

GREATER MANCHESTER, MERSEYSIDE AND HALTON, AND WARRINGTON

JOINT LOCAL AGGREGATE ASSESSMENT

November 2014

Prepared on behalf of the 17 Mineral Planning Authorities of:

**Greater Manchester (including Bolton, Bury, Manchester, Oldham, Rochdale, Salford,
Stockport, Tameside, Trafford and Wigan)**

Merseyside and Halton (including Knowsley, Liverpool, Sefton, St Helens and Wirral)

Warrington Borough Council

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1 Introduction

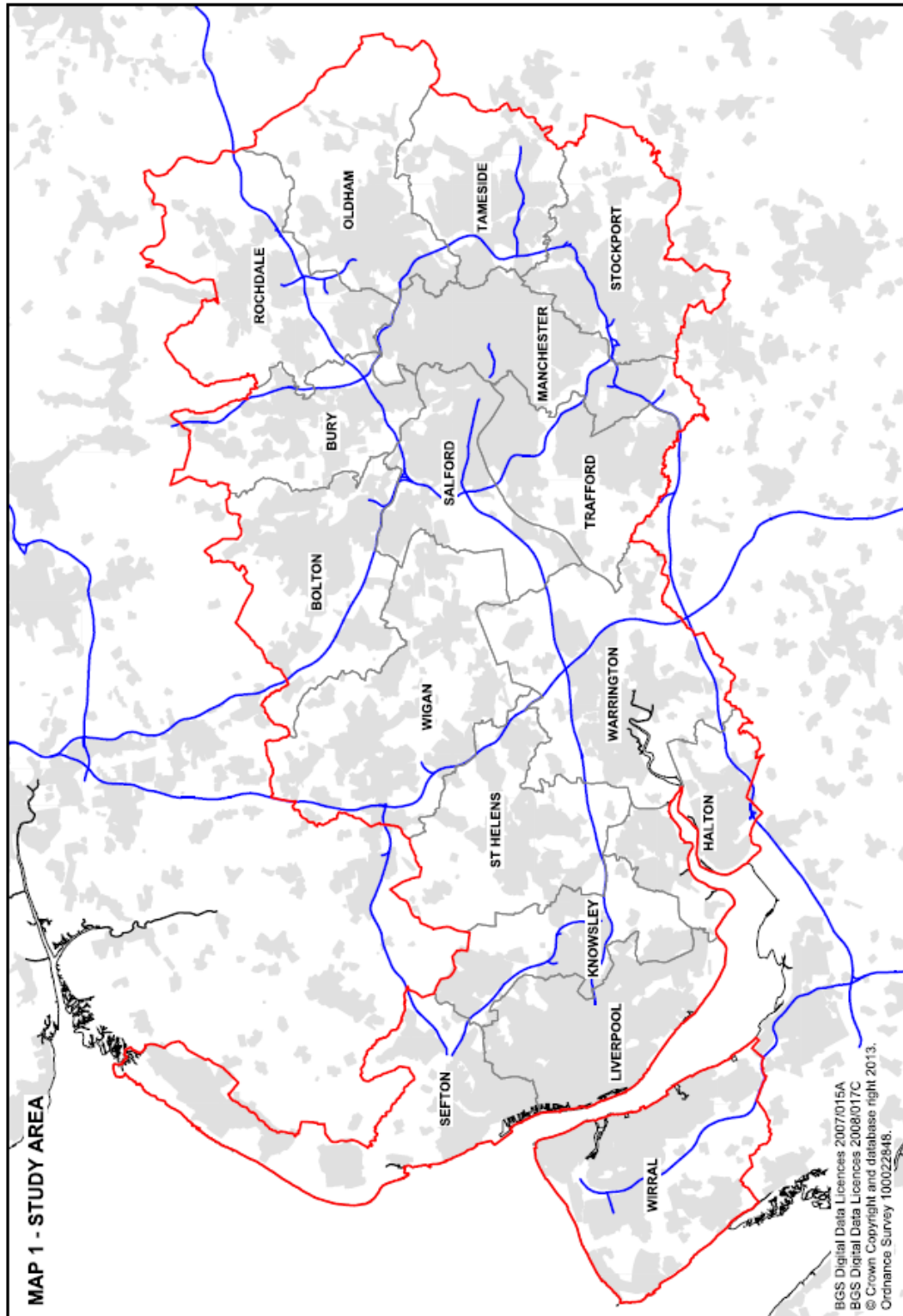
Production of a Joint LAA

- 1.1 The National Planning Policy Framework (NPPF), published in March 2012, introduced a requirement for Mineral Planning Authorities (MPAs) to plan for a steady and adequate supply of aggregates by preparing an annual Local Aggregate Assessment (LAA). This should be based on a rolling average of 10 years sales data and other relevant local information and an assessment of all of the supply options (including marine dredged, secondary and recycled sources)¹. The guidelines specify that this can be done either individually or jointly by agreement with another or other mineral planning authorities. Previously published Guidance has now (as of March 2014) been replaced by the new Government system of Planning Policy Guidance provided on-line, but it's content has largely been retained intact.
- 1.2 The Association of Greater Manchester Authorities (AGMA), the Merseyside authorities, including Halton (working through Merseyside Environmental Advisory Service (MEAS)) and the unitary authority of Warrington (known as the 'sub-region') have decided to continue to work together by collaborating in the production of this document, the second of its kind, in order to satisfy the ~~new~~ duty to co-operate imposed by Section 110 of the Localism Act and due to established links from previous sub-regional working. Also, the data available for the Greater Manchester and Merseyside (including Halton) authorities and Warrington for the production of any LAA is only available at this sub regional level and cannot, for reasons of commercial confidentiality, be disaggregated to an individual authority level.
- 1.3 In order to satisfy section 110 of the Localism Act, this LAA will be issued to the North West Aggregate Working Party (AWP), West Midlands AWP, East Midlands AWP, Yorkshire and Humber AWP and North Wales AWP. We will prepare an updated LAA following any comments received.
- 1.4 The LAA, along with all others produced in the region, has been put through a process of consultation and an advisory report has been produced. The advice has been taken into account as is required by para 145 of the NPPF.
- 1.5 This LAA provides an assessment of the demand for and supply of aggregates in the sub-region based on an average of 10 year sales data and other relevant local information, and an assessment of all supply options. The LAA is a factual based monitoring document that will act as an evidence base to assist the individual Mineral Planning Authorities (MPAs) in their policy formulation. A summary of the key messages for individual MPAs can be found in Section 12.

¹ Paragraph 145, NPPF

Study Area

- 1.6 The study area covers the ten Metropolitan Districts of Greater Manchester; the five Metropolitan Districts of Merseyside and the Unitary Authorities of Halton and Warrington. These are detailed on Map 1.



Greater Manchester

- 1.8 Greater Manchester is the second largest conurbation in the UK with a population of over 2.6 million. Much of the land is urban, however, there are large rural areas, especially in the North which is where mineral working tends to occur. Greater Manchester is bounded by Lancashire, West Yorkshire, Derbyshire, Cheshire and Merseyside and is a major transport hub. The M60 motorway encircles the conurbation, with major road links leading from it. Greater Manchester relies on imports of high specification aggregates from quarries in North Wales, Derbyshire, Lancashire, Cumbria, Staffordshire and Cheshire. Materials are mainly transported by road and, to a lesser extent, rail.
- 1.9 The natural landscape is very important for biodiversity, and it contains a wide variety of habitats including ancient woodlands, moorlands, mosses, broadleaf woodland, rivers and ponds, and bogs. As a consequence, a number of sites within Greater Manchester have been designated for their biological, cultural, archaeological and heritage importance.

Merseyside and Halton

- 1.10 Merseyside and Halton is a coastal conurbation strongly influenced by the River Mersey and its estuary. Although highly urbanised with a population of approximately 1.5 million, between 33% and 50% of each of the constituent unitary local authorities is designated Green Belt and contains a high proportion of high quality agricultural land, which remains economically significant. There has been extensive working of minerals in the area in the past, but the limited nature of the remaining resources and presence of significant spatial and environmental constraints has led to a significant decline in the number of working sites and their production in recent years.
- 1.11 Merseyside and Halton is bounded by Lancashire, Cheshire, Warrington, Greater Manchester and North Wales and has major road links through the M6, M62, M58, M53 and M56. Like Greater Manchester, Merseyside and Halton relies on imports of high specification aggregates from quarries in North Wales, Derbyshire, Lancashire, Cumbria, Staffordshire and Cheshire, as well as those transiting the area's port facilities. Materials are mainly transported by sea, road and rail.
- 1.12 The Merseyside and Halton economy has a strong maritime focus with significant port facilities through which aggregate minerals are imported and processed for onward transport to the point of use. These include sand and gravel from off-shore dredging in the Irish Sea and crushed rock materials shipped from other land-won sources, notably the Glensanda quarry in the west of Scotland.
- 1.13 The environment of Merseyside and Halton is highly sensitive and large areas, particularly along the coast and estuaries of the Mersey, Dee and Ribble, have protected status to a very high level due to their value for a range of important habitats and species. The City of Liverpool also contains a World Heritage Site recognising the historic, cultural and architectural value of the maritime quarter of the city centre and docks.

Warrington

- 1.14 Warrington Borough is the most northerly of the local authorities in the former Cheshire area. It shares boundaries with Halton, Cheshire West and Chester, Cheshire East and the four metropolitan boroughs of St Helens, Wigan, Salford and Trafford. The borough covers some 176 square kilometres and has a population of just under 200,000.
- 1.15 Warrington lies at the hub of the region's communications network. The M6, M56 and M62 motorways intersect within the borough, providing good access to all parts of the region and beyond. Warrington also lies on the region's main North-South (West Coast Main Line) and East-West (Trans-Pennine) rail routes. Two significant waterways pass through the middle of the borough; the River Mersey, which passes close to the Town Centre and, further south, the Manchester Ship Canal. The Manchester Ship Canal is an important commercial waterway linking the Port of Manchester with the Mersey and also plays a vital role in managing fluvial flood risk along the Mersey, significantly reducing the incidence of flooding from fluvial flows.
- 1.16 The Mersey Valley Corridor constitutes a wide tract of land (exceeding 2kms in places) extending across the borough from Fiddlers Ferry Power Station in the west, to Hollins Green and the flood plain of the River Bollin in the east. Its value lies in the mix of river valley habitats, notably wetlands, in the context of the Mersey Estuary as a whole - one of the largest estuaries in Europe and supporting internationally important numbers of birds.
- 1.17 Warrington also has extensive areas of high-grade agricultural land, a varied landscape character, and important areas of nature conservation value, mostly within the relatively narrow gaps of open land separating Warrington from neighbouring towns and smaller settlements within and beyond the borough.
- 1.18 Due to its largely urban nature, the major transport infrastructure that dissects the borough and the ecological habitat along the Mersey Valley Corridor mineral activity in Warrington is limited and as a consequence the borough relies on imports of aggregates the same as the other areas in the sub-region. Materials are mainly transported by road.

Status of Mineral Planning in the Study Area

Greater Manchester

- 1.19 The ten Greater Manchester Authorities have worked together to produce a Joint Minerals Plan. The Minerals Plan considers all aspects of Minerals Planning including: aggregate apportionments; identification of Minerals Safeguarding Areas (MSAs); identification and safeguarding of sites for minerals development in the area; ensuring a steady supply of minerals within the sub-region; identifying and safeguarding sites for the provision of secondary and recycled materials; and development management policies for minerals development. The Minerals Plan sets the planning framework for minerals development in Greater Manchester.
- 1.20 The Greater Manchester Minerals Plan was found sound in January 2013, following an Examination in Public. It was adopted on 26th April 2013 by all ten authorities and forms part of each District's Local Plan.

Merseyside and Halton (including Knowsley, Liverpool, Sefton, St Helens and Wirral)

- 1.21 The six authorities are each independently considering minerals matters within their broader Local Plans. There are no plans to produce a common plan or separate Minerals Local Plans within each authority. However, specific policies for minerals planning issues will be included within local plan documents as appropriate and all of the authorities intend to continue to work within the Managed Aggregate Supply System and to participate in the NW Aggregates Working Party. Merseyside and Halton has undertaken a joint review of its minerals evidence base and authorities will prepare their plan coverage in full compliance with the requirements of Duty to Co-operate.
- 1.22 Of the 6 authorities, plan preparation progress is at different stages and the structure of plan documentation is likely to vary between them as a result. Halton and St Helens achieved adoption of their Core Strategies in 2012, while Knowsley had its Local Plan Core Strategy undergo examination in public in November 2013. Wirral has prepared its Core Strategy for submission and examination in public during 2014. All four authorities will prepare additional site-specific Local Plans in accordance with their published Local Development Frameworks.
- 1.23 Sefton and Liverpool are working to prepare single-document comprehensive Local Plans which are anticipated to complete the preparation process and achieve adoption during 2015 and 2016 respectively.

Warrington

- 1.24 Due to the need to progress other elements of the Core Strategy in a timely manner and the need to review emerging national guidance as well as look more closely at local evidence the decision was taken to separate mineral (and waste) issues out from the Core Strategy. Therefore, the production of a joint Waste and Minerals Development Plan Document will now follow the adoption of the Core Strategy.
- 1.25 The revised (5th) Local Development Scheme (LDS) that was approved by the Council's Executive Board on 16th April 2012 sets out the new approach. This specifies that work is expected to start on the Joint Waste and Minerals Local Plan Document in January 2013 with a draft document being available to go out for consultation in December 2013 and the completed document being ready for adoption in March 2015. However, due to delays in the adoption of the Core Strategy the production of this document has been delayed.
- 1.26 The Core Strategy (now renamed the Local Plan Core Strategy) was submitted to the Planning Inspectorate on 19th Sept 2012 and the EIP took place between 4th and 11th June 2013. The LPCS contains one policy (MP9) dealing with mineral issues. This indicates that the Council will bring forward a Minerals Local Plan Document that identifies and safeguards preferred sites for mineral extraction; encourages the use of recycled and secondary aggregates; promotes the use of sustainable modes for the transport of minerals and specifies that will be taken into consideration for mineral related development. The Council are currently awaiting a decision on the outcome of the examination which is now not expected until late Spring 2014. A revised Local Development Scheme will be produced after the conclusion of the examination process. There is now likely to be a consequential delay to the production and adoption of the Joint Waste and Minerals Local Plan.

2 Geology

Sub Regional Geology

- 2.1 The oldest rocks in the sub-region are of Carboniferous age and can be found at the far eastern and northern upland fringes of Greater Manchester, where they outcrop. They comprise sequences of mainly coarse grained sandstones and gritstones.
- 2.2 The upland areas give way to progressively younger rocks to the south and west. At first these are represented by the Carboniferous Pennine Coal Measures. Comprising sequences of mainly coarse grained sandstones and gritstones, these are the oldest rocks in Merseyside where they are found in the northeast, primarily in St Helens. They are found in a thick band across Greater Manchester and at the northwestern tip of Warrington.
- 2.3 The Pennine Coal Measures give way to progressively younger, Permo-Triassic rocks to the south and west of the sub-region. These cover much of Merseyside and Warrington.
- 2.4 Extensive areas of the sub-region are covered with superficial drift deposits of Pleistocene to recent age. These are dominated by glacial tills ('boulder clay') laid down by retreating ice sheets at the end of the Devensian cold stage some 10,000 years ago. The tills typically comprise silty clays with subordinate sands and gravels (ranging in size up to large boulders). The latest drift deposits are represented by tidal sands, river terrace sands and gravels, glacio-fluvial and glacio-lacustrine sands and gravels, alluvium and wind blown sand, and peat.

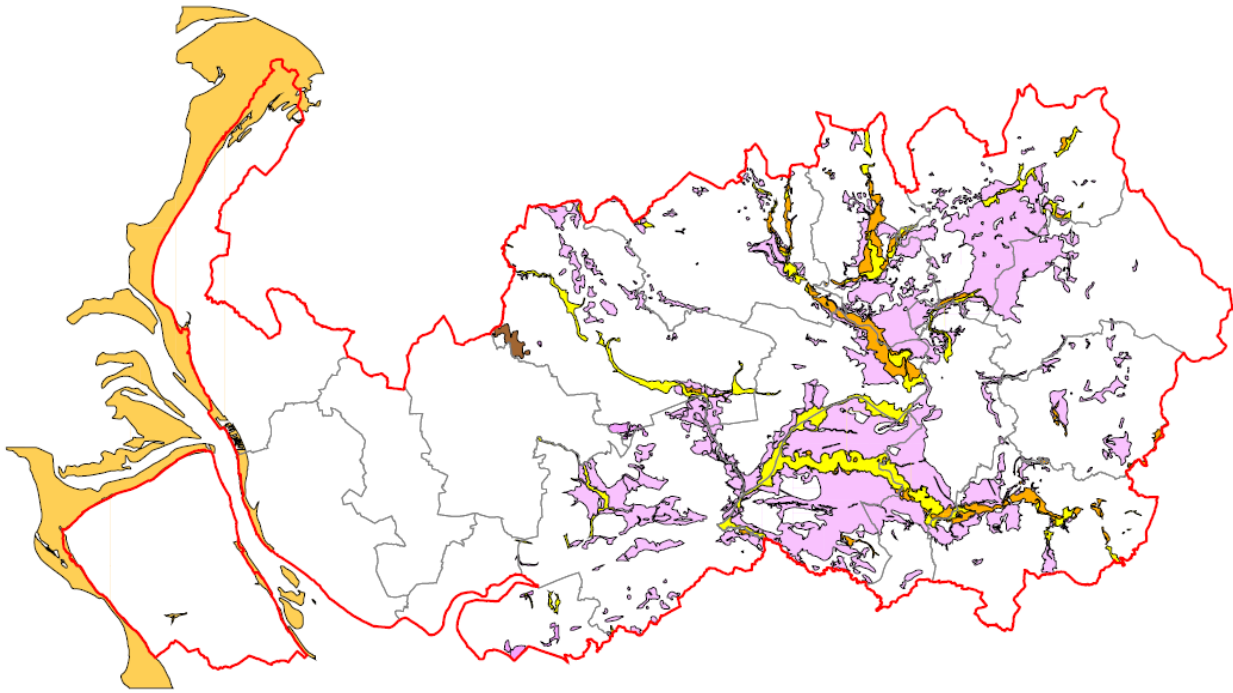
Overview of Aggregate Resources in Sub-Region

Sub-regional aggregate resources

Sand and gravel resources and current extraction

- 2.5 Resources of sand and gravel primarily occur within superficial or 'drift' deposits of glacial and post glacial origin. These sands and gravels are derived from the erosion of local bedrock in a variety of environments, including glaciofluvial rivers formed from melting ice and also river terraces formed after the main ice had retreated from the area. Map 2 shows the distribution of the sand and gravel resource across the sub-region.
- 2.6 There is a limited amount of sand and gravel extraction in the sub-region. Sand and gravel has been extracted in the past in Warrington although there are no working quarries at present. Activity in Merseyside is mainly limited to the landing of marine-dredged material at coastal ports such as the Port of Liverpool and Bromborough. In Greater Manchester, glacio-fluvial sand and gravel is currently worked at Astley Moss, Salford. Map 3 shows permitted sand and gravel quarries (active and inactive) in 2013. Morleys Quarry in Wigan produces sand but this is worked from soft sandstone (Triassic sandstones of the Sherwood Sandstone Group) rather than from sand and gravel deposits.

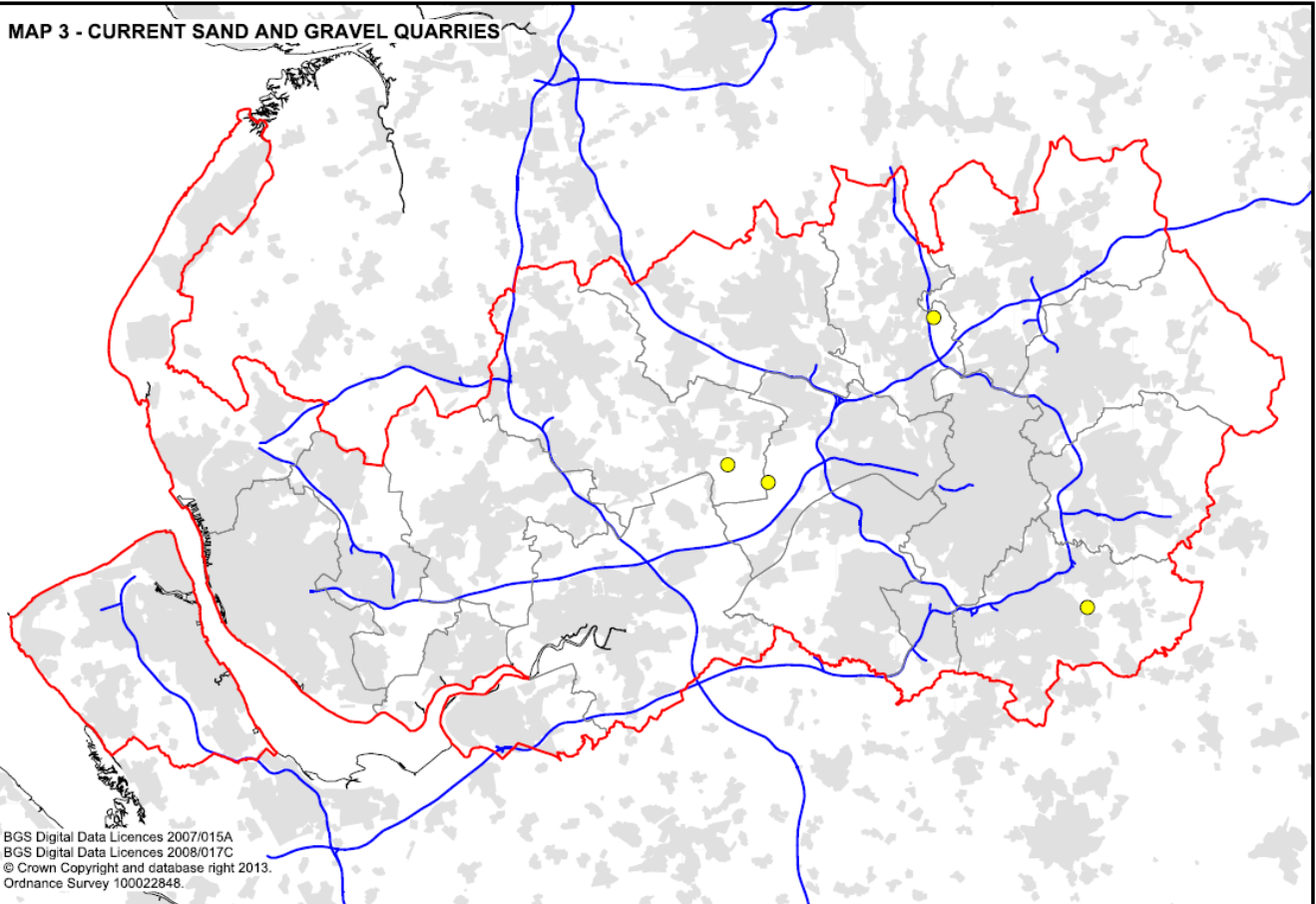
MAP 2 - SAND AND GRAVEL RESOURCE



- GLACIOFLUVIAL DEPOSITS
- RIVER TERRACE DEPOSITS
- SUB-ALLUVIAL INFERRED RESOURCES
- MARINE INTERTIDAL DEPOSITS

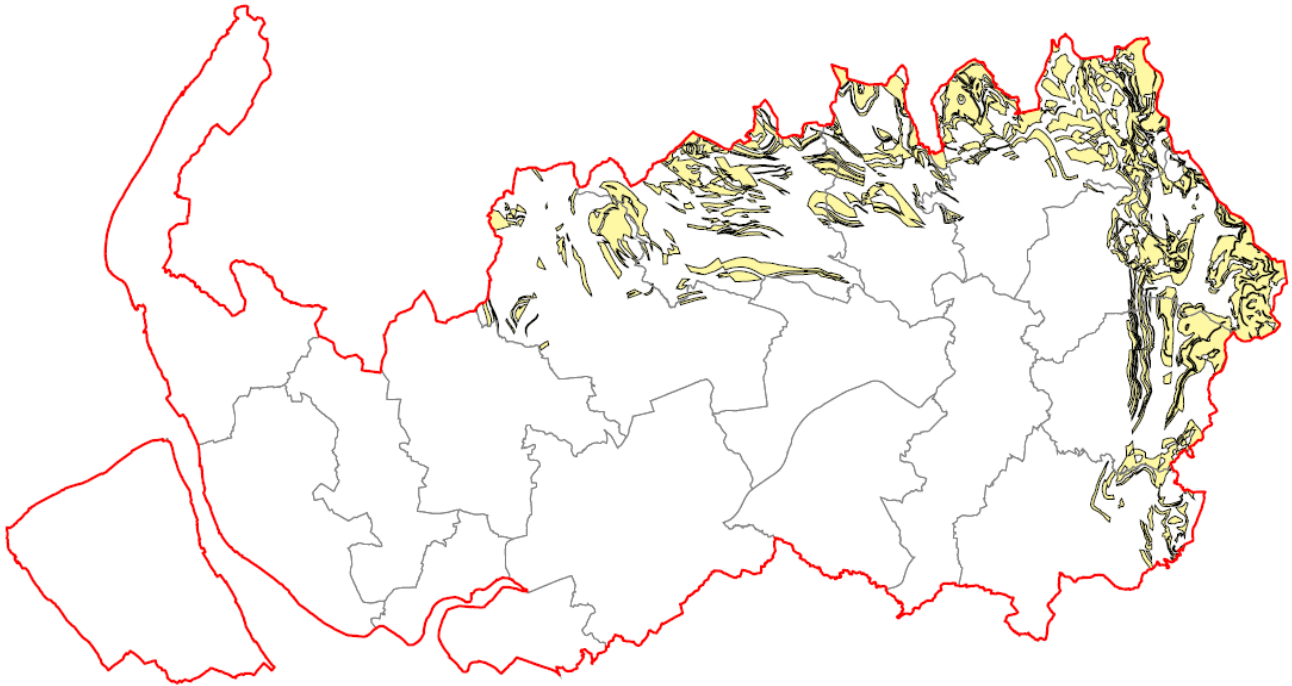
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MAP 3 - CURRENT SAND AND GRAVEL QUARRIES



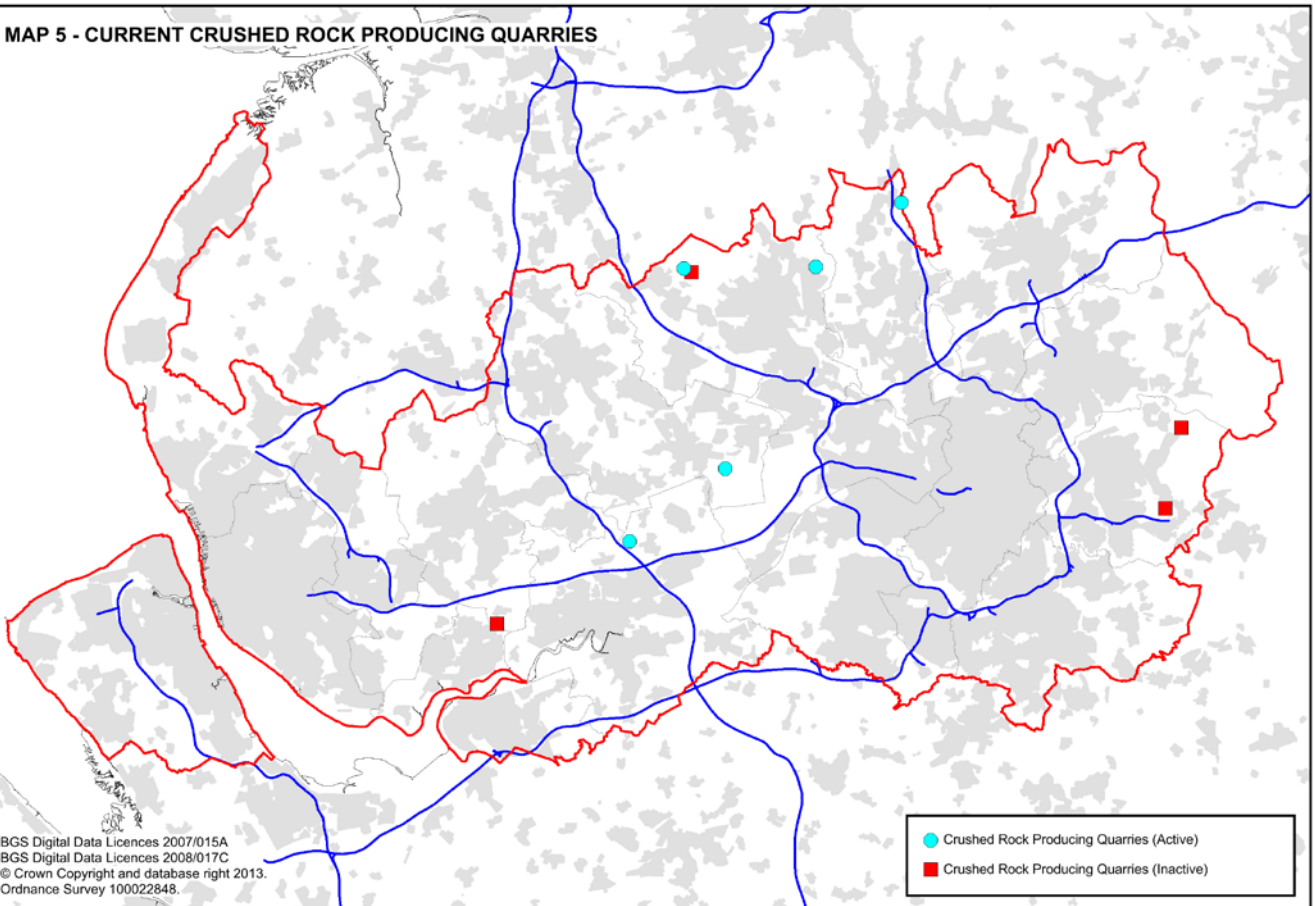
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MAP 4 - CRUSHED ROCK (SANDSTONE/GRITSTONE)



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MAP 5 - CURRENT CRUSHED ROCK PRODUCING QUARRIES



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Crushed rock resources and current extraction

- 2.7 Crushed rock resources are associated with Carboniferous and Permo-triassic rocks of the area (see Map 4).
- 2.8 Extraction of crushed rock aggregate in Greater Manchester is confined to where the resource is found which is in a broad strip running north-south along the eastern margin and east-west along the northern margin. There are seven crushed rock aggregate quarries in Greater Manchester which are concentrated in the north and east of the sub-region. Only three are currently active; one is active for the extraction of shale (therefore not extracting aggregate) whilst the remaining three are currently inactive and do not produce aggregate.
- 2.9 The only aggregate producing quarry in Warrington is operated by Gaskell Brothers Ltd for the extraction of sandstone at Southworth Quarry in Croft Parish. The site produces crushed rock aggregate primarily for bulk fill purposes. Planning permission for this operation is valid until 2025. The site also contains a significant aggregate recycling facility and the quarry void is being backfilled with inert wastes.
- 2.10 There is one quarry in Merseyside with an active planning consent for production of crushed rock aggregate, Bold Heath in St Helens. This has been inactive for the last 2-3 yrs because of economic conditions. It produces low grade crushed sandstone for use as construction fill and should continue to contribute to apportionments for some time into the future. Map 5 shows crushed rock extraction in the sub-region. BGS explain that isolated mineral workings may occur in areas that are shown as having no mineral resource. This explains why there are crushed rock quarries identified in Map 5 which do not correspond with the sandstone/gritstone resource identified in Map 4².

Table 1 Summary of Sub-Regional Mineral Resources

Mineral Resource	Summary of Mineral Resource	Extraction in the sub-region and uses of material
Glaciofluvial sand and gravel	Sands and gravels are derived from the erosion of local bedrock by the action of ice and waste which is then deposited by glacial melt water. Sand and gravel is defined on the basis of particle size rather than composition, although they are usually rich in silica (quartz, quartzine and flint), but other rock types occur.	Domestic uses, e.g. garden
Carboniferous Millstone Grit (sandstone)	Carboniferous sandstones consist of sand-sized particles with minor pebbles, composed dominantly of quartz, but also with some feldspar, which are cemented by silica, to a greater or lesser extent. The sandstones are typically buff coloured although locally grey and vary from fine to course grained.	Bulk fill material

² Source: Mineral Resource Information in Support of National, Regional and Local Planning (Merseyside) BGS 2006

Table 2 Permitted Aggregate Quarries in the Sub-Region

Site name	Operator	Grid Ref	Mineral	Status	MPA
Astley Moss	Marshalls Mono Ltd	SJ 371 500	Sand and gravel	Active	Salford City Council
Bold Heath Quarry	D Morgan Plc	SJ 530 885	Sandstone	Inactive	St Helens Council
Buckton Vale Quarry	Aggregate Industries UK	SD992 016	Sandstone	Inactive	Tameside Council
Fletcher Bank Quarry	Marshalls Mono Ltd	SD 804 170	Sandstone	Active	Bury Council
Harrop Edge Quarry	Chartrange (Quarry Products)	SJ 982 959	Sandstone	Inactive	Tameside Council
Harwood Quarry	Booth Ventures	SD 747 124	Sandstone	Inactive (for aggregate extraction)	Bolton Council
Montcliffe Quarry	Armstrongs	SD656 124	Sandstone	Active	Bolton Council
Morley's Hall Quarry	Astley Sand and Gravel	SJ 685 990	Sand and gravel	Active	Wigan Council
Offerton Quarry	Offerton sand and gravel	SJ 928 893	Sand and gravel	Active	Stockport Council
Pilkington Quarry	Armstrongs	SD 622 121	Sand and gravel	Inactive	Bolton Council
Southworth Quarry	Gaskell Bros	SJ 619 940	Sandstone	Active	Warrington

3 Aggregate Sales

Land-won Sand and Gravel Sales

3.1 Sales of land-won sand and gravel originating in the sub-region from 2004 to 2013 are shown in Table 3. There has been a general downward pattern in sales over the past 10 years, from a high of 0.5 million tonnes in 2004 to a low of 0.22 million tonnes in 2010. The total sales for the past three years has remained stable at 0.24 million tonnes.

3.2 The sales for the most recent 10 year period are set out in Table 4.

Table 3 Land won sand and gravel sales in the sub region between 2004 – 2013 (million tonnes)

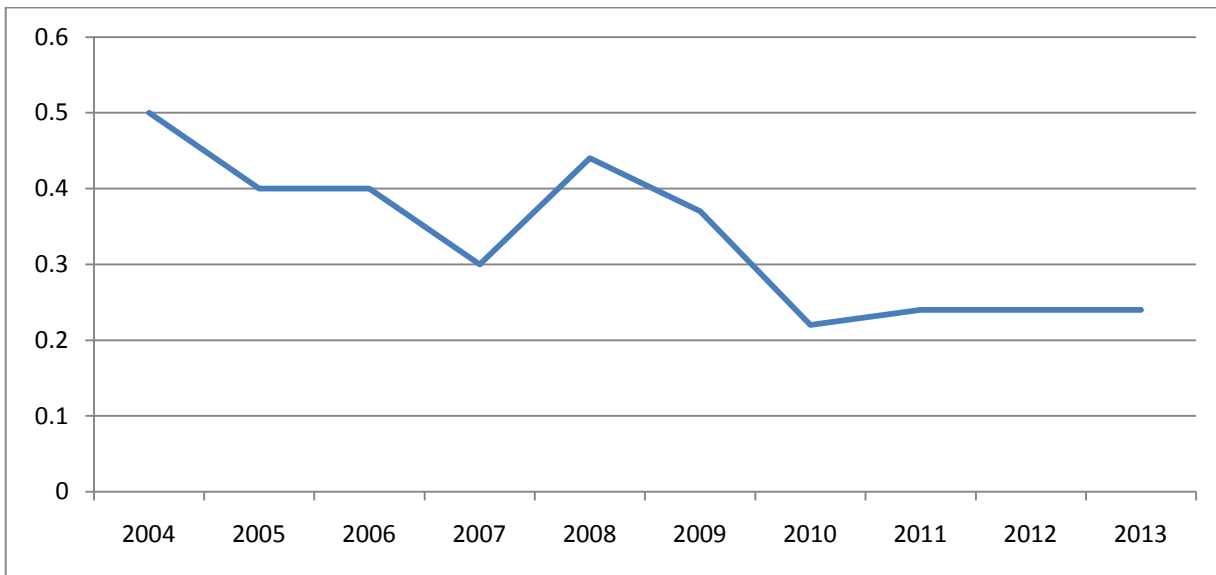


Table 4 Land won sand and gravel sales in the sub region between 2004 – 2013 (million tonnes)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Sales	0.5	0.4	0.4	0.3	0.44	0.37	0.22	0.24	0.24	0.24

Crushed rock sales

3.3 Sales of crushed rock originating in the sub-region from 2004 to 2013 are shown in Table 5. There has been a general decline in crushed rock sales by 72% since 2004, from 1.5 million tonnes in 2004 to 0.42 million tonnes in 2013. There was a low of 0.36 million tonnes in 2011. Whilst there was an upturn in sales in 2012 to 0.81 million tonnes, this dropped to 0.42 million tonnes in 2013.

3.4 The sales for the most recent 10 year period are set out in Table 6.

Table 5 Crushed rock sales in the sub region between 2004 - 2013 (million tonnes)

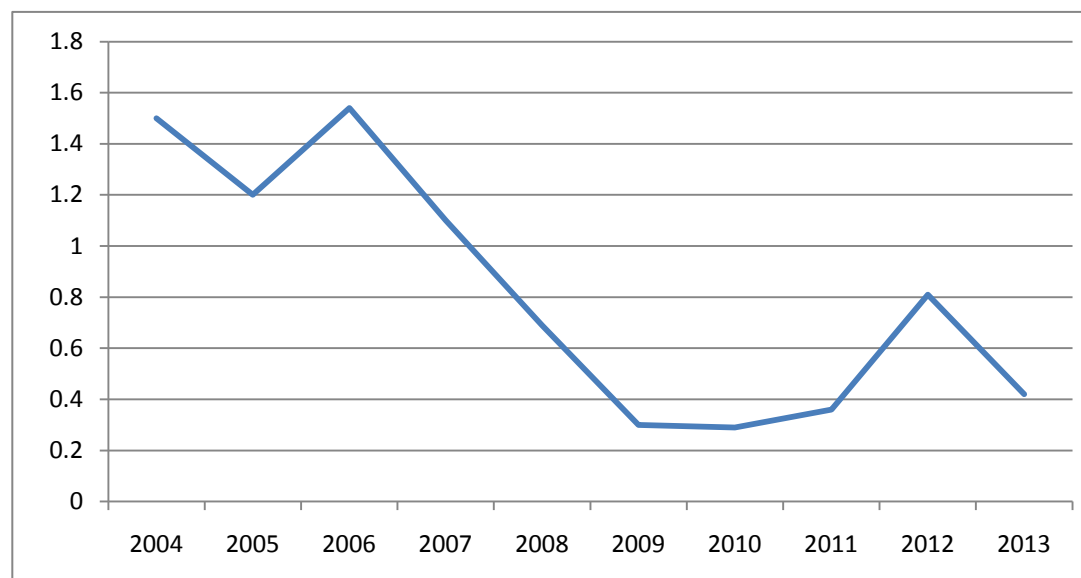


Table 6 Crushed rock sales in the sub region between 2004 – 2013 (million tonnes)

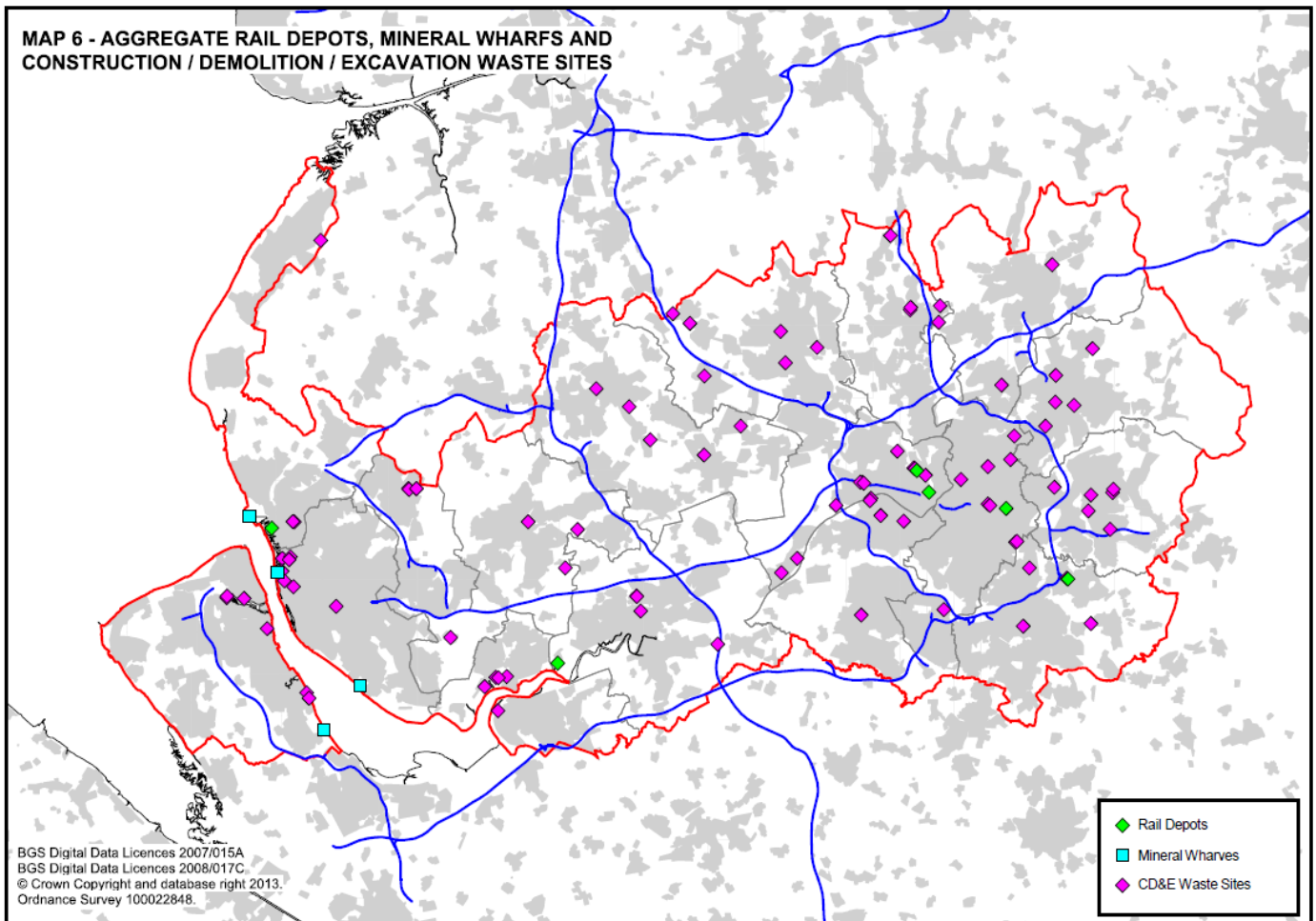
Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Sales	1.5	1.2	1.54	1.1	0.69	0.30	0.29	0.36	0.81	0.42

4 Secondary and Recycled Aggregates

- 4.1 Recycled Aggregate, which include inert materials such as concrete, stone, brick and other similar materials, are reprocessed materials previously used for construction purposes and which are often taken from the Construction, Demolition and Excavation (CD&E) waste stream. Secondary aggregates are usually by-products of industrial processes and can include materials such as clay, ash and slag.
- 4.2 The use of secondary and recycled materials not only reduces the requirement for new production of primary aggregate, but also reduces the need for disposal to landfill of CD&E waste materials. The National Planning Policy Framework recognises this and strongly promotes the use of secondary and recycled materials as an alternative to primary aggregate.
- 4.3 Data on secondary and recycled aggregate production and use is variable and incomplete. This is because, while some sites operate under license and can be monitored, much recycling and re-use occurs on individual construction sites, is temporary in nature and does not produce data. A regional study of arisings was undertaken in 2007 and provided an estimated figure of 10,792,823 tonnes CD&E waste arising in the north west in 2006, but there is currently no reliable means of producing a more up-to-date figure specific to the sub-region. However, one significant contributor to the market are reported sales of 265,246 tonnes of pulverised fuel ash and 33,294 tonnes of furnace bottom ash for aggregate purposes in the reporting period, with 51% of this remaining in the region and the rest exported elsewhere, principally to North Wales.
- 4.4 The use of secondary and recycled aggregate materials is acknowledged to be of some importance to the sub-region, as it is heavily urban in nature and therefore is likely to have production levels significant enough to offset considerably against the apportionment figures. Seeking a means to provide a reliable estimate for secondary and recycled aggregate production will therefore be taken forward as a priority action for future LAAs.
- 4.5 The locations of CD&E waste management facilities are identified in Map 6. Locations are based on Waste Interrogator 2011 data (Inert waste transfer and treatment facilities). Data on this waste stream is notoriously challenging and local authority licensed sites may not be identified on Map 6 due to limitations with the data. In addition, the quality of the spatial information on Map 6 is varied as site co-ordinates in the EA interrogator do not necessarily match the site address.
- 4.6 For the reasons outlined above, CD&E and its use for aggregate purposes has been identified by AWP as an area requiring further work. For the first time in this sub-region Merseyside has, as a pilot exercise, surveyed its licensed CD&E sites as part of the annual aggregate sales survey. Although little usable data has emerged, the survey has allowed for the list of potential aggregate-producing sites to be refined, and the exercise will be repeated in 2015.

5 Marine Won Aggregates and Wharves

The apportionment sub-region contains significant marine infrastructure, most notably in the Port of Liverpool, but also through other large dock facilities at Garston, Bromborough and Eastham and a range of smaller wharf facilities along the Manchester Ship Canal to its terminus in Salford. There are significant primary landings of aggregate materials in the Port of Liverpool, at Garston and Bromborough and, while most onward trans-shipment is by road and rail, from time to time some onward trans-shipment by barge may take place. The Port of Liverpool also handles landings of significant quantities of crushed rock aggregate shipped from the Glensanda quarry in the West of Scotland. Map 6 identifies wharves in the sub-region where marine-won aggregates are landed



- 5.1 The marine aggregates landed in the sub-region come from two main sources. These are the licensed sand and gravel extraction zones in the Irish Sea and from more local dredging associated with the maintenance of navigational channels and docks. Crown Estates (published in *Marine Aggregates Capability and Portfolio 2013*) statistics for 2012 report a figure for permitted removal from North West waters of 1.43mt per annum.
- 5.2 The comparison of the 10-year peak extraction (720,000 tonnes) with the 10-year average (520,000 tonnes) and the 3-year average (320,000 tonnes) is indicative both of significant falls in demand for marine aggregate in recent years, but also of significant unused capacity potentially available to the market should demand increase significantly in the future. However, extraction did rise year-on-year from approximately 300,000 tonnes in 2011 to approximately 600,000 tonnes in 2012, the most since 2009. In 2012, 200,000 tonnes of marine aggregate was landed at Liverpool wharves, together with 300,000 tonnes of crushed rock aggregate shipped from land-won sources in Scotland. Both Crown Estates and the wharf operators report that the material landed through wharves in the sub-region has an end-use within the north west.

6 Movement of Aggregates – imports/exports

- 6.1 Information on imports and exports of aggregates into and out of the sub-region is taken from the 2009 Aggregates Minerals Survey (AMS) undertaken jointly between the Department for Communities and Local Government (DCLG) and the British Geological Survey (BGS). This is the most up-to-date data available on flows of aggregate materials.
- 6.2 The North West as a whole consumed 12,226 thousand tonnes of primary aggregate in 2009, 67% of which originated within the North West and 34% of which was imported into the region. Table 7 shows net imports and exports into/out of the North West in 2009. In summary, the North West region is a net exporter of sand and gravel and a net importer of crushed rock.

Table 7 North West Net Imports/Exports (2009)

	Import (000 tonnes)	Export (000 tonnes)	Balance (000 tonnes)
Sand & Gravel (land won and marine)	288	473	-185 (net export)
Crushed Rock	4,822	421	+ 4,401 (net import)

- 6.3 In order of volume, the North West imported sand and gravel from the following regions in 2009:
- West Midlands (154 thousand tonnes);
 - North Wales (126 thousand tonnes);
 - Yorkshire & Humber (3 thousand tonnes);
 - South East (3 thousand tonnes);
 - East of England (1 thousand tonnes);
 - East Midlands (1 thousand tonnes).
- 6.4 In order of volume, the North West imported crushed rock from the following regions in 2009:
- East Midlands (2,539 thousand tonnes);
 - North Wales (976 thousand tonnes);
 - Yorkshire & Humber (792 thousand tonnes)
 - Outside England & Wales (241 thousand tonnes)
 - South Wales (170 thousand tonnes)
 - West Midlands (84 thousand tonnes)
 - North East (19 thousand tonnes)
- 6.5 The 2009 survey breaks down this information to the AWP sub-regional level, although it does not specify where the sub-region imports materials from.

Table 8 Sub-regional imports and consumption of primary aggregates in 2009³

	Import (000 tonnes)	Consumption (000 tonnes)	Net imports as a % of consumption
Sand & Gravel (including Marine)	568	748	76%
Crushed Rock	3,533	3,822	92%
Total Aggregate	4,100	4,570	90%

- 6.6 Table 8 shows sub-regional imports and consumption of primary aggregates in 2009. It shows that the sub-region imported 92% of the crushed rock consumed, either from elsewhere in the North West or beyond. This can be explained by the fact that the quality of crushed rock extracted in the sub-region is of a lower quality than that required for many construction activities and is understood to be mainly used as bulk fill. Therefore, the sub-region must import the higher quality crushed rock aggregate for use in construction projects as it is not available locally and it is likely that this will continue.
- 6.7 The sub-region imported 76% of sand and gravel consumed in 2009, either from elsewhere in the North West or from beyond the North West. The only sand and gravel quarries in the sub-region are currently found in Greater Manchester. It is therefore likely that the sub-region will continue to rely on imports to supply the majority of its requirements for sand and gravel.
- 6.8 The survey does not provide details of exports from the sub-region however it is assumed that these would be limited given the quality of material found and the constraints of the urban area. Given this, communication and co-operation with those authorities that import primary aggregates into the sub-region will be important. The sub-region is meeting with Derbyshire County Council in April 2014 and intends to contact and meet with a representative from North Wales in Spring 2014. Due to the times of these meetings, the outcomes will therefore be reported on when the LAA is revised following consultation and prior to final publication.
- 6.9 The majority of aggregates are transported into the sub-region by road. However, there are a number of aggregate rail depots in the sub-region and these are shown on Map 6.
- 6.10 AWP has identified that the LAA could be strengthened by including additional information on onward movement and final destination of aggregate from rail depots and wharves. Data is not readily available to address this in this LAA and therefore it will be addressed in the next LAA. Indications are that the material imported through Merseyside Wharves is used entirely within the north west.

³ Table 8 includes imports from other authorities within the North West as well as any imports from outside the North West. It is therefore not directly comparable with the information in Table 7.

7 Total Aggregate Supply – permitted reserves

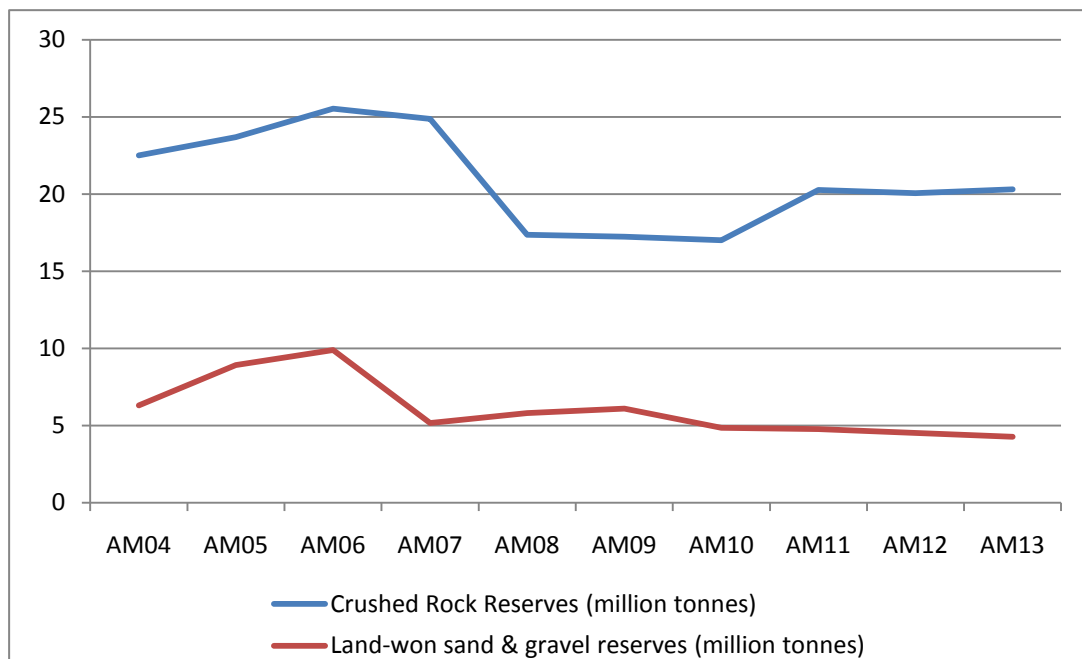
7.1 The table below sets out aggregate reserves in the sub-region.

Table 9 Aggregate reserves in the sub-region

Monitoring period	AM04	AM05	AM06	AM07	AM08	AM09	AM10	AM11	AM12	AM13
Crushed Rock (sandstone) reserves (million tonnes)	22.5	23.69	25.54	24.86	17.36	17.23	17.01	20.26	20.06	20.3
Land-won sand and gravel reserves (million tonnes)	6.3	8.91	9.89	5.15	5.8	6.1	4.85	4.76	4.52	4.27

7.2 The graph below (Table 10) shows aggregate reserves over a ten-year period to 2013. There has been a general decline in both crushed rock and sand and gravel reserves since 2006. This is in line with reported sales and no new reserves being permitted. The reduction in sand and gravel sales and reserves from 2009 – 2012 is due to the closure of one site for the purposes of sand and gravel extraction and subsequent use for waste disposal in Greater Manchester.

Table 10 Graph showing aggregate reserves in the sub-region



8 Assessment of Future Supply

Managed Aggregate Supply System

8.1 For over 35 years, geographical imbalances in the occurrence of suitable natural aggregate resources and the areas where they are needed, have been met through the Managed Aggregate Supply System (MASS). The underpinning concept behind MASS is that Mineral Planning Authorities which have adequate resources of aggregates make an appropriate contribution to national as well as local supply. New Government guidance on the MASS⁴, published in October 2012, indicates the Government considers there is still a role for forecasts of aggregate provision in England and that it will continue to publish National and Sub-national guidelines and continue to make assumptions on the likely contribution of demand for alternatives, imports and marine dredged sand and gravel.

Current Aggregate Apportionment (2005 – 2020)

8.2 Prior to the publication of the National Planning Policy Framework (NPPF) in March 2012, national aggregate policy was set out by the Government in MPS1, which required Mineral Planning Authorities (MPAs) to make provision for the sub-regional apportionment of the National and Regional Guidelines for Aggregate Provision 2005-2020⁵, which was most recently updated in June 2009. The key regional guideline figures are reproduced below along with the national figures for comparison.

Table 11 Comparison of National and Regional Apportionment Guidelines for England (2009)

Region	Land-won provision		Assumptions		
	Land-won Sand & Gravel (mT)	Land-won Crushed Rock (mT)	Marine Sand & Gravel (mT)	Alternative Materials (mT)	Net Imports to England (mT)
North West	52	154	15	117	55
England	1028	1492	259	993	136

8.3 The regional guidelines were broken down, as far as possible, to mineral planning authority areas (the 'sub-regional apportionment'). For reasons of commercial confidentiality, Greater Manchester, Merseyside, Halton and Warrington were grouped together for the purposes of the sub-regional apportionment. The apportionment prior to the publication of the NPPF was 0.43 million tonnes per annum of land-won sand and gravel and 1.32 million tonnes per annum of crushed rock.

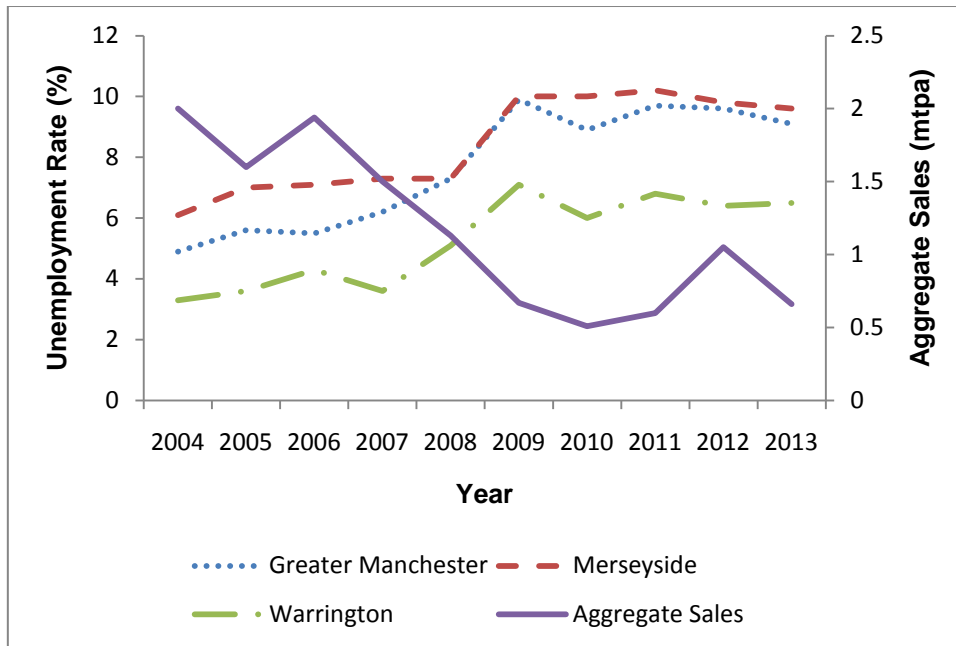
⁴ Guidance on the Managed Aggregate Supply System (DCLG, Oct 2012)

⁵ National and regional guidelines for aggregates provision in England 2005-2020 (DCLG, Jun 2009)

8.4 Table 14 compares total crushed rock sales against the annual crushed rock apportionment 2005 – 2020. Table 15 compares total sand and gravel sales against the annual sand and gravel apportionment 2005 – 2020.

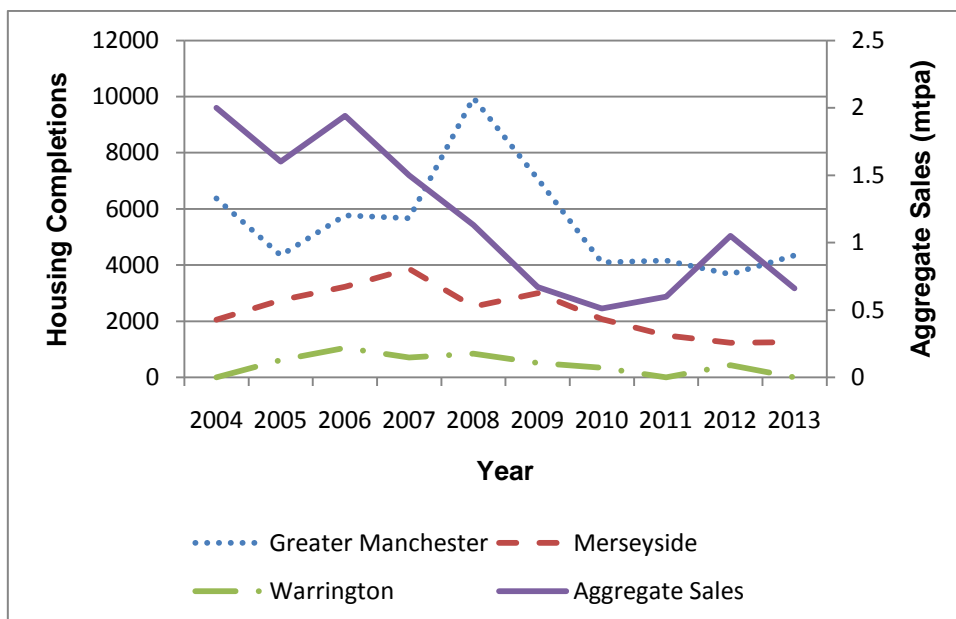
8.5 The sub-region has not met the annual apportionment 2005 – 2020 for crushed rock since 2007. The main reason for not meeting the crushed rock apportionment, despite there being sufficient permitted reserves, is likely to be the economic downturn and reduction in production site numbers

Table 12 Unemployment* and Aggregate Sales



* Source: Department of Work and Pensions

Table 13 Housing Completions* and Aggregate Sales



* Source: Department for Communities and Local Government

8.6 However, an additional factor is possibly that the sub-region produces crushed rock aggregate at the lower end of the quality spectrum, which is in competition with recycled aggregate. Unfortunately, the importance of this trend is difficult to demonstrate given the lack of reliable data on the production and use of recycled materials. In addition, the sub-region has not met the land-won sand and gravel annual apportionment 2005 – 2020 since 2008. This coincides with the downturn in the economy and the closure of one sand and gravel site in Greater Manchester.

Table 14 Comparison of total crushed rock sales against the annual crushed rock apportionment 2005 – 2020

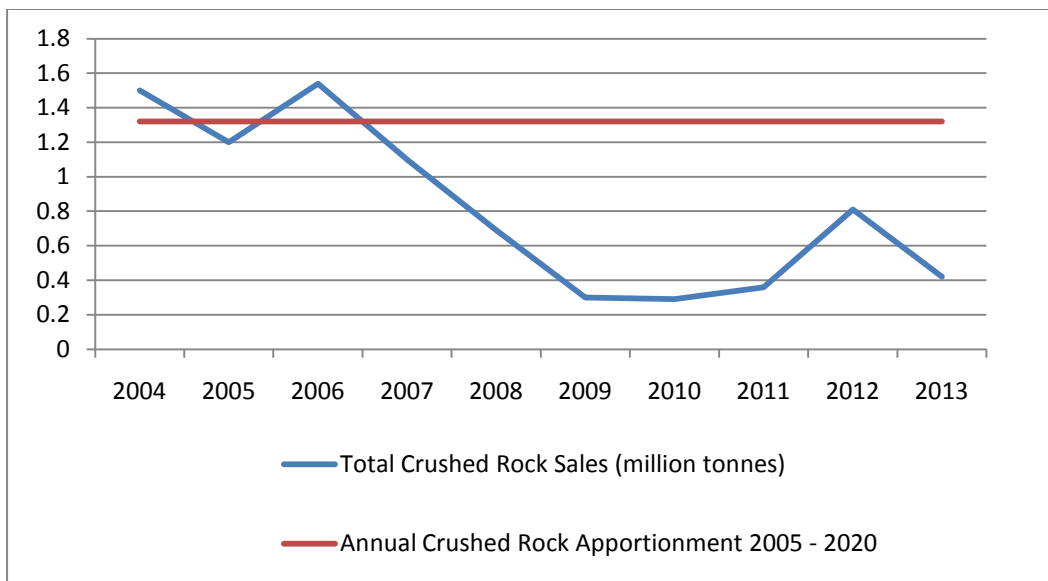
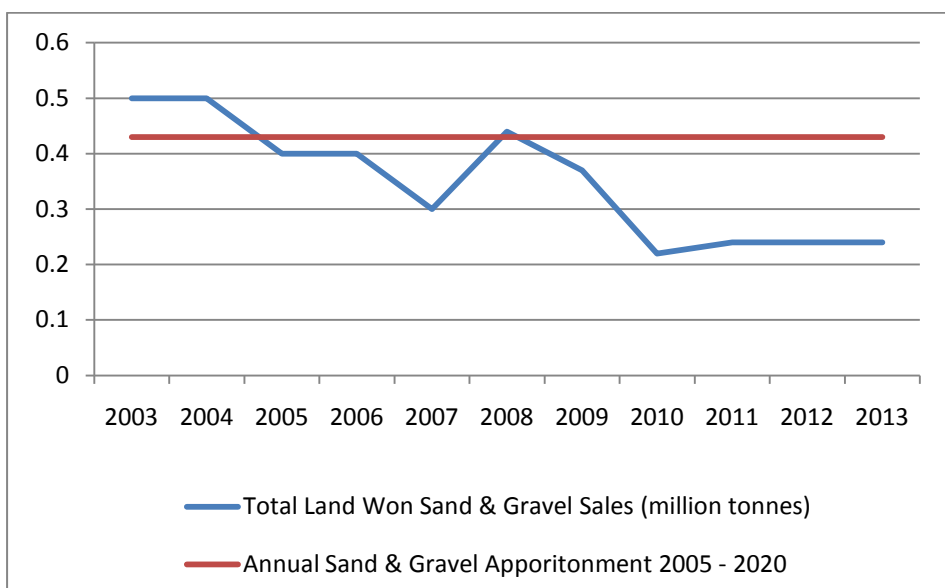


Table 15 Comparison of total sand and gravel sales against the annual sand and gravel apportionment 2005 – 2020



8.7 Table 16 shows the landbank for crushed rock and sand and gravel in the sub-region based on the sub-regional apportionment from National and Regional Guidelines for Aggregate Provision 2005-2020⁶.

8.8 The landbank for crushed rock aggregate has increased marginally from 15.2 years in 2012 to 15.4 years as at 31st December 2013. The landbank for land-won sand and gravel has decreased slightly since 2012 to just under 10 years.

8.9 Table 16 shows that under the existing apportionment, there is a sub-regional landbank of at least 10 years for crushed rock and 7 years for sand and gravel as required by NPPF (para. 145).

Table 16 Landbank for crushed rock and sand and gravel in the sub-region based on the sub-regional apportionment from National and Regional Guidelines for Aggregate Provision 2005-2020⁷

	Landbank as at 31.12.2012	Permitted reserves as at 31.12.2013	Annual apportionment requirement 2005 – 2020	Landbank as at 31.12.2013
Crushed Rock	15.2 years	20.3 mt	1.32 mt	15.4 years
Sand and gravel	10.5 years	4.27 mt	0.43 mt	9.9 years

9 Future Aggregate Supply and Demand

9.9 The Government recognises the need to maintain the main principals of the MASS. However, following the publication of the NPPF, the Government considers that a steady and adequate supply of aggregate minerals should be delivered by decentralising more power to Mineral Planning Authorities to determine the appropriate level of aggregate extraction, in keeping with its principles for a more localist approach to planning more generally⁸. Notwithstanding this, the Government will continue to publish National and Sub-national Guidelines.

9.10 Annual surveys of aggregate sales and reserves have historically been undertaken by the northwest AWP and provide a basis for establishing future supply and demand. There has been a general decline in sales of both land won sand and gravel and crushed rock in the sub-region. This mirrors a general downward trend in sales of primary land-won aggregate nationally and is due to:

- Decline in the construction industry;

⁶ National and regional guidelines for aggregates provision in England 2005-2020 (DCLG, Jun 2009)

⁷ National and regional guidelines for aggregates provision in England 2005-2020 (DCLG, Jun 2009)

⁸ Guidance on the Managed Aggregate Supply System (DCLG, Oct 2012)

- Development of more efficient construction techniques requiring less aggregate;
- Increased use of marine won aggregate and secondary and recycled aggregates.

9.11 Current primary mineral extraction (sand and gravel and crushed rock production) in the sub-region is limited with all but two existing quarries located in Greater Manchester. Recent work on the Greater Manchester Minerals Plan revealed little interest in future new extraction opportunities although Areas of Search have been identified in the Plan (no new sites came forward). Reasons for this could include the extent of the urban area and the quality of materials found in the sub-region being such that it competes with secondary and recycled materials.

9.12 Given the above, it is likely that imports of primary aggregate material into the sub-region will continue to be important. It is also likely that secondary and recycled aggregates will continue to compete with primary aggregate extracted in the sub-region.

9.13 Forecasting future aggregate market conditions is difficult, given the depth and duration of the recent economic downturn. Although growth conditions have returned to the sub-region recently, aggregate sales data do not yet reflect this. The pre-recessionary peak for sales was reached in 2006 with 1.94mt of recorded aggregate sales, compared with 0.51mt in 2010. However, ambitious local authority housing delivery targets will be a factor in the recovery of demand for aggregate. By 2015 Greater Manchester is committed to delivering 9,200 new homes per annum, which is more than double current levels. However, Crown Estates⁹, while recognises that a market recovery for marine aggregate is underway, does not expect a return to 2008 peak levels until the early 2020s. This suggests that recovery to peak levels is certainly possible, but may take some time. There is expected to be sufficient unused capacity within the aggregates market onshore, and particularly off-shore, to service any increase in demand in the short- to-medium term.

⁹ Marine Aggregate Capability and Portfolio 2013 (The Crown Estate, 2013)

10 A Local Approach to Apportionment Determination

- 10.1 The demand for aggregates in the sub-region is likely to remain higher than actual land-won aggregate sales figures. The sub-region contains large urban areas including Liverpool, Manchester and Warrington, which restrict the land available for minerals extraction. The geology means that high specification materials for construction and infrastructure projects are not locally available and must be imported. Lower quality materials are available but compete with secondary and recycled products.
- 10.2 In recent years the emphasis in waste management policy on increased recycling, given particular impetus by the introduction of regulations requiring Site Waste Management Plans to be adopted on construction sites, has led to rapid growth in the market for substitute aggregate materials and, in particular, facilities for processing construction and demolition waste to produce them. In some circumstances materials from other industrial processes, such as glass, can also be used for this purpose. Unfortunately robust data on the production, distribution or use of alternative aggregates remains difficult to obtain, a position acknowledged by DEFRA in respect of its obligations to report progress against the target set by the Waste Framework Directive to recover 70% of construction and demolition waste by 2020¹⁰. In the meantime, indications are that the use of alternative aggregate has increased rapidly to around a quarter in 2011 and could be expected to continue to rise in the immediate future, driven by policy, regulation and market factors.
- 10.3 A number of significant built infrastructure projects and development projects have been identified that are due to or have already commenced. These could require substantial amounts of aggregates and include: Port Salford; Liverpool and Wirral Waters; Mersey Gateway Bridge in Halton; Omega employment site in Warrington, and the Liverpool 2 post-Panamax container terminal at Seaforth.
- 10.4 Forecasting future demand for aggregates based on the average of 10-year sales data may therefore be an appropriate approach for the sub-region to take. Previous apportionments have not been met and this would seem to be a more realistic approach. A ten year period covers the recent economic downturn and the more prosperous period before this and therefore would appear to be realistic in forecasting future demand. The following table (Table 17) sets out the forecast based on the 10-year sales data.
- 10.5 The 10-year average figure for sand and gravel is 0.39mt, down 0.04mt on the 2005 – 2020 annual apportionment requirement of 0.43mt. This is such a small difference that it would be difficult to see how this will impact on forecasting.
- 10.6 The 10-year average figure for crushed rock is 0.82 mt, down 0.5 mt on the 2005 – 2020 annual apportionment requirement of 1.32 mt. This is nearly a 40% reduction and it is important to understand how this will impact on the landbank.

¹⁰ Directive 2008/98/EC on waste (Waste Framework Directive)

10.7 Under this forecast, the sand and gravel landbank would be 11 years and the crushed rock landbank would be 24.8 years. This meets the requirement set out in NPPF for a land bank of 7 years (sand and gravel) and 10 years (crushed rock).

Table 17 Forecast based on 10-year supply

	Aggregate	
	Sand and Gravel	Crushed Rock
10 year average sales (2004 to 2013)	0.39 Mt	0.82 Mt
Total Requirement (2013 to 2028)	5.85 Mt	12.3 Mt
Permitted reserves as at 31/12/2013	4.27Mt	20.3 Mt
Landbank as at 31/12/2013	11 Yrs	24.8 Yrs

(Based on 10 year average sales data)

10.8 The annual apportionment requirement 2005-2020 is 1.32 mt for crushed rock with the crushed rock landbank at 31st December 2013 of 15.4 years. Under 10-year sales, the landbank would increase by 9 years.

10.9 The annual apportionment requirement 2005 – 2020 is 0.43 mt for land-won sand and gravel with the landbank being 9.9 years at 31st December 2013. Under the 10-year sales figure, the landbank would increase by approximately 1 year.

10.10 Based on these figures, the sub-region will make provision for 12.3 million tonnes of crushed rock aggregate for the 15-year period 2013 – 2028. There were 20.3 million tonnes crushed rock reserves permitted at the end of 2013 so it would appear that there will be no shortfall, although this does not take into account limitations on the planning permission relating to lifespans of quarries or permitted annual extraction. The sub-region will make provision for 5.85 million tonnes of sand and gravel for the 15-year period 2013 – 2028. There were 4.27 million tonnes of permitted sand and gravel reserves at the end of 2013, meaning that the landbank could be reduced to the point where there is a shortfall. This should be monitored in future Local Aggregate Assessments.

10.11 The 10-year average sales figure is slightly lower than the 2005 – 2020 apportionment. If this trend continues a local approach to apportionment in the sub-region based on 10 year average sales may become most appropriate for the sub-region due to the following reasons:

- Reduction in sales of land won aggregates at the local and national level;
- Low quality and limited extent of primary aggregate resources in the sub-region;
- Aggregates found in the sub-region are of local importance;
- Experience in producing the Greater Manchester Minerals Plan revealed a lack of interest from industry in putting forward sites for minerals extraction (a position

supported by the recent lack of new planning applications in Merseyside and Warrington);

- Extent of the urban area and other spatial constraints impacting on where material can be extracted from;
- Wide and growing availability of secondary and recycled materials and opportunities for marine aggregate landings.

10.12 These factors suggest that the sub-regional apportionment is less likely to be achieved in the future. However, the lower ten year average sales figures may be depressed by economic conditions in that period and need to be further monitored before it can be concluded that they provide a better basis for local planning in the sub-region than the apportionment. This analysis will be undertaken through future Local Aggregate Assessments. In the meantime, the 2005 – 2020 annual apportionment should continue to be used as the basis for planning by the Mineral Planning Authorities of the sub-region.

11 Conclusions on Future Supply Capacity

- 11.1 The sub-region is theoretically able to meet the requirements for a 7-year sand and gravel and 10-year crushed rock landbank. However, this position should be kept under review through future LAA to reflect opportunities for substitution of primary land won aggregate by secondary and recycled aggregates and marine aggregates. It should be noted that 10-year average figures for crushed rock may be skewed by higher sales figures at the beginning of the 10-year period when sales were higher but also when there was a greater number of aggregate producing quarries.
- 11.2 The aggregate produced in the sub-region is locally important and districts should ensure plans/policies are in place to ensure a continued supply.
- 11.3 The port facilities of the Mersey Estuary are likely to continue to function as significant landing and transshipment points for aggregate materials coming in to the area. The future of marine aggregate extraction in Liverpool Bay seems secure and remains economically significant, but is increasingly competing with other priorities in the offshore area and areas which may be available for extraction may become increasingly restricted in the future. In this respect the first Marine Spatial Plan for the Irish Sea area, to be prepared by the Marine Management Organisation will have a significant role to play. For the immediate future it is believed that sufficient capacity exists for offshore extraction and in the port infrastructure to allow for increases in the supply of landings from marine sources to supply increased demand from economic expansion.
- 11.4 Anecdotal evidence suggests that alternative aggregates are becoming increasingly significant in meeting the needs of development in major urban areas, though robust data has proved very difficult to obtain, particularly at the local level. This is a data gap that will need to be filled in the future particularly if, as an area that is not self-sufficient in land-won aggregates, we wish to understand more fully and address the extent to which a dependence exists on material imported from other areas. This data gap has been recognised by the AWP, which has noted it as a priority for joint action at AWP level to address it.
- 11.5 A key issue for the sub-region is the importation of aggregates from within the North West and beyond. In order to meet construction needs, it is likely that imports would continue to be required. Therefore, safeguarding of rail depots and wharfs should be considered by the MPAs.

12 Key Messages, Cross-Boundary Liaison and Future Review

This LAA has been produced jointly for the 17 unitary local authorities comprising the aggregate apportionment sub-region of Merseyside, Greater Manchester and Warrington. **Its principal conclusion is that the authorities of the sub-region should continue to use the 2005 – 2020 apportionment as the basis for local planning.** However, there are indications that a 10-year average sales forecast may be more appropriate in the longer-term for the sub-region as it appears more achievable than the sub-regional apportionment. The sub-region has not met apportionment for some time and evidence from industry is that there is limited interest in taking advantage of the aggregate materials that the sub-region provides. There is no indication that this position is likely to change in the immediate future, as no new proposals for quarries are currently known. The situation will be kept under review through future LAAs and the MPAs of the sub-region will respond as the evidence requires.

Although the report has highlighted a number of areas where data is weak, absent or not readily applicable at MPA level, it is possible to identify a number of key issues for policy makers in individual MPAs, taking account of their local circumstances and the position for the sub-region identified by the LAA. These key messages for the future direction of policy for the MPAs are set out in the table below.

Mineral Planning Authority	Aggregate Resources Present?	Aggregate Extraction Sites with Live Consents?	Aggregate Wharves?	Planning Implications
Greater Manchester Authorities (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan)	Yes	Yes	No	<p>The Greater Manchester Minerals Plan was adopted in April 2012. The Minerals Plan identifies areas of search which could contribute to meeting any shortfall in provision of aggregates during the Plan Period should a suitable planning application be made.</p> <p>Greater Manchester to continue to work with industry in order to contribute to the apportionment and participate in AWP.</p>
Halton	No	No	No	<p>Prioritise use of secondary and recycled material.</p> <p>Safeguard critical transport infrastructure.</p> <p>Provide for windfall applications appropriately.</p>

Mineral Planning Authority	Aggregate Resources Present?	Aggregate Extraction Sites with Live Consents?	Aggregate Wharves?	Planning Implications
				<p>Continue to work with industry in order to contribute to the apportionment and participate in AWP.</p> <p>Monitor landbank adequacy through annual LAA.</p>
Knowsley	No	No	No	<p>Prioritise use of secondary and recycled material.</p> <p>Safeguard critical transport infrastructure.</p> <p>Provide for windfall applications appropriately.</p> <p>Continue to work with industry in order to contribute to the apportionment and participate in AWP.</p> <p>Monitor landbank adequacy through annual LAA.</p>
Liverpool	No	No	Yes	<p>Prioritise use of secondary and recycled material.</p> <p>Safeguard wharves and transport infrastructure.</p> <p>Provide for windfall applications appropriately.</p> <p>Continue to work with industry in order to contribute to the apportionment and participate in AWP.</p> <p>Monitor landbank adequacy through annual LAA.</p>
Sefton	No	No	Yes	<p>Prioritise use of secondary and recycled material.</p> <p>Safeguard wharves and transport infrastructure.</p> <p>Continue to work with industry in order to contribute to the</p>

Mineral Planning Authority	Aggregate Resources Present?	Aggregate Extraction Sites with Live Consents?	Aggregate Wharves?	Planning Implications
				apportionment and participate in AWP
St Helens	Yes	Yes	No	<p>Prioritise use of secondary and recycled material.</p> <p>Safeguard critical transport infrastructure.</p> <p>Provide for windfall applications appropriately.</p> <p>Continue to work with industry in order to contribute to the apportionment and participate in AWP.</p> <p>Monitor landbank adequacy through annual LAA.</p>
Warrington	Yes	Yes	No	<p>Prioritise use of secondary and recycled material.</p> <p>Safeguard critical transport infrastructure.</p> <p>Provide for windfall applications appropriately.</p> <p>Continue to work with industry in order to contribute to the apportionment and participate in AWP.</p> <p>Monitor landbank adequacy through annual LAA.</p>
Wirral	No	No	Yes	<p>Prioritise use of secondary and recycled material.</p> <p>Safeguard wharves and associated transport infrastructure</p> <p>Safeguard critical transport infrastructure.</p> <p>Provide for windfall applications appropriately.</p> <p>Continue to work with industry in</p>

Mineral Planning Authority	Aggregate Resources Present?	Aggregate Extraction Sites with Live Consents?	Aggregate Wharves?	Planning Implications
				<p>order to contribute to the apportionment and participate in AWP.</p> <p>Monitor landbank adequacy through annual LAA.</p>

There are a number of broader messages that emerge from this process that apply to the strategic position in the sub-region and the strengthening of the LAA process for the future.

These include:

- There is a need to ensure liaison with those authorities that export aggregates to the sub-region as these are important to ensure future growth ambitions are realised.
- There is a need to monitor permitted sand and gravel reserves as they become depleted to ensure ongoing supply.
- Future marine aggregate extraction may be increasingly competing with other offshore priorities and the Marine Spatial Plan for the Irish Sea area should be taken into account in future Local Aggregate Assessments.
- There is a data gap regarding secondary and recycled aggregates and potential opportunities should be sought to increase understanding of this material and the level of supply and demand.

A number of the issues regarding weak or absent data have been recognised by the AWP and targeted for further work at that level. The MPAs of the sub-region welcome this and will work with the AWP to resolve the identified issues and strengthen the evidence base supporting the LAA process in the future.

13 Glossary

Term	Acronym	Definition
Active Permissions		Sites with valid permissions which may be working or mothballed on a temporary basis (and for which new working and reclamation schemes are not required before working can recommence)
Association of Greater Manchester Authorities	AGMA	AGMA is the local government association for Greater Manchester . It represents the ten district councils of Greater Manchester (Manchester , Bolton , Bury , Oldham , Rochdale , Salford , Stockport , Tameside , Trafford , Wigan); developing policy , lobbying government and others, and running a range of services. In this capacity, AGMA directs the strategic public and social services of Greater Manchester on behalf of its ten metropolitan boroughs and the Greater Manchester Integrated Transport Authority , the Greater Manchester Police Authority , the Greater Manchester Fire and Civil Defence Authority and the Greater Manchester Waste Disposal Authority , who are all members by subscription.
Aggregate Minerals		Defined in Technical Guidance to the National Planning Policy Framework (DCLG, Mar 2012) (Paragraph 54) as sand and gravel, and crushed rock. Generally they are used in the construction industry for purposes of making concrete, mortar, asphalt or for roadstone, drainage or bulk filling.
Aggregate Reserves		The amount of crushed rock or sand and gravel which is covered under planning permissions for working, but is still to be extracted.
Aggregate Resources		All of the deposits of crushed rock and sand and gravel which are known to be present in the ground.
Aggregate Sales		The amount of an aggregate (crushed rock, sand & gravel, secondary or recycled) sold in a set period of time.
Aggregate Working Party	AWP	The AWP is a technical working group with membership drawn from mineral planning authorities, the minerals industry and Department for Communities and Local Government (DCLG).
Construction, Demolition and Excavation Waste	CD&E	Waste arising from site construction or refurbishment, demolition or excavation.
Core Strategy		Document setting out the long-term spatial vision for the local planning authority area, the spatial objectives and strategic policies to deliver that vision. The Core Strategy has the status of a <i>Development Plan Document</i> (PPS12 definition).

Crushed Rock		Hard rock (such as limestone) which has been quarried, fragmented and graded for use as aggregate.
Department of Communities and Local Government	DCLG	The Government department responsible for planning and local government.
Dormant Site		Dormant sites are those sites which were granted planning permission after 21 July 1943 and before 1 July 1948, but in which no substantial mineral working has been carried out between 1 May 1989 and 30 April 1991.
Duty to Co-operate		Requirement in the NPPF for Planning Authorities to address strategic issues in conjunction with neighbouring authorities who have to deal with the same issues.
Examination in Public	EIP	<p>The process of determining whether a Development Plan Document meets the requirements of the relevant legislation and is 'sound'. Soundness is tested by considering whether the DPD is justified; effective and consistent with national policy.</p> <p>As part of that process the Inspector (appointed by the Secretary of State)</p> <p>will consider representations made on the soundness of the DPD by interested parties such as local residents and developers. At the end of the examination the Inspector will issue a report to the Local Planning Authority (LPA). The report will contain recommendations relating to any changes that need to be made to the DPD, to ensure it is sound, before being formally adopted. The recommendations will be binding if the LPA chooses to adopt the DPD that has been examined.</p>
Extant Permission		Existing planning permission.
Inactive Site		Minerals extraction site with planning permission but where no extraction is currently taking place.
Landbank		The sum in tonnes of all permitted reserves for which valid planning permissions are extant. This includes current non-working sites but excludes dormant sites and 'inactive sites'. They are a monitoring tool to provide MPA's with early warning of possible disruption to the provision of an adequate and steady supply of land-won aggregate in their area.
Licensed Marine		Areas allocated under the sea where dredging is

Aggregate Dredging Areas		allowed to take place with the permission of the Marine Management Organisation.
Local Aggregate Assessment	LAA	A report prepared by a Mineral Planning Authority or group of Authorities which assesses the demand for and supply of aggregates now and in the future.
Local Development Framework	LDF	The folder of documents which contains all of the a local authorities local development documents (including Local Plan documents, Local Development Schemes, Statements of Community Involvement and Supplementary Planning Documents)
Local Development Scheme	LDS	Document setting out the programme for preparing <i>Local Development Documents</i> (PPS12 definition).
Local Plan		The NPPF defines a Local Plan as the plan for the future development of an area, drawn up by the local planning authority. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. Current Core Strategies and other planning policies, which under the regulations would be considered to be development plan documents, form part of the Local Plan. The term includes old policies which have been saved under the 2004 Act.
Marine dredged sand and gravel		Sand and gravel excavated from the sea by dredging.
Merseyside Environmental Advisory Service	MEAS	Merseyside Environmental Advisory Service is a sub-regional service that works for Halton, Knowsley, Liverpool, Sefton, St.Helens and Wirral Councils. The service comprises professional technical staff and its role is to assist the Merseyside Districts by providing technical advice on a wide range of environmental matters, primarily to the Planning Services of the Councils.
Mineral Planning Authority	MPA	The planning authority responsible for the control of mineral extraction and waste management development, through forward planning, determining of planning applications, monitoring and enforcement.
Mineral Safeguarding Areas	MSA	An area designated by Mineral Planning Authorities which covers known deposits of minerals which are of sufficient economic value to warrant protection from unnecessary sterilisation by non-mineral

		development.
National Planning Policy Framework	NPPF	The document that sets out the government's planning policies for England. The Framework sets out planning policies for England and how they are expected to be applied. It provides guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications.
Primary Aggregate		Crushed rock and sand and gravel, which is extracted directly from the ground.
Recycled Aggregate		Material sourced from construction and demolition waste, highway maintenance waste and excavation and utility operations and then be reused as aggregate.
Sand and gravel		Rock which nature has already broken into fragments mostly by weathering and by erosion during the ice age.
Secondary Aggregate		Derived from a range of materials which may be used as aggregate, including power station ash and colliery spoil.
Sub-regional Apportionment		The splitting of regional supply guidelines for aggregate minerals between planning authorities or sub regions.