

JOINT LOCAL AGGREGATE ASSESSMENT

Greater Manchester, Merseyside and
Halton, and Warrington

July 2019

(Data for the period 1 January to 31 December 2017)

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

NOTE

This Local Aggregates Assessment covers the sub-region of Greater Manchester, Merseyside and Halton, and Warrington for the period 1 January to 31 December 2017. It was prepared during the time that one of only two sand and gravel quarries in the sub-region ceased operations. This led to problems with confidentiality of sales and reserve figures for the remaining quarry, which could not be displayed in the LAA.

As well as the problem of how to represent confidential data, a number of issues regarding weak and absent data have been identified by the Aggregates Working Party; this has been targeted for further work at that level. The Mineral Planning Authorities 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.

Both Lancashire County Council and Cheshire West and Chester Council raised concerns about the assumptions made within this 2017 LAA and the lack of detail on the scale of aggregates required to be imported from Mineral Planning Authorities outside the sub-region. Rather than use valuable time and manpower resources on restarting the 2017 LAA, the sub-region Authorities deem it more efficient to concentrate effort on making the 2018 LAA a sound basis for minerals planning in the sub-region.

To this end, in the 2018 LAA, the sub-region will attempt to more accurately quantify both marine dredged and imported aggregates; added to the predicted annual production figures, this should produce a figure setting out the true estimate of demand. More meaningful conversations can then be held, under the Duty to Co-operate, with those Authorities who import aggregates into the sub-region. This will enable a better understanding of what future potential there is for those Authorities to meet the predicted unmet demand in the sub-region, and what future potential there is for additional landings of marine dredged materials to meet any shortfall. It is intended to add a precis of the relevant outcomes of those DtC meetings to the 2018 LAA.

Executive Summary

National Planning Policy Framework requires mineral planning authorities to plan for a steady and adequate supply of aggregates by preparing an annual Local Aggregate Assessment (LAA). The LAA should be based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources). The LAA should conclude if there is a shortage or a surplus of supply and, if the former, how this is being addressed.

National Planning Practice Guidance explains that mineral planning authorities should also look at average sales over the last 3 years in particular, to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply.

The Minerals Planning Authorities of Greater Manchester, Merseyside and Warrington (17 unitary local authorities) have worked together to produce a series of joint LAAs, reflecting their status as a single aggregate apportionment sub-region under the Managed Aggregate Supply System (MASS¹). This is the 6th LAA to be produced in that way and covers aggregate supply in the sub-region in the year 2017.

Crushed Rock

There were 6 active crushed rock aggregate quarries in the sub-region during 2017. In total, 0.78 million tonnes of crushed rock was sold from these quarries in 2017, a 10% decrease from the previous year, back down to the same level as sold in 2015. The predicted annual requirement for crushed rock is 0.87 million tonnes (mt), down 0.45mt on the 2005–2020 annual apportionment requirement of 1.32mt. The most recent 3-year average sales being 0.82mt (average 2014-2017) and the 10-year average sales for crushed rock were 0.60mt (rolling average 2008-2017). Sales in 2017 were above the 10-year average but just below the 3-year average sales. However, it is important to note that sales do not match consumption levels for materials required to service Greater Manchester, Merseyside, Halton and Warrington, with consumption rates continuing to be significantly higher, placing a greater demand on imports to meet the needs of the sub-region.

Total reserves of crushed rock were 18.37 million tonnes at the end of 2017. This would provide for a total of 30.6 years of sales based on the average sales over the most recent 10-year period.

Sand and Gravel

The sub-region had 2 quarries active for the sale of sand and gravel during 2017, with one of these quarries, Morley's Hall, selling stockpiled material as it had no permitted reserves left to work. The total sales figure for land-won sand and gravel in the sub-region is confidential due to the limited number of quarries that contribute to the total.

The predicted annual requirement for sand and gravel is 0.30mt, down 0.14mt on the 2005–2020 annual apportionment requirement of 0.43mt. The most recent 3-year average sales being 0.27mt (average 2013-2016) and 10-year average figure for sand and gravel is 0.29mt (rolling average 2007-2016). It is not possible to include the 2017 sales figure for confidentiality purposes. However, as with crushed rock, it is important to note that sales do not match consumption levels for materials required to service Greater Manchester, Merseyside, Halton and Warrington, with consumption rates continuing to be significantly higher, placing a greater demand on imports to meet the needs of the sub-region.

¹ Guidance on the Managed Aggregate Supply System, DCLG October 2012. MASS is a process which looks at the demand and supply of aggregates in England and requires regions, such as the NW, to contribute to meeting this need. The system accounts for the ability of areas to provide aggregates, and apportions the requirements out across the historic regional groupings of England.

With just a single quarry contributing to the sand and gravel reserve figure, this is also a confidential figure. However, this quarry has planning permission until 2022 and the landbank is therefore less than 4 years.

Marine Aggregate

The sub-region is an important landing point for marine-won sand and gravel from the licensed dredging areas offshore and its wharves also handle significant shipments of crushed rock from quarries elsewhere in the UK. The offshore dredging areas currently operate well within their licensed extraction limits and this has always been the case. In recent years, the process to obtain a production licence has been simplified and the time taken reduced by over a third, which should instigate further interest in the area. There is currently one application pending a decision in the area, which would release an additional 0.5mt of reserve. Crown Estates has advised that as market demand is increasing, it would be possible to increase supply should market growth continue, perhaps through deployment of a dedicated dredger in Liverpool Bay. It is thought that with depleting sand land won sand reserves, marine supply could be increased in the short to medium term to meet this need.

Future Provision

Most sites for the production of land-won material are located in Greater Manchester, which has seen another site become worked-out in 2017 and it is now selling remaining material from stockpiles. However, the general trend has been one of declining reserves within the sub-region, due in large part to the heavily urban nature of the area and the lack of workable aggregate resources within it.

Although the sub-region remains compliant with its land-bank obligations for crushed rock, it is likely to become more challenging to maintain this position over time. The land bank for sand and gravel remains below 7 years for the second year running, and without any new permissions coming forward, this position will remain the same.

The sub-region imports considerable amounts of aggregate and has an important and developing market in secondary and recycled material that helps to reduce the amounts of primary aggregate required. The consumption rates of aggregates continue to be significantly higher than production rates, therefore forecasting estimates of likely consumption for the sub-region is increasingly important.

There is no easy solution to increasing the sales of both crushed rock and sand and gravel to match the consumption levels required to service Greater Manchester, Merseyside, Halton and Warrington; this is a predominantly urban sub-region, with little scope to expand existing quarries or to initiate new ones. There is recognition in the draft Greater Manchester Strategic Framework (GMSF, January 2019) that growth, and therefore greater demand for minerals, is likely to result from development brought about by the GMSF itself. The GMSF highlights its links with both the Greater Manchester Minerals Plan (2013) and the LAA process. The Liverpool City Region is also in the process of preparing a Strategic Framework, and it is hoped that the important link between minerals and the growth of the City will be recognised.

Summary Figures for the Period 01/01/17 – 31/12/17

	2016 Sales (Mt)	10-year Average Sales (Mt)	3-year Average Sales (Mt)	Trend (compared to 2016)	LAA Rate (Mt)	Reserve (Mt)	Landbank (years)	Theoretical Production Capacity (Mt per annum)	Comments
All Land Won Sand & Gravel	c.	0.29	0.27	Unknown	0.30	c.	Less than 4.0		Two quarries contributed to sales in 2016 and one quarry had permitted reserves. The 2017 sales figure is confidential. The landbank is based on permitted time remaining at the only quarry which still has permitted reserves. Majority of demand is met through imports.
Crushed Rock	0.87	0.63	0.78		0.85	19.59	23.1		Low quality aggregate serving local markets, reducing need to import this material. Higher quality crushed rock continues to be met through imports with consumption higher than demand
Recycled/ Secondary Aggregates									Total produced – 3.49Mt. ¹ Total handled - 4.84Mt.
Marine Sand & Gravel	c.								North West Market Study expected soon.
Comments	Overall, it is expected that the supply of land-won aggregate is likely to decline in future unless new permissions are granted. The reserve of sand and gravel represents a landbank of fewer than 4 years based on the LAA rate. It is anticipated that the demand for aggregates will continue to increase and therefore imports of material from other areas will continue to play a vital role in supporting built development and infrastructure. Given the extent of the urban area and the quality of indigenous aggregates, this situation is unlikely to change in future.								

¹ 'Produced' refers to the quantity of useable material produced from the recycling process, whereas 'Handled' refers to the quantity of material processed within the area, not all of which will be reusable; i.e. the 'handled' material is the raw input material and 'produced' material is the end product.

Mt = million tonnes

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1. Introduction

Local Aggregates Assessment Background

- 1.1. The National Planning Policy Framework (NPPF), published in July 2018, 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)². The guidelines specify that this can be done either individually or jointly by agreement with one or more mineral planning authorities. National Planning Practice Guidance also states that MPAs should also look at average sales over the last three years in particular, to identify the general trend of demand, as part of the consideration of whether it might be appropriate to increase supply.
- 1.2. In May 2017, The Planning Officers Society and Minerals Products Association provided the latest version of the living document, 'Practice Guidance on the Production and use of Local Aggregate Assessments', which seeks not to duplicate the advice in The Planning Practice Guidance (PPG) but to build on it, drawing on best practice since LAAs were introduced.
- 1.3. The PPG advises that an LAA should contain three elements:
 - a forecast of demand for aggregates based on both the rolling average of 10 years sales data and other relevant local information;
 - an analysis of all aggregate supply options as indicated by landbanks, plan allocations and capacity data; and
 - an assessment of the balance between demand and supply.

Production of a Joint LAA

- 1.4. 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 (together known as the 'sub-region') have decided to continue to work together by collaborating in the production of this document, the sixth of its

² Paragraph 207, NPPF

kind, in order to satisfy the duty to co-operate imposed by Section 110 of the Localism Act and due to established links from previous sub-regional working under the AWP apportionment as part of MASS. 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.

- 1.5. 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, 3 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.

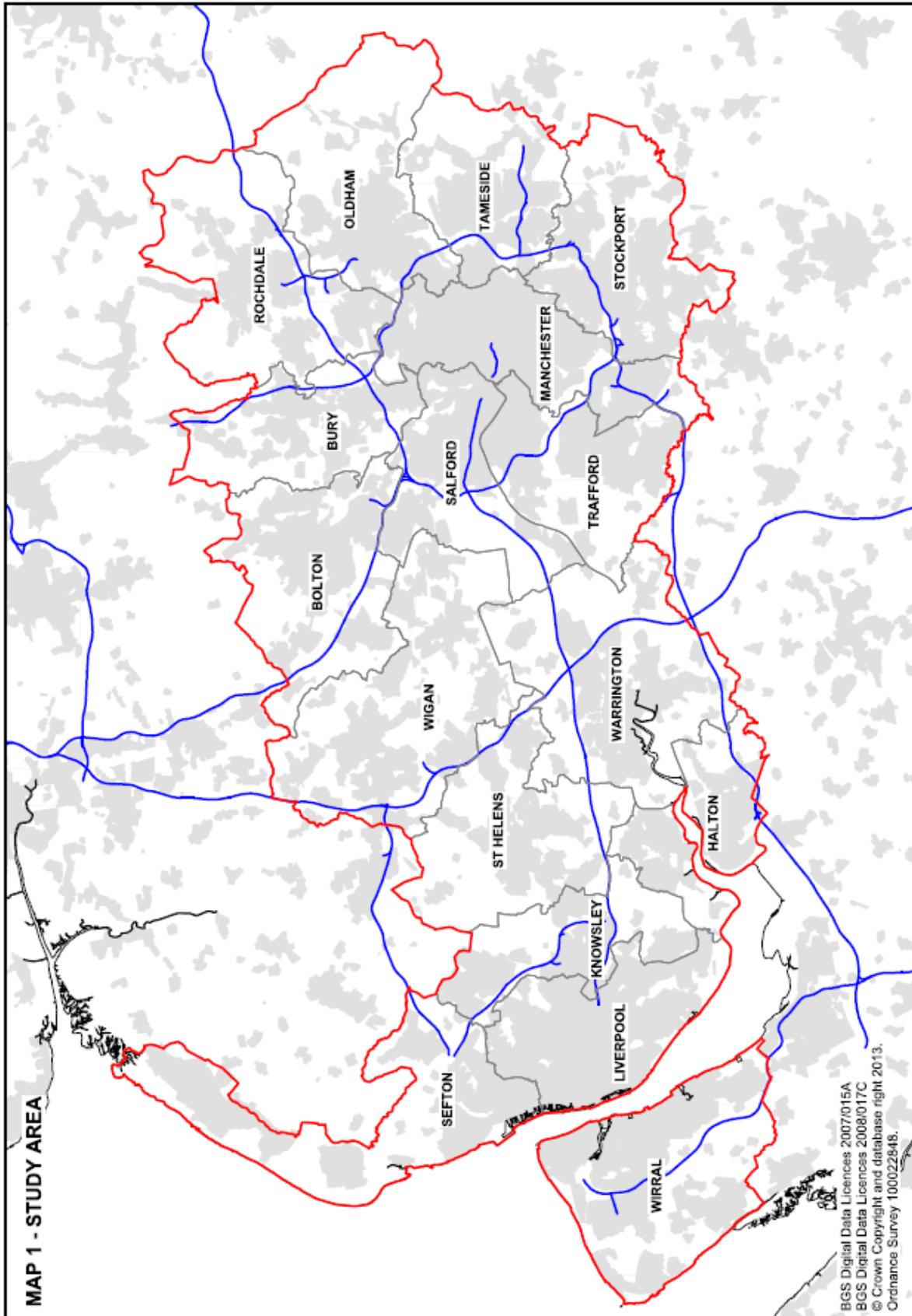
Study Area

- 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** below and summary statements of the components of the study area are also provided.

Greater Manchester

- 1.7. Greater Manchester is the second largest conurbation in the UK with a population of over 2.8 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 East, Warrington 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. Significant quantities of materials are transported by road and rail, with a number of key rail depots located within the sub-region. The Cemex site in Salford in particular, imports on average around 650,000 tonnes per annum by rail. Greater Manchester is heavily reliant upon the importation of minerals from the Peak District National Park.
- 1.8. 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

- 1.9. 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.
- 1.10. 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 rely 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 transported by sea, road and rail.
- 1.11. 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.
- 1.12. 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

- 1.13. 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 209,000.

- 1.14. 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.
- 1.15. 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.
- 1.16. 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.
- 1.17. 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

- 1.18. The Greater Manchester Joint Minerals Plan was adopted by the 10 Authorities of Greater Manchester on 26 April 2013. The current Minerals Plan seeks to deliver the apportionment only and does not look at the import of minerals to meet the growth agenda. An internal review of the Minerals Plan has been undertaken following the plan reaching 5 years. This has identified a number of policy areas which will need to be updated to ensure the plan is in line with NPPF. Currently there are no plans to update this document until the Greater Manchester Spatial Framework (GMSF) is adopted.

- 1.19. Consultation on the draft GMSF commenced on 14 January 2019 (until 18 March 2019) and includes strategic policies on resource efficiency and the circular economy. Full details on the timetable for the GMSF can be found on the Greater Manchester Combined Authority website <https://greatermanchester-ca.gov.uk/>.
- 1.20. Planning for minerals across Greater Manchester will continue to be through the Greater Manchester Minerals Plan, with annual monitoring and the Local Aggregates Assessment informing the need or not for a review. The adoption of the GMSF may result in a requirement to undertake a review of the Minerals Plan.

Merseyside and Halton

- 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 authorities will prepare their plan coverage in full compliance with the requirements of Duty to Co-operate. A summary of progress is provided below.
- 1.22. The Liverpool City Region now has a Combined Authority and an elected Mayor. The Mayor will put in place a statutory Strategic Framework for the City Region, with which Local Plans will be expected to be in conformity.
- 1.23. Halton's Core Strategy Local Plan was adopted in April 2013. The Council will be publishing the Submission Draft of its new Local Plan, the Delivery and Allocations Local Plan (incorporating revised Core Strategy Policies), in Summer 2019 with Submission following later in the year; its adoption is programmed for 2020. The Local Plan will contain policy on minerals safeguarding and extraction but no separate Minerals Local Plan.
- 1.24. Knowsley's Core Strategy Local Plan was adopted January 2016.
- 1.25. Liverpool Local Plan was submitted under Regulation 22 in May 2018, and is currently under examination. This will contain policy on mineral safeguarding and extraction but no separate Minerals Local Plan.

- 1.26. Sefton's Core Strategy Local Plan was adopted in April 2017. It includes detailed minerals policies.
- 1.27. St Helen's Core Strategy Local Plan was adopted in October 2012. The Local Plan should be published in January 2019 with submission expected in Summer 2019. Adoption is anticipated in 2020. The plan will include detailed minerals policies but there is no separate Minerals Local Plan.
- 1.28. The Wirral's Core Strategy Local Plan Proposed Submission Draft is due to be consulted on in September 2019 with submission following in January 2020. This includes overarching minerals policy. There will be no separate Minerals Local Plan.

Warrington

- 1.29. The Council undertook a Regulation 18 consultation on their Preferred Development Option during July to Sept 2017. This outlines that the new Local Plan will identify Mineral Safeguarding Areas (MSAs) for the main mineral resources that are present in the borough, principally sand and gravel and sandstone. It will also seek to safeguard a shallow coal deposit and the clay workings near Rixton. In addition to safeguarding mineral resources which may be of economic importance, it is proposed to safeguard existing, planned and potential minerals infrastructure such as rail heads, wharfs, concrete batching sites, and permanent facilities for the processing and distribution of substitute, recycled and secondary aggregate material.
- 1.30. The new Local Plan will also aim to direct minerals development to places where there are opportunities to restore land beneficially, avoiding places with a sensitive natural or built environment or that are close to existing communities. These will be places that are accessible by sustainable modes of transport and close to both the existing highway network and the end user. The new plan is not likely to be adopted until spring 2020.

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 north western 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 windblown sand, and peat.

Overview of Aggregate Resources in Sub-Region

Sub-regional aggregate resources

The resources are summarised in Table 2-1 below.

Table 2-1: Summary of Sub-Regional Aggregate Mineral Resources

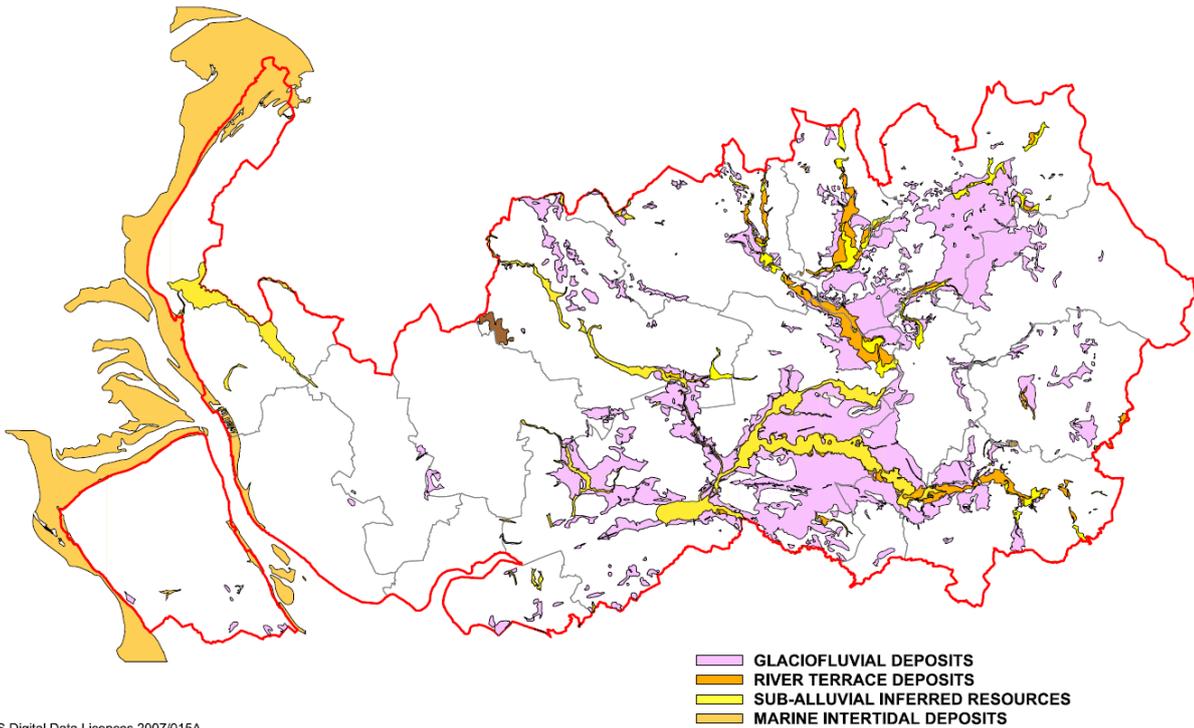
Mineral Resource	Summary of Mineral Resource	Example uses of material
Glaciofluvial sand and gravel	Sands and gravels are derived from the erosion of local bedrock by the action of ice, which is then deposited by glacial melt water. Sand and gravel is defined on the basis of particle size rather than composition, although they are usually rich in silica (quartz, quartzine and flint), but other rock types occur.	Domestic uses, e.g. garden Building projects, e.g. concrete or mortar Road building/repair, e.g. asphalt

Carboniferous Millstone Grit (sandstone)	Carboniferous sandstones consist of sand-sized particles with minor pebbles, composed dominantly of quartz, but also with some feldspar, some of which are cemented by carbonaceous material and other with Kaolinitic materials. The sandstones are typically buff coloured, although locally grey, and vary from fine to course grained.	Dimension stone Crushed rock fines Bulk fill material
Triassic (Sherwood) Sandstone	The Sherwood Sandstone Group, formerly known as the Bunter Sandstone, predominantly comprises sandstone and pebbly sandstone with lesser amounts of conglomerate and minor amounts of mudstone and siltstone. It was deposited between 230 and 260 million years ago in the late Permian and Triassic periods.	Dimension stone Crushed rock Bulk fill material

Sand and gravel resources and current extraction

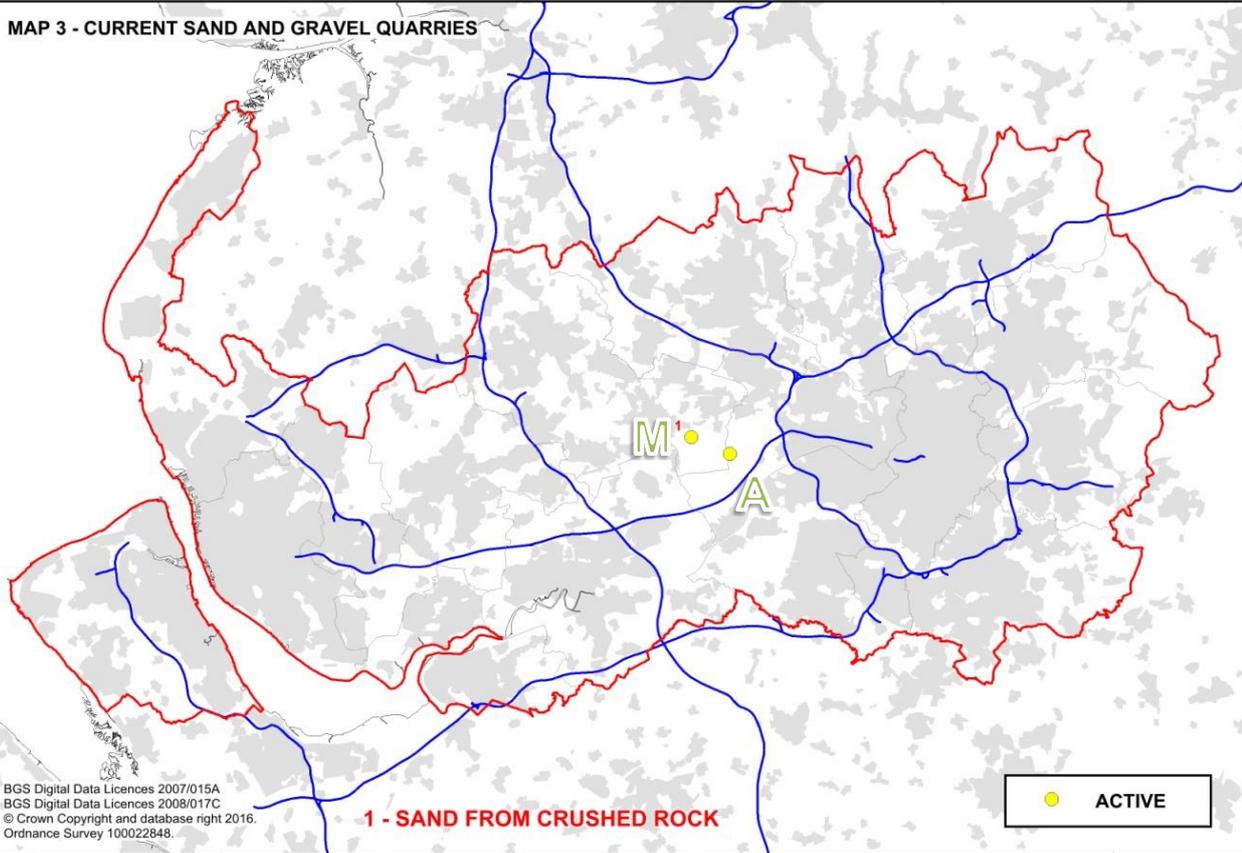
- 2.5. Resources of sand and gravel primarily occur within superficial or 'drift' deposits of glacial and post glacial origin. These sands and gravels are derived from the erosion of local bedrock in a variety of environments, including glaciofluvial rivers formed from melting ice and also river terraces 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. Nevertheless, there are fairly extensive areas of mineral resource across the borough and the Council's Regulation 18 consultation Document (Preferred Development Option) proposes safeguarding areas for sand and gravel and coal. Activity in Merseyside is mainly limited to the landing of marine-dredged material at coastal ports such as the Port of Liverpool and Bromborough. The Sefton Local Plan includes a safeguarding area proposed for the alluvial sand and gravel of the Alt floodplain, though this potential resource has not been of recent commercial interest. In Greater Manchester, glacio-fluvial sand and gravel is currently worked at Astley Moss, Salford (shown as A on Map 3). **Map 3** shows permitted sand and gravel quarries (active and inactive) in 2017. Morley's Hall Quarry in Wigan (shown as M¹ on Map 3) produces sand but this is worked from soft sandstone (Triassic sandstones of the Sherwood Sandstone Group) rather than from sand and gravel deposits. Morley's Hall Quarry has no permitted reserves and the site is expected to close shortly.

MAP 2 - SAND AND GRAVEL RESOURCE



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MAP 3 - CURRENT SAND AND GRAVEL QUARRIES



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1 - SAND FROM CRUSHED ROCK

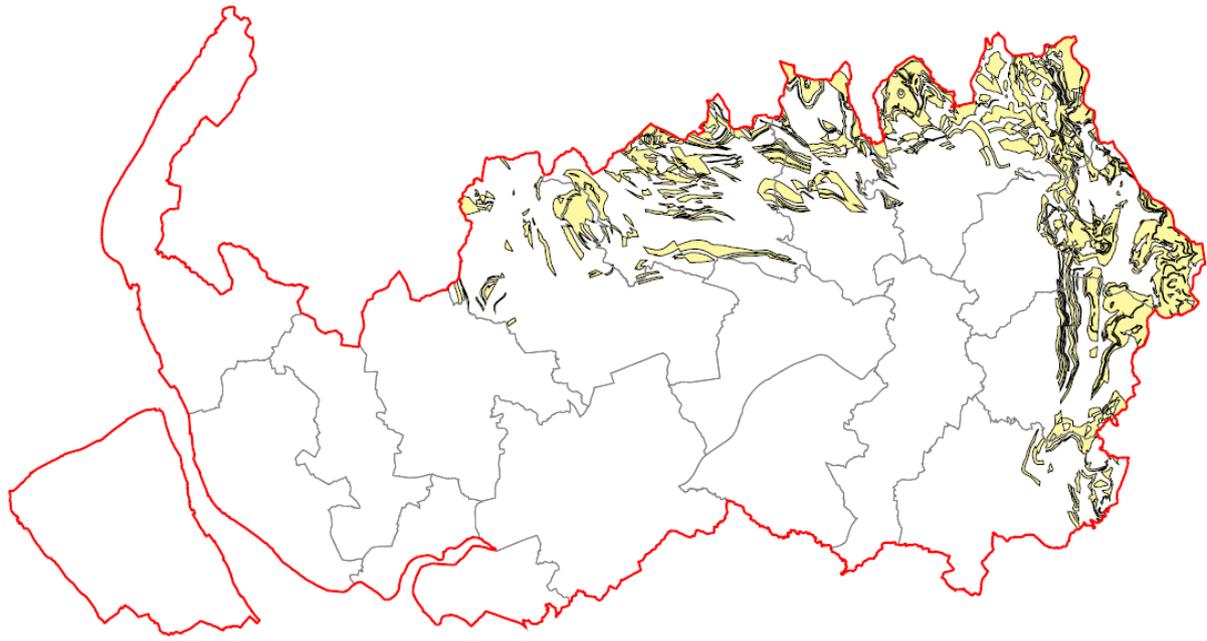
● ACTIVE

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 a broad strip running north-south along the eastern margin and east-west along the northern margin. There are five crushed rock aggregate quarries in Greater Manchester which are concentrated in the north and east of the sub-region. Four of the five quarries are currently active for the production of aggregates; the other is inactive and did not produce any aggregate during 2017.
- 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 (shown as S on Map 5). 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 (shown as BH on Map 5). 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. British Geological Survey (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 **Error! Reference source not found.** which do not correspond with the sandstone/gritstone resource identified in **Error! Reference source not found.**³

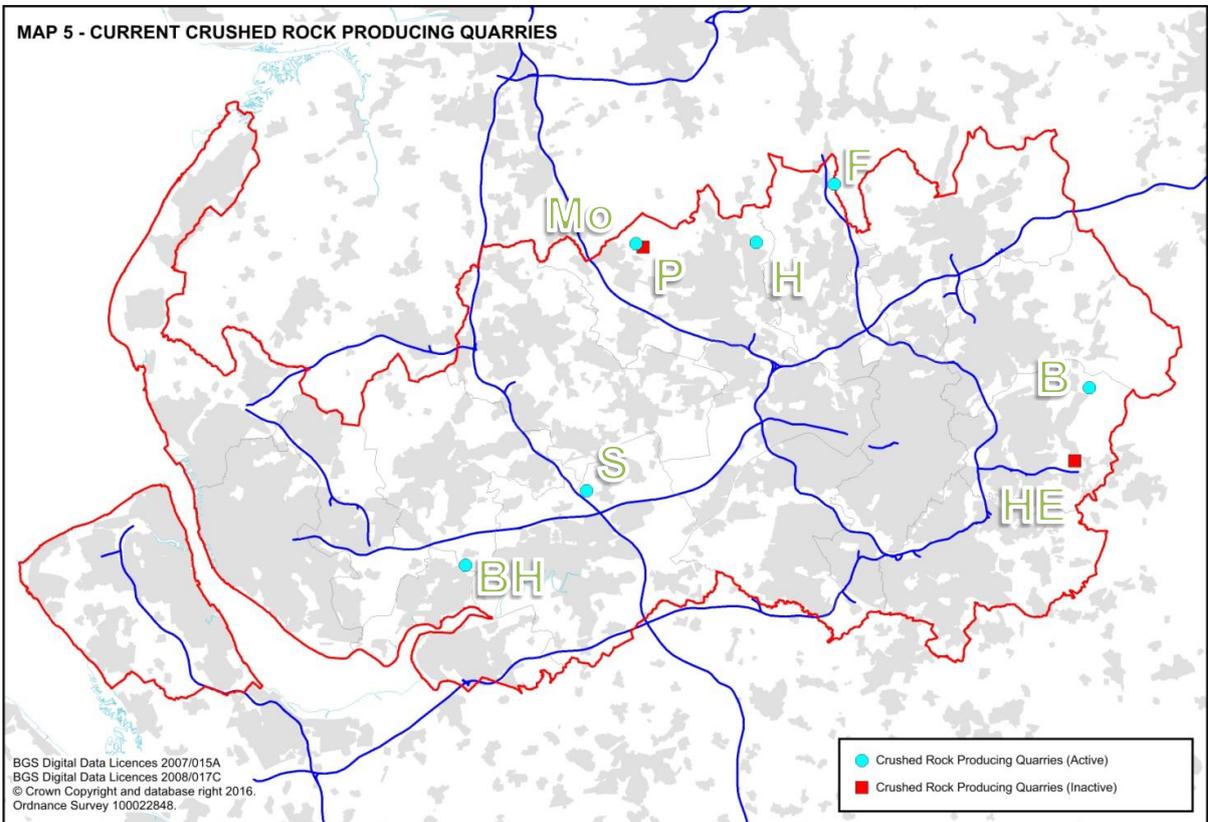
³ Source: Mineral Resource Information in Support of National, Regional and Local Planning (Merseyside) BGS 2006

MAP 4 - CRUSHED ROCK (SANDSTONE/GRITSTONE)



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MAP 5 - CURRENT CRUSHED ROCK PRODUCING QUARRIES



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2.11. A list of permitted aggregate quarries in the sub-region is summarised in Table 2-2. The majority of quarries have permitted end-dates within the next ten years.

Table 2-2: Permitted Aggregate Quarries in the Sub-Region

Site name	Map Ref	Operator	Grid Ref	Mineral	Status	MPA	Permission End Date
Astley Moss	2-A	Breedon Aggregates	SJ 371 500	Sand and gravel	Active	Salford City Council	31.12.2022
Bold Heath Quarry	5-BH	D Morgan Plc	SJ 530 885	Sandstone	Active	St Helens Council	29.08.2024
Buckton Vale Quarry	5-B	W Maher & Sons Ltd	SD 992 016	Sandstone	Active	Tameside Council	31.12.2020
Fletcher Bank Quarry	5-F	Marshalls Mono Ltd	SD 804 170	Sandstone	Active	Bury Council	31.12.2036
Harrop Edge Quarry	5-HE	Chartrange (Quarry Products)	SJ 982 959	Sandstone	Inactive	Tameside Council	2042
Harwood Quarry	5-H	Booth Ventures	SD 747 124	Sandstone	Active	Bolton Council	31.12.2026
Montcliffe Quarry	5-M	Armstrongs	SD 656 124	Sandstone	Active	Bolton Council	21.02.2033
Morleys Hall Quarry	2-M	Casey	SJ 685 990	Sand and gravel	Active	Wigan Council	31.12.2022 Note: no permitted reserves remain
Offerton Quarry	-	Offerton sand and gravel	SJ 928 893	Sand and gravel	Closed ⁴	Stockport Council	Closed
Pilkington Quarry	5-P	Armstrongs	SD 622 121	Sandstone	Inactive	Bolton Council	31.12.2026
Southworth Quarry	5-S	Gaskell Bros	SJ 619 940	Sandstone	Active	Warrington	31.12.2025

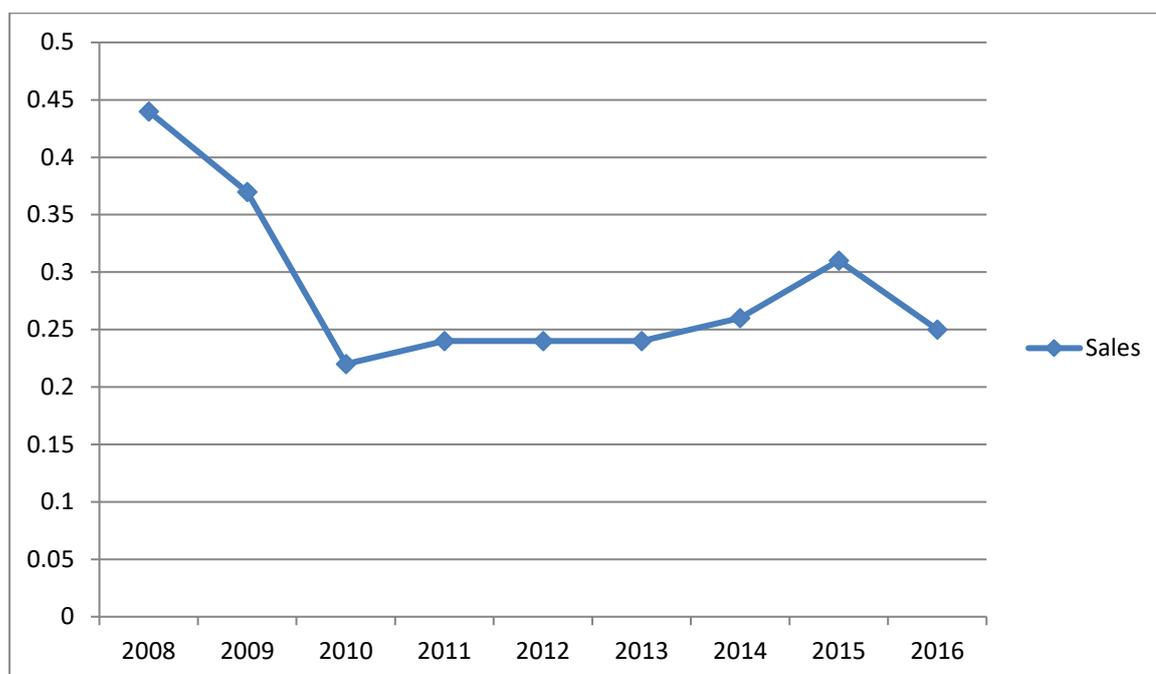
⁴ Active for recycled aggregates

3. Aggregate Sales

Land-won Sand and Gravel - Sales

- 3.1. Sales of land-won sand and gravel originating in the sub-region from 2008 to 2017 are shown in
- 3.2. Total sales of both land and marine-won aggregate sand and gravel during the monitoring period were 0.36mt. This is only marginally lower than in 2016, when total sand and gravel sales were 0.39mt. However, it is important to note that sales do not match consumption levels for materials required to service Greater Manchester, Merseyside, Halton and Warrington, with consumption rates continuing to be significantly higher, placing a greater demand on imports to meet the needs of the sub-region. Details of consumption rates are only available for 2014 at present until MHCLG commission the next 4 yearly survey.
- 3.3. **Figure 3-1.** In order to maintain the confidentiality at individual quarries and marine dredging operations, it is not possible to provide a breakdown of sales or reserves data for 2017.
- 3.4. Total sales of both land and marine-won aggregate sand and gravel during the monitoring period were 0.36mt. This is only marginally lower than in 2016, when total sand and gravel sales were 0.39mt. However, it is important to note that sales do not match consumption levels for materials required to service Greater Manchester, Merseyside, Halton and Warrington, with consumption rates continuing to be significantly higher, placing a greater demand on imports to meet the needs of the sub-region. Details of consumption rates are only available for 2014 at present until MHCLG commission the next 4 yearly survey.

Figure 3-1: Land won sand and gravel sales in the sub region, 2008 – 2016 (million tonnes)



3.5. The sales for the most recent 10 year period are set out in Table 3-1.

Table 3-1: Land won sand and gravel sales in the sub region, 2008 – 2016 (million tonnes)

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Sales	0.44	0.37	0.22	0.24	0.24	0.24	0.26	0.31	0.25 ⁵	

Land-won Sand and Gravel – Landbank

3.6. Reserves of land-won sand and gravel fell in 2017 because there is now only one quarry, Astley Moss in Salford, contributing to the landbank. Planning permission at Astley Moss is due to expire by 31 December 2022. Therefore, unless a new permission is granted, the landbank for sand and gravel in the sub-region will continue to fall and is already under the minimum of at least 7 years set out in NPPF. As previously mentioned, a planning permission for an extension at Morley's Hall in Wigan, which would have extended the landbank by 2

⁵ Sales figures for 2016 and 2017 have been estimated using data taken from a recent planning application to maintain confidentiality.

years, has now been 'withdrawn' and the site is expected to close shortly; currently it is just active for inert landfill.

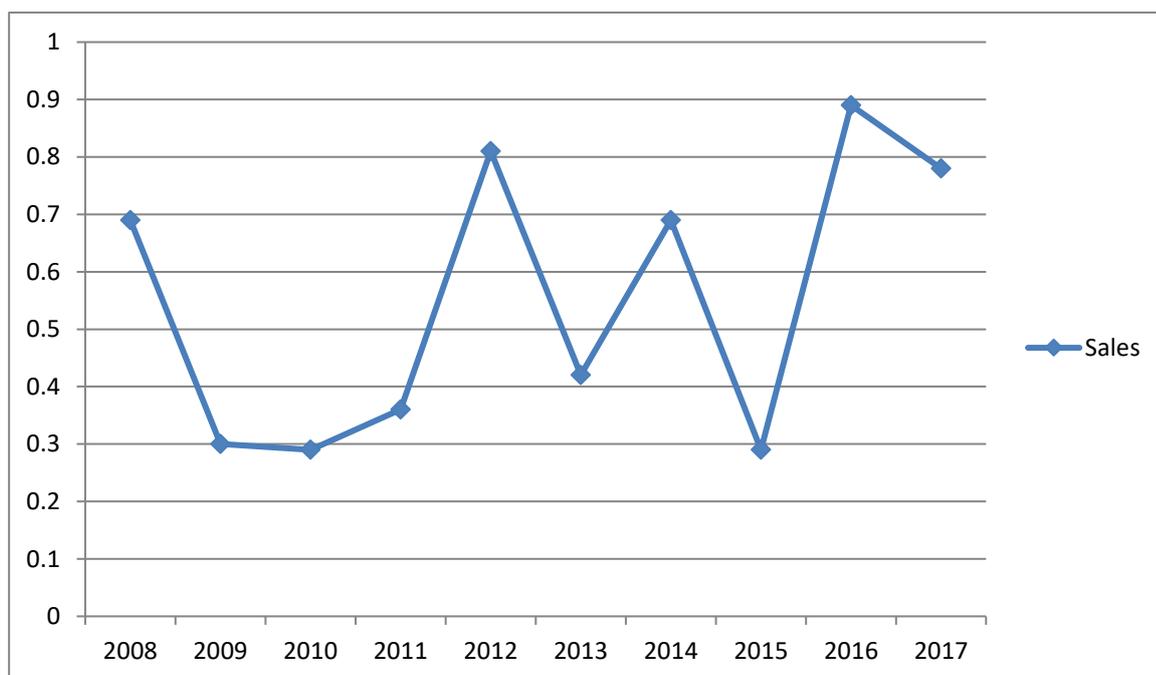
3.7. The landbank for aggregate land-won sand and gravel at 31 December 2017 was 4.5 years based on 10-year average sales.

Crushed rock sales

3.8. Sales of crushed rock originating in the sub-region from 2008 to 2017 are shown in Figure 3-2.

3.9. Total sales of aggregate crushed rock decreased during the 2017 monitoring period from 0.87mt in 2016 to 0.79mt, the same as experienced in 2015. This follows a year on year increase since 2012. However, as with sand and gravel, it is important to note that sales do not match consumption levels for materials required to service Greater Manchester, Merseyside, Halton and Warrington, with consumption rates continuing to be significantly higher, placing a greater demand on imports to meet the needs of the sub-region.

Figure 3-2: Crushed rock sales in the sub region, 2008 - 2017 (million tonnes)



3.10. The sales for the most recent 10 year period are set out in Table 3-2.

Table 3-2: Crushed rock sales in the sub region, 2008 – 2017 (million tonnes)

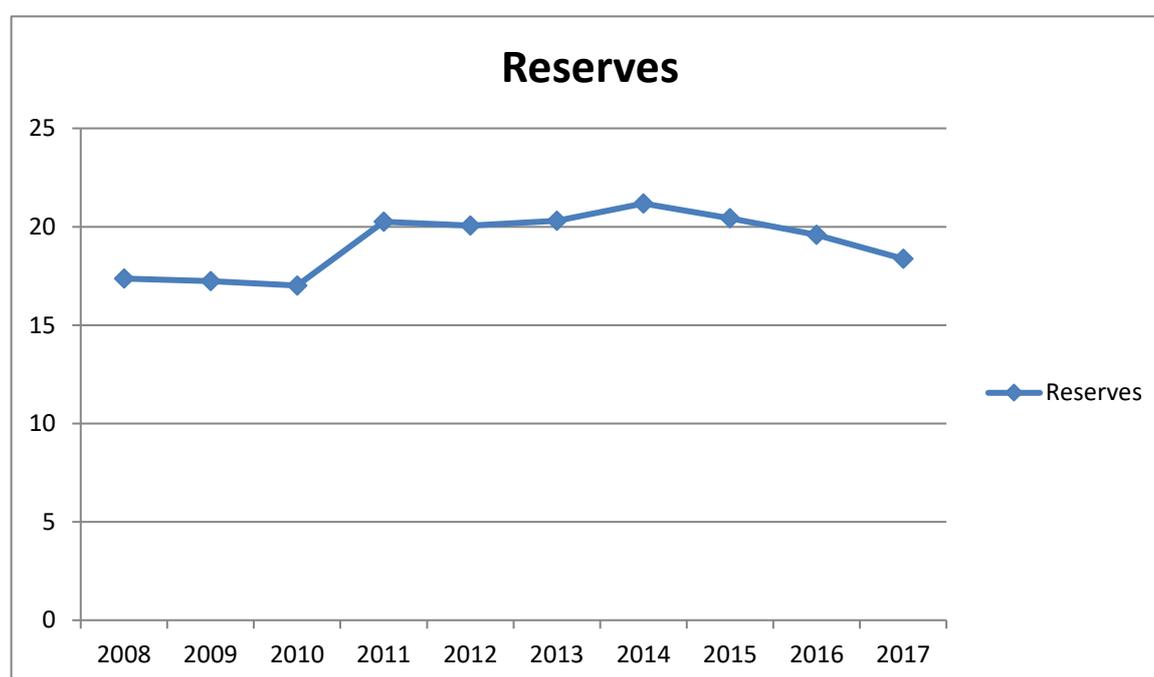
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Sales	0.69	0.30	0.29	0.36	0.81	0.42	0.69	0.79	0.87	0.78

3.11. Average crushed rock sales over the past 10-year rolling period are 0.6 million tonnes, with the average of the latest 3-year period being 0.81 million tonnes.

3.12. Table 3-3 and Figure 3-3 below, show aggregate reserves in the sub-region over a ten year period to 2017.

Table 3-3: Crushed Rock Reserves 2006-2017 (Million tonnes)

Monitoring period	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Crushed Rock (sandstone) reserves (million tonnes)	17.36	17.23	17.01	20.26	20.06	20.3	21.18	20.43	19.59	18.37

Figure 3-3 Crushed Rock Reserve (million tonnes)

3.13. Reserves of crushed rock aggregate decreased from 19.59mt as at 31 December 2016 to 18.37mt in December 2017. The landbank as at 31 December 2017 based on average sales from 2008–2017 was 30.6 years. This is above the at least 10 year minimum landbank required by NPPF.

- 3.14. However, the permitted end dates of quarries in Table 2-2 show that, with the exception of 2 sites, the majority of active crushed rock sites are due to cease operations within the next 8 years, unless new planning permissions are granted. Although of low quality, the material extracted in the sub-region plays an important local role in reducing vehicle movements of this type of material, and this situation should be monitored closely to identify if applications are coming forward.

4. Secondary and Recycled Aggregates

- 4.1. Recycled Aggregates, 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 waste, 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 licence and can be monitored, much recycling and re-use occurs on individual construction sites, is temporary in nature and does not produce data. The Mineral Products Association has published data on the likely contribution that secondary and recycled materials make to the aggregates market, reporting that nationally these materials made up 29% of the market in 2017.
- 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**. 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. The last regional survey carried out on CD&E waste was in 2007⁶ and, coupled with the fact that there are generally poor responses from both the waste and construction industry when surveyed about this waste stream, the Environment Agency's database 'Waste Data Interrogator' provides the best available information. Table 4-1 shows the amount of CD&E waste produced and handled at sites in the sub-region in 2016. The totals in this table will not reflect the true amount of CD&E waste produced and managed in the sub-region because it only shows the waste that moves through licenced sites and does not include waste that is reused on site or disposed of at exempt facilities.

Table 4-1: Construction, Demolition and Excavation Waste Produced and Handled in the Sub-region, 2017 (tonnes)

	Produced ⁷	Handled
Greater Manchester	2,720,652	3,152,362
Merseyside with Halton	590,541	1,075,822
Warrington	180,526	606,913

⁶ Study to Fill the Evidence Gaps for Construction, Demolition and Excavation Waste Streams in North West England, Smiths Gore, July 2007

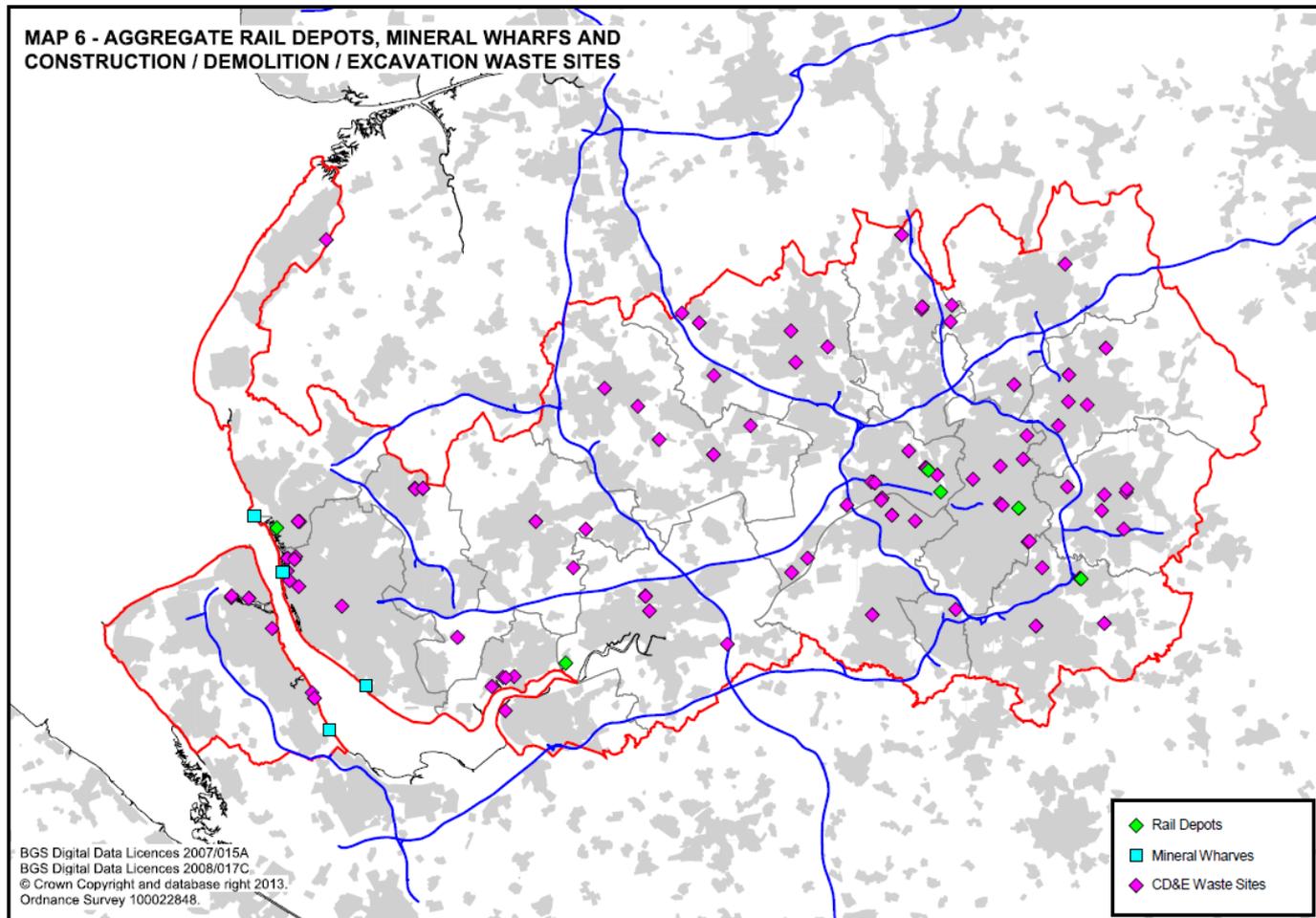
⁷ 'Produced' refers to the quantity of useable material produced from the recycling process, whereas 'Handled' refers to the quantity of material processed within the area, not all of which will be reusable; i.e. the 'handled' material is the raw input material and 'produced' material is the end product.

TOTAL	3,491,719 (3.49Mt)	4,835,097 (4.84Mt)
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Source: Environment Agency Waste Data Interrogator 2017

5. Marine Won Aggregates and Wharves

5.1. The apportionment sub-region contains significant marine infrastructure, most notably in the Port of Liverpool, but also other 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 and at Garston. Most onward trans-shipment is by road and rail, but from time to time some onward trans-shipment by barge may take place. One of the wharf facilities within the Port of Liverpool (Bramley Moore Dock) is under risk of development, although this is currently at pre-application stage, and a watching brief is being maintained; it is understood that operations will move to Garston wharf. The Port of Liverpool also handles landings of significant quantities of crushed rock aggregate shipped from the Glensanda quarry in the West of Scotland. Some 0.53mt of igneous rock from the Glensanda Superquarry was landed at Liverpool Wharf in 2017 and used in ready mix concrete; this is a drop from 0.65mt in 2016. This material is transported by road to Cheshire, Lancashire and within the sub-region. Landing of material from Glensanda has not previously been reported in the LAA. **Map 6** identifies wharves in the sub-region where marine-won aggregates are landed.



5.2. The Crown Estate, along with the British Marine Aggregate Producers Association (BMAPA), publishes reserve and dredge statistics on an annual basis⁸. The 'Marine Aggregates the Crown Estate Licences Summary of Statistics 2017' report, provides summary statistics relating to the dredging and landing of marine dredged aggregate sand. Reserve information is published by The Crown Estate in the 'Capability and Portfolio' report (2018). In addition, The Crown Estate and BMAPA publish a summary of the extraction activity in the 'Area Involved Report', the 20th of which was published in 2018. Table 5-1 provides detail of the North West dredging areas.

5.3. During the 2017 monitoring period there were three active dredging licences operating in water off the North West coast.

Table 5-1: North West marine licences and dredging areas 2017

Area no:	Area name	Licence type	Licence holder	Operational status 2017
392	Hilbre Swash	Active dredge area/application area	Tarmac Marine Dredging Active Limited	Active
393	Hilbre Swash	Active dredge area/application area	Norwest Sand and Ballast Co	Active
457	Liverpool Bay	Active dredge area/application area/Option area	Westminster Gravels Ltd	Active

5.4. A total of 321,090 tonnes of material was removed from permitted dredging areas off the North West coast during 2017; of this, 314,113 tonnes was landed at permitted landing points within the North West. Landings at Liverpool ports increased from 260,398 tonnes in 2016 to 278,617 tonnes landed in 2017. This is a significant reduction in the amount of material being dredged off the North West coast in 2015, when the total was 1,161,600 tonnes. This is due to the material removed in 2017 (and 2016) consisting solely of primary aggregates. In 2015, just 26% of the total material removed was primary aggregates, 307,074 tonnes, whilst the other 854,526 tonnes were recorded as 'secondary use from licences'⁹.

5.5. Table 5-2 shows the dredging and landing trends in the North West in general, and the landings at the Liverpool wharves in particular. There are currently seven wharves comprising the Liverpool Port – Albert Dock, Birkenhead, Bramley Moore Dock, Garston, Liverpool, Mersey Wharf and Mostyn.

⁸ <http://www.thecrownestate.co.uk/en-gb/resources/downloads/>

⁹ Marine Aggregates: Capability & Portfolio 2018, The Crown Estate, October 2018

Table 5-2: Regional Dredging and Landing Statistics (tonnes)

	2011	2012	2013	2014	2015	2016	2017
NW licence area – dredged tonnage	314,098	635,268	858,813	520,383	2,046,899	1,161,600	321,090
NW license area – landed tonnage	304,515	277,720	369,201	241,578	252,856	302,431	314,113
Liverpool Wharves	238,880	205,528	303,696	202,714	209,939	260,398	278,617
Barrow (Cumbria)	12,333	9,831	11,805	3,790	5,905	10,226	8,327
Penrhyn (N Wales)	53,302	62,361	53,700	35,074	37,012	31,807	27,169

Source - Marine Aggregates: Crown Estate Licences, 2011 to 2017

5.5 One of the key issues relating to reducing supply is poor demand; however, with the pressures on land resources, it is expected that marine aggregates may play an increasingly important role. This can be seen with the renewal for a 15 year period of the Hilbre Swash (off North Wales) licences at the start of 2014, and the future entry of a new company into the marine marketplace, with Hanson Aggregates Marine Ltd being awarded a new Option and Exploration Agreement in 2014. There would appear, therefore, to be considerable potential to increase the substitution of marine dredged sand for that which is land-won.

5.6 The 'Marine Aggregates Capability and Portfolio document 2018' reports that there are currently 12.56mt of primary marine aggregate reserves in the north west dredging areas, which when compared to the 10 year average annual off take rate, would provide a reserve life of approximately 37.49 years. There is currently one application pending a decision in the area which would release an additional 0.5mt of reserve.

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 2014 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. The data tables express the movement of minerals in percentage ranges, so there are limitations in the precision of the data. This report also provides vital information on consumption rates of aggregates, which for the sub-region indicates a high reliance on imports for maintenance of future supply.
- 6.2. The AMS reports that the North West as a whole consumed 15,363 thousand tonnes of primary aggregate in 2014, 45% of which originated within the North West and 55% of which was imported into the region. No separate data for the LAA sub-region has been published. Table 6-1: North West Net Imports/Exports (2014), shows net imports and exports into/out of the region in 2014. In summary, the North West region is a net exporter of sand and gravel and a net importer of crushed rock.

Table 6-1: North West Net Imports/Exports (2014)

	Import (000 tonnes)	Export (000 tonnes)	Balance (000 tonnes)
Sand & Gravel (land won and marine)	240	723	-483 (net export)
Crushed Rock	7,740	313	+7,427 (net import)

- 6.3. In order of volume, the North West imported sand and gravel from the following regions in 2014:
- North Wales (140,000)
 - West Midlands (70,000)
 - Yorkshire and Humber (12,000)
 - South East (12,000)
 - East Midlands (3,000)
 - East of England (1,000)
- 6.4. In order of volume, the North West imported crushed rock from the following regions in 2014:
- East Midlands (3,831,000)
 - North Wales (2,131,000)
 - Yorkshire & Humber (836,000)
 - Outside England & Wales (400,000)
 - West Midlands (357,000)

- South Wales (142,000)
- North East (44,000)

- 6.5. The previous 2009 survey did not specify where the sub-region imports materials from, whereas the latest 2014 survey has improved on this, so it is now possible to indicate from where material comes into the sub-region. Sand and Gravel is mainly imported from other parts of the North West, with Cheshire West and Chester being the largest source (20-30% of consumption); Cheshire East, Lancashire and Cumbria are also significant sources (1-10%). Only Staffordshire reported significant shipments to the sub-region from outside of the North West (1-10%), while very small contributions were also recorded from Lincolnshire and Nottinghamshire (<1%). The sub-region therefore imports significant quantities of sand and gravel from land won sources and this trend is expected to continue. The sub-region will undertake duty to co-operate discussions with areas outside the sub-region as part of the next period of reporting.
- 6.6. The reported position with Crushed Rock is more complex. Very significant imports to the sub-region are reported from Derbyshire and the Peak District National Park (20-30%), while Flintshire is also a significant supplier (10-20%); quantities also come from Cumbria, the Yorkshire Dales and Shropshire (1-10%), with small shipments also recorded from a further 9 mineral planning authority areas. This reflects the need for high quality crushed rock in the sub-region and the lack of local resources to supply it. The sub-region also borders both North Wales and the East Midlands regions, both of which produce crushed rock in relatively convenient locations to facilitate supply into the sub-region.
- 6.7. Table 6-2 shows sub-regional imports and consumption of primary aggregates in 2014. 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. Again, this is a trend which is not expected to change in coming years, especially as a high proportion of existing sub-regional sites are due to close in the next 8 years.

Table 6-2: Sub-regional imports and consumption of primary aggregates in 2014¹⁰

	Import (000 tonnes)	Consumption (000 tonnes)	Net imports as a % of consumption
Sand & Gravel (including Marine)	214	280	76%
Crushed Rock	3,233	3,465	93%
Total Aggregate	3,447	3,744	92%

- 6.8. 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; this figure remained the same for 2014. The only sand and gravel quarries in the sub-region are currently found in Greater Manchester. The sub-region imported 92% of crushed rock consumed in 2009; this rose to 93% for 2014. The data indicates that the sub-region continues to rely on imports to supply the majority of its requirements for sand and gravel and crushed rock. As such, the consumption rate of aggregates in the sub-region is more important in terms of future supply needs than the sales, which reflect production rates. This means that there is an increasingly important role for marine-won sand and gravel going forward.
- 6.9. A review of the 2017 (calendar year) Derbyshire and Peak District National Park (PDNP) LAA reveals that Derbyshire exported 23% (1,690,722 tonnes) and PDNP exported 33% (572,440 tonnes) of the total crushed rock produced in each authority to the North West region in 2009. The LAA explains that the landbank is large enough to continue to supply other areas during their Plan period to 2031 and that the area is, and is likely to continue to be, an important supplier of aggregate grade crushed rock at a wide geographical scale. The PDNPs Core Strategy (adopted October 2011) held a policy approach that does not allow for further new quarries or extensions to existing quarries; this is to progressively reduce the amount and proportion of aggregate grade crushed rock that is quarried from within the Park in order to protect the nationally protected landscape. However, the PDNP adopted their Development Management Policies in May 2019, which expands on Core Strategy Policy MIN1, setting out in Policy DMMW1 the evidence required, in relation to viability and need, for minerals development.

¹⁰ Table 6-1 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 6-2.

- 6.10. As set out in the Local Aggregate Assessment for the North Yorkshire Sub-region (2017), in 2014, the DCLG/BGS survey noted that 856,157 tonnes of stone were sold from the Yorkshire Dales National Park (YDNP) to the North West region, which represents 28% of the National Park's total sales for that year. Within that 28%, somewhere between 1 and 10% was exported to the Manchester/Merseyside/Warrington sub-region, equating to 34,000 to 340,000 tonnes. Also in the YDNP, a railhead was commissioned by Tarmac at Arcow Quarry in Ribblesdale in January 2016. At present this is being used for trains taking stone from both Arcow Quarry and Dry Rigg Quarry (also Tarmac) to the Greater Manchester rail depots at Bredbury (Stockport) and Agecroft (Salford).
- 6.11. Despite the NPPF seeking to reduce reliance on the National Parks as a source of crushed rock aggregate, as far as is practical, there is still a very large proportion of both PDNP and YDNP crushed rock being exported, and especially to the predominantly urban sub-region of Greater Manchester/Merseyside/Warrington. Both of these National Park LAAs recognise this and, in general, state that there is good potential to maintain the overall supply of limestone crushed rock from within their sub-regions over the period to 2030 at levels similar to those sustained in recent years.
- 6.12. North Wales, especially Flintshire, is an important source of both sand and gravel and crushed rock imported into the North West in general and the sub-region in particular. The 2014 survey stated that 140,000 tonnes of sand and gravel was imported from North Wales (source of the highest import tonnage), whilst 2,131,000 tonnes of crushed rock was imported from North Wales (the second highest import tonnage). Co-operation with the North Wales authorities will be important going forward.
- 6.13. The 2014 survey provides some details of exports from the sub-region. However, it is clear that these are limited and local, 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 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**. The Cemex site in Salford in particular imports significant quantities of materials by rail, averaging around 650,000 tonnes per annum. Indications are that the material imported through Merseyside Wharves is used entirely within the North West. There is a need to safeguard this infrastructure from encroachment from other forms of development.

7. Assessment of Future Supply

7.1. 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 that have adequate reserves of aggregates make an appropriate contribution to national as well as local supply.

Current Aggregate Apportionment (2005 – 2020)

7.2. Prior to publication of the first edition of the National Planning Policy Framework (NPPF) in 2012, national aggregate policy was set out by Government in Minerals Planning Statement 1 (MPS1), which required Mineral Planning Authorities (MPAs) to make provision for the sub-regional apportionment of the National and Regional Guidelines for Aggregate Provision 2005-2020¹¹, which were most recently updated in June 2009. The key regional guideline figures are reproduced in Table 7-1 along with the national figures for comparison. These figures are generally considered dated, although some Local Authorities still use them, and MHCLG has been asked to update these.

Table 7-1: Comparison of National and Regional Apportionment Guidelines for England (2009)

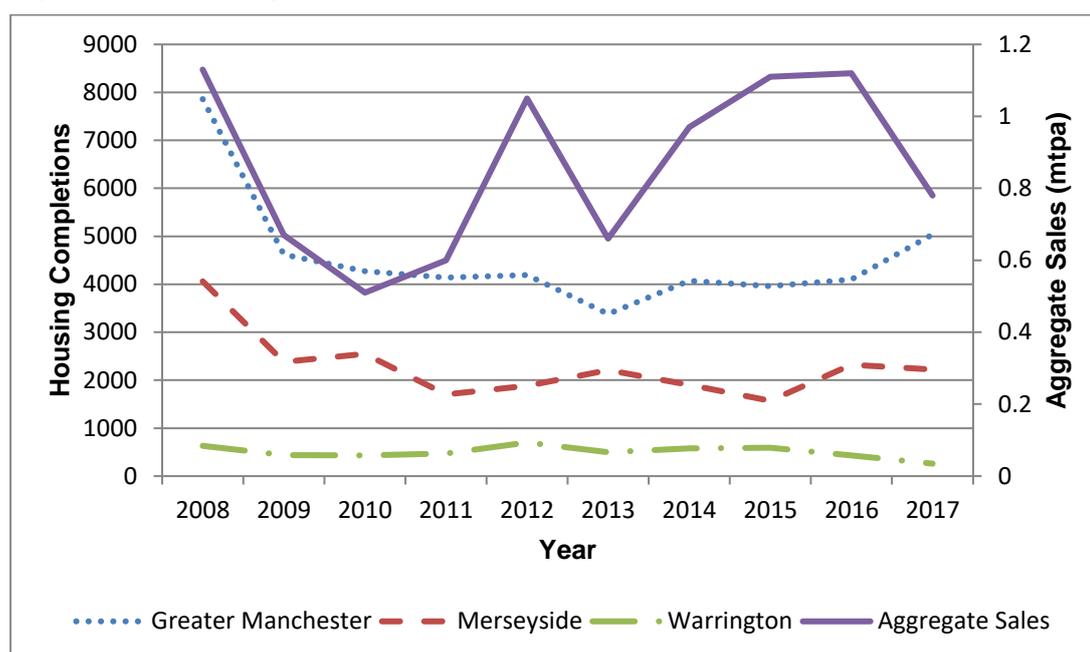
Region	Land-won provision		Assumptions		
	Land-won Sand & Gravel (Mt)	Land-won Crushed Rock (Mt)	Marine Sand & Gravel (Mt)	Alternative Materials (Mt)	Net Imports to England (Mt)
North West	52	154	15	117	55
England	1028	1492	259	993	136

7.3. 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. The sub-region has not met the apportionment in the previous 10 years and the figure has not been used to identify the guideline figure in this LAA for the reasons highlighted above.

¹¹ National and regional guidelines for aggregates provision in England 2005-2020 (DCLG, June 2009)

- 7.4. In order to understand the behaviour of the aggregates market across the apportionment area, this LAA uses historic trends in a small number of key economic indicators to illustrate how the recorded trends in aggregate sales reflect wider economic conditions. Employment in the construction sector, housing completions and GVA forecasts have all been used as indicators.
- 7.5. Figure 7-1 shows a step fall in housing completions together with a recent gradual recovery. As a key indicator of construction sector activity, it is not surprising that the recorded trend in aggregate sales broadly reflects the trend in the housing completion statistics.

Figure 7-1: Housing Completions



- 7.6. The 2018 Greater Manchester Forecasting Model produced by Oxford Economics (2018 GMFM) predicts that, over the period to 2036, construction industry in Greater Manchester will grow by 16,600 jobs (1% per annum). Between now and 2035, it is predicted that GVA growth will average 1.7% per year in Greater Manchester, the same as shown in the previous GMFM-2017 model¹².
- 7.7. Figures from the same source produced in 2015 for the Liverpool City Region (LCR) indicate a similar picture. LCR employment in the construction sector fell by 10% in the period 2008-14 but forecasts show the figure recovering to 5% above 2008 levels by 2028. Over the ten years 2015-2024 total GVA growth in the LCR of 22% is anticipated, while the forecast for the

¹² https://www.greatermanchester-ca.gov.uk/media/1731/final_gmfm2018_forecast_paper_web.pdf

construction sector over the same period is a similar 24%. This is indicative of an expected return to more normal economic conditions with average annual growth a little above 2%.

8. Other Relevant Local Information

8.1. Whilst the 10 year rolling sales average is the starting point for an LAA, they must also be based on “other relevant local information”. This information should include consideration of levels of planned construction, including major infrastructure projects, and planned house-building in the MPA area and beyond, to an extent and depth which the mineral planning authority considers relevant. It should be noted that housebuilding can only be used as a partial guide to future demand as aggregates sales reflect much wider demands, including refurbishment of the housing stock and infrastructure maintenance. In addition, MPAs should also look at average aggregate sales over the previous three years to identify if there is a general trend of demand that needs to be considered in relation to forthcoming supply in the consideration of whether it might be appropriate to increase supply.

Table 8-1: Population and Household Projections 2014 - 2039

	Population 2014	Population Growth 2014-39	% Population Growth	Change in Households	% Household Growth
Sub-region	4,457,000	480,000	11%	336,000	18%
North West	7,133,000	587,000	8%	442,000	14%
England	54,317,000	8,965,000	18%	5,258,000	23%

Source: ONS 2014-based household projections to 2039 for England, published on 12 July 2016

8.2. Table 8-1 shows the projected change in population and households from 2014 to 2039. Although overall population and households are predicted to grow at a lower rate than in England as a whole, it is predicted that 82% of the North West’s projected population growth over this time period will be within the sub-region.

8.3. The latest Economic Forecast for Greater Manchester was published by the GMCA in January 2019 for the period 2016 to 2036¹³. The key messages from this are set out below:

- GMFM-2018 shows GVA growing at 1.7 % per year up to 2036, the same headline rate of growth shown in the previous GMFM-2017 model.
- Productivity is forecast to grow at 1.3% per annum, (0.1% per year more than the previous forecast model, GMFM-2017), reflecting slightly better outturn in productivity data from ONS during the period 2017-2018.

¹³ https://www.greatermanchester-ca.gov.uk/media/1731/final_gmfm2018_forecast_paper_web.pdf

- Total employment is forecast to grow at 0.5% per year in GM, equating to a net increase of 140,100 employees 2016 to 2036, compared to 141,000 in the previous GMFM-2017 published model.
- Employment growth is largely driven by Business, Financial, and Professional Services - accounting for over half of the net increase in the total number of jobs based in GM, up to 2036.
- Sectors are broadly similar in their employment prospects compared to the previous published results, with stronger jobs growth in logistics, and professional services; and slightly slower growth in wholesale and retail.
- The baseline forecast suggests that total population will grow by 189,800 from 2016 to 2036, down 17,500 compared to GMFM-2017, due to slower rates of natural increase (slightly higher mortality rates).
- Resident employment, adjusting for residents that may hold more than one job (and commuting), GMFM-2018 forecasts a net increase of 165,000 residents in employment, living within GM.

8.4. The latest economic forecasts for Warrington were published in the Cheshire and Warrington Strategic Economic Plan (SEP) produced by the Local Enterprise Partnership in July 2017. The SEP sets a target of 31,000 jobs to be created between 2015 and 2040. This equates to an annual rate of 1,240 jobs per annum.

8.5. Similar to the predictions for Greater Manchester, employment growth in Warrington is forecast to largely be driven by business, finance and professional services. In addition, transport and storage employment related jobs are predicted to grow significantly. As with GM, further job losses in manufacturing are forecast and there is some uncertainty about short term growth due to the Brexit process.

8.6. The LCR LEP Growth Strategy was published in 2016, some of the key messages are set out below:

- The LCR Economy is worth £28.3 billion GVA with output increasing by 8.4% in the 5 years to 2014;
- It is predicted that over 100,000 additional jobs will be created in the LCR by 2040;

- Employment growth is expected to be driven by a number of sectors including: Advanced Manufacturing, Digital & Creative, Financial and Professional services, Health and Life Science, Low Carbon Energy, Maritime and Logistics and Visitor Economy;
- The population is predicted to increase by 83,000 to 1.6m by 2040. The LCR Spatial Framework is expected to be in place by 2020.

- 8.7. The GMSF will plan for new homes, jobs, infrastructure and the environment across Greater Manchester. The Draft Plan (January 2019) identified a total requirement, until 2037, for 201,000 new homes across Greater Manchester; an annual requirement of 10,580.
- 8.8. The Mineral Products Association report *Mineral Products Industry at a Glance 2016* suggests that 200 tonnes of aggregate are required to build one house. Based on this, the predicted aggregate requirement for new housing (not including apartments) over the GMSF plan period would be between 26 and 28 million tonnes. Other data sources, such as the European Aggregates Association, suggest double this figure, i.e. 400 tonnes per house, so between 52 and 56 million tonnes in total would be required, which would equate to between 1.3mt and 2.9mt of aggregate per year; in 2014 the sub-region imported around 3.447mt of aggregate. This does not include aggregates required for other built development and supporting infrastructure. Whilst a proportion of this could come from recycled aggregate, much will require imported virgin material.
- 8.9. The draft GMSF annual housing requirements are lower in the initial years of the plan at around 9,200 housing completions, before levelling out at a requirement for around 11,000 new homes every year between 2024 and 2037. Until 2017/18, completions have been significantly below this figure, rising to almost 9,000. This is approximately double the gross annual completion rate in 2015/16. Although it is difficult to quantify, it is presumed that a higher level of aggregates will be needed to meet demand. Most of the aggregate required will continue to be imported, and it is anticipated this will be at higher rates than at present. The sub-region will undertake duty to co-operate discussions with areas outside the sub-region as part of the next period of reporting to ensure it can continue to meet demand.
- 8.10. The emerging Warrington Local Plan identifies a need for a significant amount of growth over the next 20 years. The Council's Preferred Development Option Regulation 18 Consultation Document (July 2017) identifies a requirement for approximately 24,700 homes and 346ha of

employment land over the plan period (2017-2037) along with supporting infrastructure. This housing requirement equates to an annual target of over 1,100 dwellings per annum, which is approximately double the net annual completion rate since 2008.

- 8.11. Given the above referenced predicted increase in the economy of the sub-region over the next decade of circa 2% per annum, it would seem reasonable to assume that demand for aggregates will also increase at a similar rate.

9. Future Aggregate Supply and Demand

- 9.1. Annual surveys of aggregate sales and reserves have historically been undertaken by the North West AWP and provide a basis for establishing future supply and demand. There has been a decline in sales of land won sand and gravel and an increase in the sales of crushed rock in the sub-region. This is due to:
- Closure of sand and gravel quarries, which have not been replenished;
 - Development of more efficient construction techniques requiring less aggregate;
 - Increased use of marine won aggregate and secondary and recycled aggregates.
- 9.2. Current primary mineral extraction (sand and gravel and crushed rock production) in the sub-region is limited. No new sites were submitted by industry for allocation for future extraction within the Greater Manchester Minerals Plan (adopted in 2013), although Areas of Search have been identified in the Plan. 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. However, there has been an increased interest in reopening inactive sites in recent years and potential for extensions coming forward to existing sites.
- 9.3. Given the above, it is likely that imports of primary aggregate material into the sub-region will continue to be important, especially when the consumption rate of material is considered, which shows that this is the main source of aggregates, with import levels at around 3.447mt in 2014. It is also likely that secondary and recycled aggregates will continue to compete with primary aggregate extracted in the sub-region. However, the sub-region is an important landing point for marine-won sand and gravel from the licensed dredging areas offshore and its wharves also handle significant shipments of crushed rock from quarries elsewhere in the UK. It is understood that as market demand increases it will be possible to increase marine supply in the short to medium term to meet this need.
- 9.4. Forecasting future aggregate market conditions is difficult. Although growth conditions have returned to the sub-region recently, aggregate sales data do not yet fully reflect this; however, consumption rates do show that demand is still high and identify that it is the import of aggregates which will continue to be of most importance to the sub-region. The pre-recessionary peak for sales was reached in 2006 with 1.94mt of recorded aggregate sales, compared with 0.51mt in 2010, 1.1mt in 2016. However, ambitious local authority housing delivery targets and the potential effects of local devolution will be a factor in the recovery of demand for aggregate. The Crown Estate notes that marine aggregate demand has recovered to exceed pre 2008 recession levels in some markets (notably London); however,

in the North West logistical constraints around shipping are evident and are perceived to be restricting supply growth. There is expected to be sufficient unused capacity within the aggregates market onshore, and particularly off-shore via both existing and developing licenced areas, to service any increase in demand in the short to medium term. However, logistical challenges remain for marine aggregates to access the GMA economically via rail or seaborne methods, which until resolved are likely to constrain supply.

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, with consumption data indicating that demand for material is significantly higher than that which can be supplied locally, and in GM alone, demand for house building alone is estimated to be between 1.3mt and 2.9mt per year to deliver the GMSF, which is close to the 2014 import rates for the region as a whole in 2014. Housing equates to 30% of aggregate sales (by value), there is, therefore, a need for flexibility in developing local plan policy.
- 10.2. 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.
- 10.3. In recent years the emphasis in waste management policy on increased recycling 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 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 2020¹⁴. In the meantime, indications are that the use of alternative aggregate has increased to represent 29% of the market in 2017 (*The Contribution of Recycled and Secondary Materials to Total Aggregates Supply in Great Britain*, Minerals Products Association, 2019) and could be expected to continue to rise in the immediate future, driven by policy, regulation and market factors. Although it should also be noted that secondary aggregates are constrained by availability, quality and specification.
- 10.4. A number of significant built infrastructure projects and development projects have been identified that are due to commence or have already commenced. These could require substantial amounts of aggregates and include: Port Salford; Liverpool and Wirral Waters; and the Omega employment site in Warrington.

¹⁴ Directive 2008/98/EC on waste (Waste Framework Directive)

- 10.5. The Department for Transport (DfT) awarded Warrington Council funding to develop the business case for a potential new road, which would link the A56 Chester Road in Higher Walton with the A57 Sankey Way in Great Sankey (Warrington Western Link). This would be a significant infrastructure project. Following Executive Board approval of the project team's recommendation, the Outline Business Case was submitted to the DfT in November 2017. In April 2019, Warrington were informed that funding for the scheme had been conditionally approved by Government to a value of £142.5m of the estimated total £212m build cost. The Western Link is now classed as an official Council scheme, and the Council will be pursuing various funding routes for its delivery.
- 10.6. Progress is being made with a number of projects related to Liverpool Waters and Wirral Waters, and there are also a number of strategic infrastructure projects in the pipeline across the LCR.
- 10.7. The current consultation on the GMSF concludes that the housing need for Greater Manchester over the period 2018-2037 is 201,000 net additional dwellings, which is an average of 10,580 net additional dwellings per annum. Given the predicted increase in housing completions, employment, infrastructure projects and the economy in general across the sub-region, it is considered reasonable to apply an 'uplift' to future predicted demand for aggregates, rather than the previous 10 year average sales data. Table 10-1 below identifies a 2% annual uplift in predicted aggregate production (based upon economic predictions outlined earlier in this report), taking the 3 year rolling sales average as the baseline figure to give a more realistic indicator for recent demand. This has been applied over the next ten years and then an average figure taken as the predicted annual production. Actual demand is higher than local production rates and up to date consumption figures which are only available up to 2014. The BGS report for 2014 highlights the North West as one of the regions most heavily reliant on imports, with 45% of requirements being met by imports, and in the sub-region this rises to 92% of aggregate requirements met through imports, see Table 6-2.

Table 0-1: Predicted annual sub-regional production based upon 2% uplift

	Aggregate	
	Sand and Gravel	Crushed Rock
3 year average	0.27Mt	0.78Mt
2018	0.281Mt	0.812Mt
2019	0.287Mt	0.828Mt
2020	0.292Mt	0.844Mt
2021	0.298Mt	0.861Mt
2022	0.304Mt	0.878Mt
2023	0.310Mt	0.896Mt
2024	0.316Mt	0.914Mt
2025	0.323Mt	0.932Mt
Predicted annual demand (average)	0.30Mt	0.87Mt

10.8. Table 10-2 sets out the forecast based upon the 2% uplift figure, along with the 3-year and 10-year rolling average of sales. Average sales for sand and gravel are shown to 2015 due to the confidential nature of the 2016 and 2017 data.

Table 0-2: Forecast sub-regional production based on 10-year supply

	Aggregate	
	Sand and Gravel	Crushed Rock
10 year average sales (2006 to 2015)	0.29Mt	0.60Mt
3 year rolling average of sales	0.27Mt	0.81Mt
Predicted annual production	0.30Mt	0.87Mt
Total Production (2017 to 2032)	4.5Mt	13.05Mt
Permitted reserves as at 31/12/2017	c.	18.37Mt
Landbank as at 31/12/2017	Less than 4Yrs (based on existing planning permission)	21.1Yrs

- 10.9. The forecast production for sand and gravel is 0.30mt, down 0.13mt on the 2005–2020 annual apportionment requirement of 0.43mt.
- 10.10. The forecast production for crushed rock is 0.87 mt, down 0.45 mt on the 2005–2020 annual apportionment requirement of 1.32 mt.
- 10.11. The landbank for sand and gravel is below the requirement set out in NPPF for a landbank of at least 7 years. The landbank for crushed rock meets the requirement set out in NPPF of at least 10 years. Again, it is important to note that landbanks are based on production rather than consumption, with consumption rates known to be higher for the sub-region and only relate to the contribution the sub-region makes to meeting its needs.
- 10.12. Based on these figures, the sub-region will make provision for the production of 13.05 million tonnes of crushed rock aggregate for the 15-year period 2017–2032. There were 18.37 million tonnes crushed rock reserves permitted at the end of 2017, so it would appear that there will be no immediate shortfall in relation to local production rates only, 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 the production of 4.5 million tonnes of sand and gravel for the 15-year period 2017–2032. The landbank for sand and gravel is below the minimum required by NPPF and further permissions are required now.

11. Conclusions on Future Supply Capacity

- 11.1. The position regarding primary aggregate extraction in the sub-region should be kept under review through future LAAs, to reflect opportunities for substitution of primary land won aggregate by secondary and recycled aggregates and marine aggregates.
- 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 national Marine Policy Statement (2011) highlights the importance of marine aggregate in UK supply and the NPPF and associated guidance also provide support for use of this source of supply. 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, subject to the capacity constraints of the port.
- 11.4. Robust data on the use of alternative aggregates 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 will continue to be required. Therefore, safeguarding of rail depots and wharves by the MPAs is a requirement of the NPPF.

12. Key Messages, Cross-Boundary Liaison and Future Review

- 12.1. 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 adopt a 2% annual uplift for predicted future production and consumption for aggregates, in line with predicted economic growth.** This is more realistic and achievable than the sub-regional apportionment or the 10 and 3 year rolling averages from previous year's sales. 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. Going forward, it is acknowledged that predicted production and consumption should be more accurately calculated including imports, sales and marine won materials.
- 12.2. 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 Table 12-1 below.

Table 12-1: Planning implications summary

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	<ul style="list-style-type: none"> The Greater Manchester Minerals Plan was adopted in April 2013. 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. Greater Manchester to continue to work with industry in order to contribute to the apportionment and participate in AWP. Link with Minerals Plan and LAA recognised in draft Greater Manchester Spatial Framework Safeguarding of mineral resources and processing facilities

Mineral Planning Authority	Aggregate Resources Present?	Aggregate Extraction Sites with Live Consents?	Aggregate Wharves?	Planning Implications
Halton	No	No	No	<ul style="list-style-type: none"> • Prioritise use of secondary and recycled material. • Safeguard critical transport infrastructure and processing facilities. • Provide for windfall applications appropriately. • Continue to work with industry in order to contribute to the apportionment and participate in AWP. • Monitor landbank adequacy through annual LAA.
Knowsley	No	No	No	<ul style="list-style-type: none"> • Prioritise use of secondary and recycled material. • Safeguard critical transport infrastructure and processing facilities. • Provide for windfall applications appropriately. • Continue to work with industry in order to contribute to the apportionment and participate in AWP. • Monitor landbank adequacy through annual LAA. • Safeguarding of mineral resources
Liverpool	No	No	Yes	<ul style="list-style-type: none"> • Prioritise use of secondary and recycled material. • Safeguard wharves and transport infrastructure and processing facilities – currently risk to one wharf as a consequence of potential re-development. • Provide for windfall applications appropriately. • Continue to work with industry in order to contribute to the apportionment and participate in AWP. • Monitor landbank adequacy through annual LAA. • Safeguarding of mineral resources
Sefton	No	No	Yes	<ul style="list-style-type: none"> • Prioritise use of secondary and recycled material. • Safeguard wharves and transport infrastructure and processing facilities. • Continue to work with industry in order to contribute to the apportionment and participate in AWP

Mineral Planning Authority	Aggregate Resources Present?	Aggregate Extraction Sites with Live Consents?	Aggregate Wharves?	Planning Implications
				<ul style="list-style-type: none"> • Safeguarding of mineral resources
St Helens	Yes	Yes	No	<ul style="list-style-type: none"> • Prioritise use of secondary and recycled material. • Safeguard critical transport infrastructure and processing facilities. • Provide for windfall applications appropriately. • Continue to work with industry in order to contribute to the apportionment and participate in AWP. • Monitor landbank adequacy through annual LAA. • Safeguarding of mineral resources
Warrington	Yes	Yes	No	<ul style="list-style-type: none"> • Prioritise use of secondary and recycled material. • Safeguard critical transport infrastructure and processing facilities. • Provide for windfall applications appropriately. • Continue to work with industry in order to contribute to the apportionment and participate in AWP. • Monitor landbank adequacy through annual LAA. • Safeguarding of mineral resources
Wirral	No	No	Yes	<ul style="list-style-type: none"> • Prioritise use of secondary and recycled material. • Safeguard wharves and associated transport infrastructure and processing facilities • Safeguard critical transport infrastructure. • Provide for windfall applications appropriately. • Continue to work with industry in order to contribute to the apportionment and participate in AWP. • Monitor landbank adequacy through annual LAA. • Safeguarding of mineral resources

12.3. 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, including relevant National Parks, that export aggregates to the sub-region as these are important to ensure future growth ambitions are realised.
- There is a need to report relevant outcomes of any Duty to Co-operate meetings held by the sub-region with those authorities, both within and outside the North West region, who import aggregates to the sub-region.
- There is a need to monitor permitted sand and gravel and crushed rock reserves as they become depleted, to ensure steady and adequate 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.
- There is a need to safeguard mineral resources as well as the critical transport and processing facilities that are essential for distribution and processing of aggregates.
- Currently consumption continues to be greater than production which is a risk to achieving growth aspirations in the sub-region.

12.4. A number of the issues regarding weak, absent or confidential 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

Term	Acronym	Definition
		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. Now the Ministry of Housing, Communities and Local Government (MHCLG)
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	DtC	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) 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.

Term	Acronym	Definition
Licensed Marine Aggregate Dredging Areas		Areas allocated under the sea where dredging is 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.
Ministry of Housing, Communities and Local	MHCLG	Formerly the Department for Communities and Local

Term	Acronym	Definition
Government		Government (DCLG).
National Planning Policy Framework	NPPF	The document that sets out the government's 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 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.

Bolton
Council

Bury
COUNCIL

HALTON
BOROUGH COUNCIL



Knowsley Council



Liverpool
City Council



MANCHESTER
CITY COUNCIL



Oldham
Council

ROCHDALE
METROPOLITAN BOROUGH
COUNCIL

Salford City Council

Sefton Council



St. Helens Council



STOCKPORT
METROPOLITAN BOROUGH COUNCIL

Tameside
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TRAFFORD
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