 2011
	Blackpool Council	Adopted June 2006	Adopted March 2007	Adopted June 2007	
	Lancashire County Council	Minerals Local Plan adopted 2001	Adopted April 2007	Adopted May 2006	
Greater Manchester/Merseyside/Warrington	Bolton Council*	Replacement UDP adopted April 2005	Adopted December 2006	Adopted March 2007	Core Strategy adoption due March 2011
	Bury Metropolitan Borough Council*	Current UDP adopted August 1997.	Adopted March 2007	Adopted March 2006	Core Strategy Submission Stage January 2011
	Greater Manchester (AGMA authorities*/GMGU)	As constituent authorities	As constituent authorities	As constituent authorities	Greater Manchester Minerals Plan Preferred Approach consultation October 2010

	Halton Borough Council	UDP adopted April 2005	Adopted March 2007 Revised March 2009	Adopted July 2006	Publication consultation February 2011
	Knowsley Metropolitan Borough Council	UDP adopted June 2006	Adopted March 2007 Revised March 2009	Adopted May 2007	Core Strategies Issues and Options
	Liverpool City Council	UDP adopted 2002	Adopted April 2005 Most recent revision July 2009	Adopted July 2007	Core Strategy Submission Stage November 2010
	Manchester City Council*	Current UDP adopted 1995 - Partial Reviews Adopted	Series of alterations have been adopted between 1998-2004	Adopted January 2007	Publications consultation February 2011
	Oldham* Metropolitan Borough Council	Replacement UDP adopted July 2006	Adopted March 2007	Adopted April 2007	Core Strategy Submission Stage February 2011
	Rochdale Borough Council*	Replacement UDP adopted June 2006	Adopted March 2007	Adopted December 2007	Core Strategy Submission Stage January 2011
	Salford City Council*	Replacement UDP adopted May 2006	Approved June 2007	Adopted March 2008	Publication Stage – awaiting guidance from new government
	Sefton Metropolitan Borough Council	Replacement UDP adopted June 2006	Adopted 2009 after revision	Adopted October 2006	Core Strategy Issues and Options Consultation due May-July 2011
	St Helens Council	Review of UDP abandoned to proceed with preparation of LDF	Adopted April 2005 Most recent revision April 2007	Adopted January 2007	Core Strategy Publication Stage consultation January 2011
	Stockport Metropolitan Borough Council*	Replacement UDP adopted May 2006	Adopted March 2007	Adopted July 2006	Core Strategy adoption due March 2011 subject to amendments
	Tameside Metropolitan Borough Council*	Replacement UDP adopted November 2004	Adopted April 2007	Adopted July 2006	First stage of Core Strategy production
	Trafford Council*	Replacement UDP adopted June 2006	Adopted March 2007	Adopted July 2006	Core Strategy Submission Stage December 2010
	Warrington Borough Council	UDP adopted January 2006	Adopted March 2007	Adopted March 2006	Core Strategy Publication stage consultation early 2011
	Wigan Council*	Replacement UDP adopted April 2006	Adopted February 2007	Adopted July 2006	Core Strategy Submission Stage February-March 2011
	Wirral Metropolitan Borough Council	UDP adopted 2000	Adopted July 2007	Adopted December 2006	Core Strategy Preferred Options January 2011

## **APPENDIX A: TERMS OF REFERENCE**

### **North West Regional Aggregates Working Party Terms of Reference**

- 1.** To hold at least one RAWP meeting per year, with membership to include representatives from CLG, the Government Office, the Regional Planning Body, MPAs, MPA, BAA and such other representatives as appropriate (e.g. NFDC, BMAPA).
- 2.** To agree either at the first meeting of each year, or early in the year via correspondence, an agenda of RAWP business for that year.
- 3.** To organise, in conjunction with MPAs, an Annual Monitoring (AM) Survey to monitor (subject to confidentiality) the sales and reserves of primary aggregate in the region, imports to it and exports from it by sea or rail (including marine aggregates).
- 4.** To support the National Aggregate Minerals Surveys, which include all inter-regional movements of aggregate, in years when such surveys are carried out.
- 5.** To produce, supply to the RPB and publish on the CLG website an Annual Monitoring Report (AMR) containing core information to inform stakeholders in a consistent manner of the findings from the AM survey.
- 6.** To give technical advice to CLG, NCG, the RPB and MPAs on:
  - a) demand for and supply of aggregates in the region (including alternatives, marine aggregates and imports);
  - b) trends in supply in the medium to longer term, including aggregate imports and exports.
- 7.** To give technical advice to the RPB and MPAs on
  - a) sub-regional apportionment of land-won aggregates, and, where undertaken;
  - b) regional apportionment of provision for recycling sites for CDEW.
- 8.** To liaise with the Regional Technical Advisory Body (RTAB) to co-ordinate monitoring and technical advice on aggregates and waste management, and other RAWPs on inter-regional movement of aggregate.

## APPENDIX B: DIRECTORY OF AGGREGATE SITES SURVEYED 2009

**NB:** Please note only aggregate producing sites are presented on maps 3-4 and 9-20.

Sub-Region	Site Name	Company	Grid Reference	Aggregate Type	Status	MPA	MPA/BAA Member	Survey Received
Cheshire	Arclid Quarry	Bathgate Silica Sand	SJ 783 613	Sand	Active	Cheshire East Council	BAA	✓
Cheshire	Bent Farm Quarry	Sibelco UK	SJ 831 619	Sand	Active	Cheshire East Council	MPA	✓
Cheshire	Bridestones Quarry	Multigrove Limited	SJ 939 765	Sandstone	Active	Cheshire East Council		✓
Cheshire	Cherry Orchard Farm	Cherry Orchard Sand Unit Ltd	SJ 568 680	Sand	Active	Cheshire West and Chester Council		✓
Cheshire	Cobden Farm	Tarmac Limited	SJ 587 673	Sand and gravel	Inactive	Cheshire West and Chester Council	MPA	✓
Cheshire	Crown Farm	Tarmac Limited	SJ 572 699	Sand and gravel	Active	Cheshire West and Chester Council	MPA	✓
Cheshire	Delamere Quarry	Tarmac Limited	SJ 568 696	Sand and gravel	Inactive	Cheshire West and Chester	MPA	✓
Cheshire	Dingle Bank Quarry	Sibelco UK	SJ 832 714	Sand	Active	Cheshire East Council	MPA	✓
Cheshire	Eaton Hall Quarry	Tarmac Limited	SJ 860 655	Sand	Active	Cheshire East Council	MPA	✓
Cheshire	Endon Quarry	Park Skip Hire	SJ 940 763	Sandstone	Active	Cheshire East Council		✓
Cheshire	Forest Hill Quarry	CEMEX UK Materials Limited	SJ 612 714	Sand and gravel	Active	Cheshire West and Chester Council	MPA	✓
Cheshire	Fourways Quarry	Tarmac Limited	SJ 577 690	Sand and gravel	Active	Cheshire West and Chester Council	MPA	✓
Cheshire	Gawsworth Quarry	Wyman Limited	SJ 919 679	Sandstone	Inactive	Cheshire East Council		✗
Cheshire	Hough Mill	Anthony Construction Limited	SJ 705 487	Sand and gravel	Closed	Cheshire East Council		✓

Sub-Region	Site Name	Company	Grid Reference	Aggregate Type	Status	MPA	MPA/BAA Member	Survey Received
Cheshire	Lee Hills	Lee Hills Quarries	SJ 928 691	Sandstone	Yet to be worked	Cheshire East Council		✓
Cheshire	Marksend Quarry	A.M & D Earl	SJ 941 757	Sandstone	Active	Cheshire East Council		✓
Cheshire	Mere Farm Quarry	Hanson Quarry Products Europe Limited	SJ 825 746	Sand	Active	Cheshire East Council	MPA	✓
Cheshire	Rough Hey Quarry	Wyman Limited	SJ 923 682	Sandstone	Yet to be worked	Cheshire East Council		✗
Cheshire	Sycamore Quarry	A.M & D. Earl	SJ 939 766	Sandstone	Active	Cheshire East Council		✓
Cheshire	Town Farm	Marchington Stone Limited	SJ 565 735	Sand and gravel	Active	Cheshire West and Chester Council		✓
Cheshire	White Moss Quarry	Land Recovery Limited	SJ 774 549	Sand	Active	Cheshire East Council		✓
Cumbria	Aldoth Quarry	D A Harrison	NY 146 482	Sand and gravel	Active	Cumbria County Council		✗
Cumbria	Bonnie Mount Quarry	J.E.A & S.M Byrne	NY 548 313	Sand	Active	Cumbria County Council		✓
Cumbria	Brocklewath Farm	William Roper	NY 348 551	Sand	Active	Cumbria County Council		✓
Cumbria	Cardewmires Quarry	Tarmac Limited	NY 343 505	Sand and gravel	Active	Cumbria County Council	MPA	✓
Cumbria	Eskett and Rowrah Quarries	Aggregate Industries UK	NY 054 167	Limestone	Active	Cumbria County Council	MPA	✓
Cumbria	Faugh No.1 and 2 Sand Pits	Hanson Quarry Products Europe Limited	NY 512 552	Sand	Inactive	Cumbria County Council	MPA	✓
Cumbria	Flusco Quarry	Lakeland Minerals Limited	NY 464 293	Limestone	Yet to be worked	Cumbria County Council		✓
Cumbria	Ghyll Scaur Quarry	Aggregate Industries UK	SD 171 828	Igneous rock	Active	Cumbria County Council	MPA	✓

Sub-Region	Site Name	Company	Grid Reference	Aggregate Type	Status	MPA	MPA/BAA Member	Survey Received
Cumbria	Goldmire Quarry	Neil Price Construction Services Limited	SD 219 739	Limestone	Active	Cumbria County Council		✓
Cumbria	Hartley Quarry	CEMEX RMC (UK) Ltd	NY 787 083	Limestone	Active	Cumbria County Council	MPA	✓
Cumbria	Helbeck Quarry	Sherburn Stone Company Ltd	NY 799 158	Limestone	Active	Cumbria County Council	BAA	✓
Cumbria	High House Quarry (Highfield)	D A Harrison	NY 511 252	Sand and gravel	Active	Cumbria County Council		✗
Cumbria	Holme Park Quarry	Aggregate Industries UK	SD 536 788	Limestone	Active	Cumbria County Council	MPA	✓
Cumbria	Holmescales Quarry	Aggregate Industries UK	SD 556 869	Sandstone (HSA)	Active	Cumbria County Council	MPA	✓
Cumbria	Kendal Fell Quarry	Tarmac Limited	SD 502 925	Limestone	Inactive	Cumbria County Council	MPA	✓
Cumbria	Kirkhouse Quarry	Lakeland Minerals Limited	NY 564 601	Sand and gravel	Active	Cumbria County Council		✓
Cumbria	Low Gelt Quarry	Hanson Quarry Products Europe Limited	NY 512 552	Sand	Active	Cumbria County Council	MPA	✓
Cumbria	Low Plains	Tarmac Limited	NY 490 410	Sand and gravel	Active	Cumbria County Council	MPA	✓
Cumbria	Moota Quarry	CEMEC RMC (UK) Ltd	NY 148 361	Limestone	Active	Cumbria County Council	MPA	✓
Cumbria	New Cowper	Thomas Armstrong Limited	NY 118 458	Sand	Active	Cumbria County Council	BAA	✓
Cumbria	Overby No. 2 Sand Pit	Thomas Armstrong Limited	NY 125 470	Sand	Active	Cumbria County Council	BAA	✓
Cumbria	Peel Place Quarry	Tendley Quarries	SD 069 011	Sand and gravel	Active	Cumbria County Council		✓
Cumbria	Roan Edge Quarry	CEMEX RMC (UK) Ltd	SD 584 926	Sandstone (HSA)	Active	Cumbria County Council	MPA	✓

Sub-Region	Site Name	Company	Grid Reference	Aggregate Type	Status	MPA	MPA/BAA Member	Survey Received
Cumbria	Roosecote Sand Pit	L & W Wilson	SD 224 687	Sand and gravel	Active	Cumbria County Council		✓
Cumbria	Sandside Quarry	Tarmac Limited	SD 482 807	Limestone	Active	Cumbria County Council	MPA	✓
Cumbria	Shap Beck Quarry	Hanson Quarry Products Europe Limited	NY 550 181	Limestone	Active	Cumbria County Council	MPA	✓
Cumbria	Shap Blue Quarry and Works	CEMEX RMC (UK) Ltd	NY 564 106	Igneous rock	Active	Cumbria County Council	MPA	✓
Cumbria	Shap Pink Quarry	CEMEX RMC (UK) Ltd	NY 555 084	Igneous rock	Inactive	Cumbria County Council	MPA	✓
Cumbria	Shapfell Limestone Quarry	Chorus Construction and Industrial Business	NY 587 138	Limestone	Active	Cumbria County Council		✓
Cumbria	Silvertop Quarry	W & M Thompson	NY 586 602	Limestone	Active	Cumbria County Council		✓
Cumbria	Snowhill Quarry	Snowhill Quarries	SD 280 387	Limestone	Active	Cumbria County Council		✓
Cumbria	Stainton Quarry	Tarmac Limited	SD 246 729	Limestone	Active	Cumbria County Council	MPA	✓
Cumbria	Tendley Quarry	Tendley Quarries	NY 088 288	Limestone	Active	Cumbria County Council		✓
Greater Manchester/Merseyside/Warrington	Astley Moss	Marshalls Mono	SJ 371 500	Sand and gravel	Active	Salford City Council		✓
Greater Manchester/Merseyside/Warrington	Bold Heath Quarry	D Morgan Plc	SJ 530 885	Sand / Sandstone	Inactive	St Helens Council		✗
Greater Manchester/Merseyside/Warrington	Buckton Vale Quarry	Aggregate Industries UK	SD 992 016	Sandstone	Active	Tameside Metropolitan Borough Council	MPA/BAA	✓
Greater Manchester/Merseyside/Warrington	Cronton	Ibstock Brick Limited	SJ 242 895	Clay and shale	Active	Knowsley Metropolitan Borough Council		✓
Greater Manchester/Merseyside/Warrington	Fletcher Bank Quarry	Marshalls Mono Ltd	SD 804 170	Sandstone	Active	Bury Metropolitan Borough Council	MPA/BAA	✓

Sub-Region	Site Name	Company	Grid Reference	Aggregate Type	Status	MPA	MPA/BAA Member	Survey Received
Greater Manchester/Merseyside/Warrington	Garston Wharf	Hanson Quarry Products Limited	SJ 397 837	Sand	Active	Liverpool City Council	MPA	✓
Greater Manchester/Merseyside/Warrington	Harrop Edge Quarry	Chartrange (Quarry Products)	SJ 982 959	Sandstone	Inactive	Tameside Metropolitan Borough Council		✗
Greater Manchester/Merseyside/Warrington	Harwood Quarry	Booth Ventures	SD 747 124	Sandstone	Active	Bolton Council		✗
Greater Manchester/Merseyside/Warrington	High Moor	Veolia	SD 973 067	Sandstone	Closed	Oldham Metropolitan Borough Council		✗
Greater Manchester/Merseyside/Warrington	Montcliffe Quarry	Hanson Quarry Products	SD 656 124	Sandstone	Active	Bolton Council	MPA	✓
Greater Manchester/Merseyside/Warrington	Morley's Hall Quarry	Astley Sand and Aggregates Ltd	SJ 685 990	Sand and gravel	Active	Wigan Council		✗
Greater Manchester/Merseyside/Warrington	Offerton Quarry	Offerton Sand and Gravel	SJ 928 893	Sand and gravel	Active	Stockport Metropolitan Borough Council		✗
Greater Manchester/Merseyside/Warrington	Pilkington Quarry	Armstrongs	SD 622 121	Sandstone	Inactive	Bolton Council		✓
Greater Manchester/Merseyside/Warrington	Pilsworth South Quarry	Tarmac Limited	SD 825 088	Sand and gravel	Active	Bury Metropolitan Borough Council	MPA	✓
Greater Manchester/Merseyside/Warrington	Seaforth Docks	Aggregate Industries UK	SJ 319 965	Wharf (Imports)	Active	Liverpool City Council	MPA/BAA	✓
Greater Manchester/Merseyside/Warrington	Southworth Quarry	Gaskell Bros (WM&C) Ltd	SJ 619 940	Sandstone	Active	Warrington Borough Council		✓
Lancashire	Back Lane	Aggregate Industries UK	SD 510 695	Limestone	Active	Lancashire County Council	MPA	✓
Lancashire	Bankfield	Tarmac Limited	SD 755 435	Limestone	Active	Lancashire County Council	MPA	✓
Lancashire	Bellman Quarry	Hanson Cement	SD 761 428	Limestone	Active	Lancashire County Council	MPA	✓
Lancashire	Bradley's Sand Pit	J A Jackson	SD 512 340	Sand and gravel	Active	Lancashire County Council		✓

Sub-Region	Site Name	Company	Grid Reference	Aggregate Type	Status	MPA	MPA/BAA Member	Survey Received
Lancashire	Brinscall Quarry	Armstrongs Aggregates Ltd	SD 633 421	Sandstone	Active	Lancashire County Council		✓
Lancashire	Dalton Brickworks Quarry	Ibstock Brick Limited	SD 501 091	Clay and shale	Active	Lancashire County Council		✗
Lancashire	Dunald Mill	Tarmac Limited	SD 511 679	Limestone	Inactive	Lancashire County Council	MPA	✓
Lancashire	Foreshore St Annes	William Rainford	SD 313 300	Sand and gravel	Active	Lancashire County Council		✓
Lancashire	German Lane Quarry	P Casey Enviro Ltd	SD 562 171	Sand	Active	Lancashire County Council		✓
Lancashire	Heysham Wharf	Tarmac Limited	SD 397 601	Sand and gravel	Closed	Lancashire County Council	MPA	✗
Lancashire	Jamestone Quarry	Aggregate Industries UK	SD 758 233	Sandstone	Active	Lancashire County Council		✓
Lancashire	Lanehead	Hanson Cement	SD 752 437	Limestone	Active	Lancashire County Council	MPA	✓
Lancashire	Leapers Wood	Tarmac Limited	SD 515 694	Limestone	Active	Lancashire County Council	MPA	✓
Lancashire	Leeming	Brown Bros (Longridge) Ltd	SD 683 406	Sandstone	Active	Lancashire County Council		✓
Lancashire	Lower Brockholes	Hargreaves Quarries (GB) Ltd	SD 578 304	Sand and gravel	Active	Lancashire County Council		✓
Lancashire	Lydiate Lane Quarry	Unknown	SD 554 239	Sand and gravel	Active	Lancashire County Council		✓
Lancashire	Runshaw	Tarmac Limited	SD 543 195	Sand	Yet to be worked	Lancashire County Council	MPA	✓
Lancashire	Sandons Farm	Rigshaw Limited	SD 592 131	Sand and gravel	Active	Lancashire County Council		✗
Lancashire	Scout Moor	Marshalls Natural Stone	SD 814 190	Sandstone	Active	Lancashire	MPA/BAA	✓

Sub-Region	Site Name	Company	Grid Reference	Aggregate Type	Status	MPA	MPA/BAA Member	Survey Received
Lancashire	Tong Farm	J Laycock	SD 880 225	Clay and shale	Active	Lancashire County Council		✓
Lancashire	Waddington Fell	Aggregate Industries UK	SD 718 479	Sandstone	Active	Lancashire County Council		✓
Lancashire	Whinney Hill	Hanson Quarry Products	SD 762 306	Clay and shale	Active	Lancashire County Council	MPA	✗
Lancashire	Whinney Hill Quarry	Park Royal Haulage Ltd	SD 756 307	Sandstone	Active	Lancashire County Council		✓
Lancashire	Whitworth Quarry	Aggregate Industries UK	SD 875 202	Sandstone	Active	Lancashire County Council		✓

## **APPENDIX C: MINUTES OF NORTH WEST RAWP MEETINGS**

### **Minutes of North West RAWP meeting 7 December 2009**

#### **Chair of the North West RAWP**

AM raised the issue of chairmanship of the North West RAWP. Harold Collin has stood down as chair and therefore a temporary chair is required. Nominations were put forward from Cheshire West and Chester Council (Jeremy Owens) and Cumbria County Council (Richard Evans) prior to the meeting. A vote was held and it was decided that Richard Evans (RE) should take the temporary chairmanship. RE took over as chair for the meeting.

#### **North Wales RAWP update (Roger Bennion)**

Roger Bennion (RB) reported that the North Wales RAWP 2008 annual report is currently out in its draft form. He reported that there had been a downturn in aggregate sales in North Wales but it has not been as dramatic as elsewhere as there has been a general decline in sales over the past survey years. Sales of crushed rock are down 12% and sales of sand and gravel are down 10%, there are no significant changes to the landbanks: crushed rock 31 years and sand and gravel 20 years. RB reported that there is an issue with allocating landbanks, in previous years the North Wales RAWP has been able to allocate landbanks to North East and North West Wales but due to confidentiality this is no longer possible.

Ken Hobden (KH) reported that the Board of the Mineral Products Association (MPA) is willing to see advice changed regarding confidentiality if they can secure a commitment from mineral planning authorities that the managed aggregate supply system will remain. MPA attempted to secure this commitment from the Planning Officers Society but they were not in a position to do this.

RB reported that he is currently unsure of the Welsh Assembly Government's position regarding the increase in imports outlined in the revised 'National and regional guidelines for aggregate provision in England 2005-2020'. It is agreed that clarification is needed as to the source of imports i.e. does CLG expect all imports to come from Wales.

RB reported that Welsh Assembly Government has recently funded work by the British Geological Survey (BGS) regarding aggregate reserves and safeguarding areas. RE raised concerns that SSSIs etc will be ignored. KH stated that the study is at its most basic level and the exercise is ultimately the responsibility of the Local Planning Authorities. Ian Pearson (IP) raised concerns regarding the classification of minerals and aggregate and stated that clarification is needed. RB stated that silica sand is already protected under Minerals Planning Policy Wales.

#### **Update on Local Government Review in Cheshire**

AM reported that on 1<sup>st</sup> April this year Cheshire County Council and the six district authorities ceased to exist and were replaced by the two new unitary authorities of Cheshire West and Chester Council and Cheshire East Council. AM reported that the minerals planning and minerals development management roles were filled by ex county council staff in both authorities. A shared service was established for minerals policy and

evidence base work, however as of April 2010 a Single Level Agreement will be in place between the two authorities and this service will only deal with evidence base work. Paul Urwin (PU) would be responsible for minerals planning policy in Cheshire East.

AM stated that the current RAWP contract has been transferred to Cheshire West and Chester Council and runs to end of March 2010, however Cheshire West and Chester Council had been requested to quote for a further 1 years contract to 2011. This had been undertaken. Andrew Farrow, former Technical Secretary to the North West RAWP has now moved to Flintshire County Council and has taken over as Chair of the North Wales RAWP.

RE asked Chris Bamber (CB) if there was a move towards a removal of funding for the RAWPs, CB confirmed that there was not.

**Minutes of the last meeting (2<sup>nd</sup> December 2008)**

**Associated Paper: 'Minutes 02.12.2008'**

Item 4 (Implications of Yorkshire and Humberside RSS Policy) – AM has taken issue up with Technical Secretaries. Yorkshire and the Humber are happy to meet with the North West RAWP regarding the impacts of the RSS policy, AM has asked for assessment of the implications of revised sub-regional apportionment.

Item 5 (Implications of Paragraph 70 MPS1 Practice Guide) – AM wrote to CLG with reference to landbanks etc, no response has been received as yet.

KH stated that a review of MPS1 is imminent and CLG are happy to receive comments regarding proposed changes, it is therefore considered timely to raise issues at Secretaries meeting.

The minutes were agreed to be an accurate record.

**North West RAWP draft annual report (AM2008)**

**Associated Paper: '2009 North West RAWP Report'**

Jamie Longmire (JL) presented the key findings from the draft North West RAWP annual report (AM2008). Total aggregate sales have dropped by 14%. Crushed rock sales are down 15% from 9.42mt in 2007 to 8.01mt. Sand and gravel sales are also down by 14% from 3.66mt in 2007 to 3.15mt. Sales of limestone have fallen by 11%, sales of sandstone and igneous rock have fallen by 21%, sales of marine dredged sand and gravel have decreased by 33%. Total aggregate reserves have fallen by 1.4% from 384.8mt in 2007 to 379.26mt. Crushed rock reserves have fallen by 1.8%, reserves of limestone have increased by 6.7%, reserves of sandstone and igneous rock have fallen by 10.6%. Reserves of sand and gravel have increased by 2.5%. Landbanks currently stand at 32.65 years for crushed rock and 11.57 years for sand and gravel.

RE expressed concern that the landbanks for crushed rock are over optimistic, Geoff Storey (GS) agreed and stated that the North West Designation project may have implications for quarries around the M6 corridor.

RE queried whether surveys for road planings and recycled aggregate were still being

carried out, Natalie Durney-Knight (NDK) confirmed that they are not being carried out for road planings. IP confirmed that the majority of materials recovered were put straight back into road construction. GS reiterated this point and confirmed that material recovered from the A66 had been put into the A1.

GS stated that an increased amount of recycled aggregate is being used in the lower levels of road construction. IP stated that coating plants may well have information regarding quantities of recycled road planings. GS stated that operators would have to confirm which plants had the ability to carry out this process.

RE queried whether there is the ability to track where minerals are being transported to and where imports have come from with regards to marine dredged aggregate. John Bingham (JB) confirmed that the Crown Estate are unable to provide specific information regarding the amounts of aggregate dredged from which licensed area due to commercial confidentiality. However, JB has stated that the information would be available from the harbor authorities i.e. Mersey Docks and Harbor Company (MDHC) will hold information regarding the origin of landings from off the North West coast.

Marcus Hudson (MH) confirmed that there is a discrepancy of 8mt in the figures for Lancashire. Carolyn Williams (CW) confirmed that the reduction in reserves for Greater Manchester is correct due to the closure of one site.

IP raised concern that recycled and secondary aggregate figures are not complete as they do not appear to include shale, clay or glass (page 45 of draft report)

Keith Frost (KF) requested that the sentence “but is higher than the required figure of 7 years” be removed from paragraph 8.11 of the report.

KH requested that the sentence “established in the 1970’s in order to collect data on the production of aggregates” be removed or elaborated upon to show the full working role of the RAWPs in paragraph 1.1 of the report.

NDK requested that all comments on the draft annual report 2008 be sent via email to AM and NDK by no later than 14<sup>th</sup> December.

**National and regional guidelines for aggregate provision in England 2005-2020 (Duncan McCorquodale) – Associated Papers: ‘4NW report for NWRAWP 7 Dec09’ and ‘Sub-regional Apportionment Options’**

Duncan McCorquodale (DMc) presented the paper ‘North West Region Aggregates Apportionment – 4NW Covering Report’ to the group. He stated that 4NW and the NWRAWP had 6 months to apportion the new guidelines but as with most other regions this was not going to be achieved in the North West. DMc reported that there is work to be done regarding methodology in terms of apportionment in relation to RSS. He stated that Sustainability Appraisals are available and should be used from existing work towards core strategies e.g. Cumbria.

AM presented the report ‘Draft Paper on Proposed Sub-Regional Apportionment Methods

for the North West'. AM described the 4 methodologies outlined in the paper (1. Five year average production AM2003-2007 published figures, 2. Five year average production AM2004-AM2008 unpublished figures for 08, 3. Five year average production AM2004-AM2008 deleting the highest and the lowest production years, 4. Continuation of the 2003 apportionment % split.

RE queried whether it is appropriate to use previous 5 years production when 2009 is in recession. DMc stated that house building requirements remain and so it is therefore appropriate to say that there are resources available. CB stated that recession years should not be excluded and there should be consideration of a 10 year average. CW stated that Manchester's sand and gravel landbanks are poor and reserves are expected to run out by 2020. JB stated that if figures are to be used in the long term then a 10 year average is more appropriate. KP asked what other regions are doing, KH reported that the South East RAWP are using various proxies (economic growth, availability etc) and other areas are using historical sales data. KH stated that MPA supports the use of historical sales data as a method for reapportionment.

RE queried whether the North West has the capacity to meet the increased apportionment of marine won aggregate, JB confirmed that there is the ability to meet this and operations are nowhere near capacity. RE asked if gravel was also removed from the seabed, JB confirmed that very little gravel is won from off the North West coast as there is very little present in Liverpool Bay. CB stated that the Marine Spatial Planning maps appear to respect national boundaries, JB confirmed that this is the case and will continue through the Marine Planning consultation.

RE stated that Cumbria County Council will be unable to accept an increase in apportionment when reserves have dropped and sand and gravel is being taken to other parts of the country. AM stated that the apportionment exercise is not about where the materials are being used but is about reserves and historical sales data. GS stated that a geological reality check is needed.

It was agreed that method 2 and 4 should be taken forward with an extra model using a 10 year average, methods 1 and 3 should be dismissed. It is also agreed that a small sub working group should be established to assess the methods and consider sustainability factors.

### **CLG RAWP Review (Questionnaire)**

#### **Associated Papers: 'RAWP Questionnaire\_09'**

At the end of October CLG wrote to all RAWP Secretaries asking to complete a questionnaire relating to the future of RAWPs. Initially comments were to be submitted to CLG by 30<sup>th</sup> November. This has since been extended to ensure RAWPs are able to respond fully to the questionnaire and it is now to be delivered to CLG at 10<sup>th</sup> December Technical Secretaries meeting.

KH stated that 1A is incorrect and current membership does not include other bodies, these bodies are invitees only. He also stated that MPA object to the inclusion of 'environmental groups...within the scope and membership'. He stated that the RAWP is not seen as a forum

for campaigning groups. AM stated that this was included as it is currently unclear what CLG want. KP stated that the RAWP is a technical body not a lobbying group and membership should be kept as it is and wider issues should be dealt with by smaller sub-groups. It was agreed that this sentence should be removed from the questionnaire response.

KH stated that he felt the response is currently not emphatic enough and that RAWP is the backbone of the managed aggregate supply system. KF stated that the industry pay the aggregate levy and therefore RAWP should be included as a benefactor of the fund.

Nick Horsley (NH) stated that the word 'deliver' in 1b should be removed and replaced with 'advise'.

KP stated that the scope should not be extended but the main responsibilities remain the same as RAWP has a fundamental established role, sub-groups should take on wider issues as they arise. AM stated that the role of the secretaries is unlikely to expand given the emphasis on reducing costs.

response.

### **CLG Update (Chris Bamber GONW)**

CB presented an update from CLG (Mark Plummer) as follows: tendering process is underway for RAWP contracts. Detailed survey is due to commence in January. AMRI has been published, National Policy Statements are out for consultation, Mine Waste Directive law 01/07/09 sets out relationship between planning and pollution control.

### **Industry and MPA updates**

Cheshire: JL reported Cheshire West and Chester Council are currently consulting on the Core Strategy Issues and Options paper ending in January 2010.

Cheshire East Council is currently consulting on the SCI document until 18<sup>th</sup> January 2010. There is currently an application in for an extension of South Arclid quarry involving 7mt Silica Sand, determination is expected early next year. There is also an application for a small extension at Mere Farm.

Cumbria: RE reported Cumbria Regulation 27 Site Allocations Policies and Proposals Map currently under consultation for 8 weeks. HSA has been treated separately and has its own policies. There is an application in for Low Gelt.

GMGU: CW reported GMGU are currently starting work on a Greater Manchester Minerals Plan, the current consultation (Scoping Report for Sustainability Appraisal and Report on Identifying and Protecting Mineral Resources in Greater Manchester) ends on 8<sup>th</sup> January 2010. An application from Pilkington Quarry was refused this week and there has been one application submitted for an extension of time at a peat site in Salford.

Merseyside: Paul Slinn (PS) reported that all LDFs in Merseyside are currently delayed. Bold Heath won an appeal last summer and production could begin at any time.

Warrington: David Ringwood (DR) reported Warrington has commissioned a report on AOS. Core Strategy Preferred Options due in March 2010, adoption is scheduled for 2011.

NH reported Sibelco are expecting to put in an application for a time extension at one quarry.

MH reported Lancashire Site Allocations Reg 25 due to be published in January. Dunald Mill is moving forward as a potential site.

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### **Minutes of North West RAWP meeting 27 July 2010**

#### **Feedback from RAWP Technical Secretaries Meeting July 2010**

AM reported that the RAWP technical secretaries have contracts in place until October 2010 and CLG are hopeful that a further 6 month extension will follow. The additional 6 months has financial and ministerial go-ahead but CLG are waiting for clearance from procurement. CLG now only have two key staff for minerals and waste matters (Mark Plummer and Lucy Yates) along with one member of support staff.

AM stated that a paper had been put to the technical secretaries regarding the supply of hard rock and more specifically HSA. Welsh Assembly Government has also expressed concern over this issue and has attempted to start talks with industry but is yet to be successful.

AM reported that MIRO were considering a number of bids for research projects which were likely to cover implications of 2042 and beyond, assessing the evidence in areas where there may be specific constraints on aggregate supply and assessing the environmental impacts of regional and sub-regional supply options. RE stated that the North West RAWP should take the opportunity to become involved in these research projects and input into the work packages. NH stated that the MPA organised 'Living with minerals conference' scheduled for November 2011 should include a presentation of the projects findings. Please see BGS website for details <http://www.bgs.ac.uk/ukmf/conferences.html>

AM reported that 5 RAWPs had completed work on the sub-regional apportionment, 1 was almost complete and a further 3 were in the same position as the North West RAWP.

Findings of the Waste and Resources Action Programme (WRAP) survey on CD&E waste arisings between 2005-2008 are now complete and results have been published showing a 7% increase in recycling. Report is not available via website due to publishing restrictions currently in place. Copy of this document to be circulated with minutes of meeting.

AM reported that CLG is to hold another meeting with BGS regarding the revision of mineral safeguarding guidance in the light of the abolition of RSS. AM also reported that this is the final guaranteed year for the Aggregates Levy Sustainability Fund (ALSF). CW queried where the capital would go if the fund was abolished. RE stated that the North West RAWP should enquire if RAWPs can be funded by the ALSF, NH stated that the party should wait for announcements and that the Mineral Products Association (MPA) had written to CLG expressing their concerns that the ALSF is now funding local government rather than appeasing the impacts of quarrying and that there should be a greater say locally, by affected communities. Details of this can be found on the [MPA website](#). GS indicated a question on this had been asked in the House of Commons, details of which are available in

the [Hansard](#) (official report).

### **Feedback from meeting with Y&H RAWP**

RE reported the outcome of a meeting with Yorkshire and Humber RAWP (YHRAWP) regarding the long-term supply of aggregates. Nobody from the Yorkshire and Humber Government Office or the Y&H Leaders Forum were able to attend but discussions took place with Dave Parish (YHRAWP). In general there was a more optimistic message on continued supply of aggregate from the Yorkshire and Humber region from the representative. RE stated that he would like all aggregates to be considered and not just HSA. GS stated the abolition of RSS meant that there was every possibility of more permissions being granted in the footprints of existing quarries. Research is due to be undertaken by MIRO (see item 3)

### **AM2009 Progress**

NDK reported that progress of the AM2009 survey was fair to good and that Cheshire had received 72% of returns, Cumbria 64%, Lancashire 24%, Greater Manchester 50%, Merseyside 20% and Warrington have completed their returns. Form B's are outstanding for Cumbria and Lancashire. NDK requested that all returns be completed by the end of July.

RE stated that issues surrounding confidentiality and the poor standard of some returns have hampered Cumbria's previous attempts at completing annual surveys and that the responsibility for surveys had since been handed to Cheshire to complete on Cumbria's behalf. NH stated that MPA had discussed confidentiality and had stated that if local authorities were fully supportive of the Managed Aggregate Supply System (MASS) then confidentiality could be relaxed. NH suggested that consideration could be given to the submission of a 5 year average sales and reserve figure to help overcome the above issues. NH also reported that MPA had held meetings with CLG stressing the importance of RAWPs and asking for them to remain. RE stated that the Confederation of British Industry (CBI) had also made a case for the retention of RAWPs.

### **Regional issues update**

Duncan McCorquodale (DMc) reported that RSS was revoked as part of a letter from Eric Pickles on 6<sup>th</sup> July 2010 and that no parliamentary order is required for the revocation. 4NW is in the process of winding down and will be closed by the end of September. Staff are currently updating the evidence base and ensuring that the website content is kept up to date. The policy side of RSS will have a life after RSS in the form of a legacy document entitled 'Future North West', the North West Development Agency (NWDA) will publish the document with time to comment between August-October. It is hoped that there will be a monitoring role in the future for some officers from 4NW but this is subject to funding decisions. The 4NW website will be hosted in the future by the British Library and web links will be maintained. Details can be found at <http://www.webarchive.org.uk/ukwa/>.

### **Sub-regional apportionment of the 'National and regional guidelines for aggregates provision in England 2005-2020'**

AM went through the report and the 3 options outlined in it. All of the three options are based on previous sales as there was no desire to over complicate the process. Option 2 has had no support, Option 1 had the support of the two Cheshire unitary authorities (Cheshire

West and Chester and Cheshire East), Option 3 had the support of the Greater Manchester sub-region (including Merseyside and Warrington) and Lancashire, Cumbria has not supported of any of the three options. RE stated that Cumbria has expressed a wish that a 3 year rolling average method is used but this has not been included in the main report for consistency with the method used in the RAWP Annual Reports. No additional papers were put forward to support this option.

AM reported that CLG have advised that there should be a Sustainability Appraisal (SA) carried out and that the sub-group should carry out this exercise proportionately.

CL queried whether the ‘assumptions’ regarding imports, alternative materials and marine aggregate outlined in the guidelines are acceptable. John Bingham (JB) confirmed that the assumptions for marine aggregate were indeed acceptable and that there is capacity to meet the assumptions. CL also stated that landings at Heysham have now ceased and that there was concern that the region would not meet these assumptions.

AM stated that Option 1 was the preferred option for Cheshire West and Chester and Cheshire East as a sub-region as it best reflects what has been happening in Cheshire. There was a compromise option which would see Cheshire agreeing with Option 3, thereby a majority of MPA authorities. Currently the 10 year supply for Cheshire includes sales figures for parts of the Peak Park that fall within Cheshire, Halton and Warrington. Using an 8 year supply would provide consistent data for Cheshire and the Merseyside authorities. The figures are not significantly different to Option 1. A comparison document was circulated. RE stated that he had no issues with the use of the 8 year average; CW stated that the Greater Manchester sub-region would struggle to meet the crushed rock apportionment but an 8 year average method was best, CL stated that Lancashire would be happy to agree to these figures.

DMc stated that the process would now be difficult without the RSS process in support. Shaun Denny (SD) stated that the West Midlands RAWP had experienced similar difficulty with one authority being unhappy with revised apportionments; the onus was put on them to work through an alternative option and state why they cannot accept the revised apportionments. SD recommended that the method should be agreed upon using a majority view.

For the sub-regions of Lancashire, Cheshire, Greater Manchester and Merseyside there was agreement that the revised Option 3 was preferable. RE did not support this option.

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**DECISION:** Revised Option 3 is the preferred option for the sub-regional apportionment from the North West RAWP. It was a majority decision (Cheshire, Lancashire, Greater Manchester and Merseyside). Cumbria did not agree the option and therefore the report will be taken forward with Cumbria dissent.

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#### **SA of sub-regional apportionment**

DMc introduced his papers and work undertaken so far on the SA of RSS. AM circulated an extract of previous RSS SA objectives which had been considered suitable, by the working group, for the process. AM stated that the report must have an SA completed but it must

also be proportionate to the work and that relevant information must be available. All RAWP members are to look at the set of objectives and provide feedback to AM and NDK.

GS stated that the fundamentals of geology should form the starting point for all SAs.

CW stated that Greater Manchester may have SA criteria that may be more useful than those provided for by the RSS process. AM requested that all members provide input into this as soon as possible.

RE stated that it is difficult to see how the apportionments could be SA'd without figures for where the demand is within the region to compare with the supply pattern. On the basis of 0.5 tonnes sand and gravel per head of population in the NW it was difficult to see that an increase in Cumbria's apportionment would in practice meet any shortfall within the Cumbria sand and gravel quarries supply areas. The increase in Cumbria's apportionment is not likely to solve any problem in practice.

### **CLG Update**

CB reported that interaction with CLG remains unclear but Local Planning Authorities should push ahead with DPDs.

CB reported that ministers need to discuss the future of minerals planning with industry representatives. The spending review in October should provide more answers as to the future of RAWPs and the ALSF.

### **North Wales RAWP update**

RB reported that 4 year contracts are now in place for the Welsh RAWPs which demonstrates Welsh Assembly Governments commitment to MASS and that revised Regional Technical Statements had been published to back this up.

RB reported that the minerals safeguarding exercise by the British Geological Survey (BGS) had now been completed and that as a result Paragraph 13 of the Minerals Technical Advice Note (Wales) 1: Aggregates (MTAN1) is now being reviewed. A resource map for Wales is now available with a safeguarding map expected after the revision of Paragraph 13.

RB also reported that Welsh Assembly Government is requiring all authorities to demonstrate that they are providing minerals planning services and as a result of this the North Wales authorities are preparing to establish a shared service hosted by Flintshire.

### **Industry and MPA updates**

NH provided the following update from the MPA: discussions with CLG have had a strong emphasis on retaining RAWPs and MASS, ALSF should be distributed appropriately, and the Raw Materials Supply Initiative is currently out for consultation until September in which the UK has been used as a good example. Details can be found via the [European Commission for Enterprise and Industry](#) website.

JB reported that a new Crown Estate license had been granted in the Liverpool Bay area for

marine dredging, the data is available and will be circulated as part of the North West RAWP 2009 Annual Monitoring Report.

CL reported that a draft publication Lancashire Minerals DPD is expected at the end of September with publication being scheduled for January 2011.

PU reported that consultation on the Cheshire East Spatial Options was expected in the autumn with a revised Local Development Scheme (LDS) being made available soon, adoption of the Core Strategy is expected to be 2014 with an allocations DPD following shortly afterwards.

CW reported that a Greater Manchester Minerals Plan Preferred Options stakeholder event is scheduled for 9<sup>th</sup> September which will include site allocations and mineral safeguarding areas. There is also a smaller 4 week industry focused consultation scheduled regarding mineral safeguarding areas. Adoption is due 2012.

Paul Slinn (PS) stated that there had been a number of applications for coalbed methane exploration in Merseyside. Minerals issues are to be dealt with in individual Local Planning Authorities (LPA) Core Strategies.

RE reported that Cumbria Site Allocations hearings are due to commence on 28<sup>th</sup> September for a period of 4 weeks, adoption is expected in December. Mineral safeguarding areas for gypsum are currently being worked on. A total of approximately 7mt of sand and gravel permissions have been granted over the past 12 months.

AM reported that Cheshire West and Chester LDS is currently under review and advice has been sought from CLG as to the next steps, adoption is expected in 2012. No major aggregate applications have been received

## APPENDIX D: National and Regional Guidelines for Aggregate Provision in England 2001-2016

On 10<sup>th</sup> June 2003, the Office of the Deputy Prime Minister (ODPM) published the 'National and Regional Guidelines for Aggregate Provision in England 2001-2016'. The guidelines replace those in Annex A of Minerals Planning Guidance Note 6, published in 1994. The revised guidelines are set out below:

### National and Regional Guidelines for Aggregate Provision in England 2001-2016

New Regions	Guidelines for land-won production		Assumptions		
	Land-won Sand & Gravel	Land-won Crushed Rock	Marine Sand & Gravel	Alternative Materials	Net Imports to England
South East England	212	35	120	118	85
London	19	0	53	82	6
East of England	256	8	32	110	8
East Midlands	165	523	0	95	0
West Midlands	162	93	0	88	16
South West	106	453	9	121	4
North West	55	167	4	101	50
Yorkshire and the Humber	73	220	3	128	0
North East	20	119	9	76	0
<b>England</b>	<b>1068</b>	<b>1618</b>	<b>230</b>	<b>919</b>	<b>169</b>

Source: National and Regional Guidelines for Aggregate Provision in England 2001-2016, ODPM, June 2003

Before the regional guidelines can be used in the preparation of minerals development plans they need to be broken down to mineral planning authority (MPA) areas. The apportionment of the regional guidelines to sub-regional areas in the North West is the responsibility of 4NW taking into account advice from MPAs and the North West RAWP.

A five-year average production level was used for the basis of the apportionment, as this best reflected recent supply patterns. The numerical implications for each MPA in terms of land-won sand and gravel and crushed rock provision, by apportioning the regional guidelines based on the above, are detailed below.

**Sub-regional apportionment of aggregates provision in the North West region 2001-2016 (million tonnes)**

	Sand and Gravel	Annualised Requirement
Cheshire	31.5	1.97
Cumbria	11.2	0.7
Greater Manchester/ Merseyside/Warrington	4.1	0.26
Lancashire	8.2	0.5
<b>Total</b>	<b>55</b>	<b>3.43</b>

Figures from - The North West of England Plan: Regional Spatial Strategy to 2021, Government Office for the North West of England

	Crushed Rock	Annualised Requirement
Cheshire	2.17	0.13
Cumbria	65.5	4.1
Greater Manchester/ Merseyside/Warrington	26.4	1.65
Lancashire	72.9	4.6
<b>Total</b>	<b>166.97</b>	<b>10.4</b>

Figures from - The North West of England Plan: Regional Spatial Strategy to 2021, Government Office for the North West of England

## APPENDIX E: National and regional guidelines for aggregates provision in England 2005-2020

On 29<sup>th</sup> June 2009 the Department for Communities and Local Government (CLG) published revised national and regional guidelines for aggregates provision in England for the period 2005 – 2020. These revised guidelines are set out below:

New Regions	Guidelines for land-won production		Assumptions		
	Land-won Sand & Gravel	Land-won Crushed Rock	Marine Sand & Gravel	Alternative Materials	Net Imports to England
South East England	195	25	121	130	31
London	18	0	72	95	12
East of England	236	8	14	117	7
East Midlands	174	500	0	110	0
West Midlands	165	82	0	100	23
South West	85	412	12	142	5
North West	52	154	15	117	55
Yorkshire and the Humber	78	212	5	133	3
North East	24	99	20	50	0
<b>England</b>	<b>1028</b>	<b>1492</b>	<b>259</b>	<b>993</b>	<b>136</b>

Source: National and regional guidelines for aggregates provision in England 2005-2020, Communities and Local Government, June 2009

The requirements for the North West region for the period 2005-2020 compared to the previous 2001-2016 guidelines are:

Aggregate Type	2001-2016 Guidelines	2005-2020 Guidelines	Difference (mt)
Land-won Sand & Gravel	55	52	-3
Land-won Crushed Rock	167	154	-13
Marine Sand & Gravel	4	15	+11
Alternative Materials	101	117	+16
Net Imports to England	50	55	+5

The revised guidelines above are yet to be apportioned to the sub-regional level.

## **APPENDIX F: NWRAWP Membership**

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