Nottinghamshire County Council

Nottingham City Council

Nottinghamshire and Nottingham Local Aggregates Assessment

April 2015

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Summary

This is the third Nottinghamshire Local Aggregates Assessment (LAA) to be produced under the requirements set out in the National Planning Policy Framework (NPPF). The assessment covers the geographical area of Nottinghamshire and for the first time includes the Nottingham City unitary council area. It monitors average annual production figures for aggregate minerals as well as identifying other relevant local information to enable the Mineral Planning Authorities to identify future apportionments for aggregate production.

Aggregate minerals are made up of sand and gravel, Sherwood Sandstone and limestone and are used in the construction industry. Their main uses include concrete, mortar, asphalt, railway ballast and bulk fill.

The LAA sets out:

- Summaries of past aggregate production, number of active quarries and the distribution of the extracted mineral;-

- Future apportionment levels based on the NPPF 10 year average figure and comparison to past apportionment figures; and,-

- The key issues that could affect the future demand for aggregates over the next plan period.

Key Findings

Nottinghamshire is an important producer of sand and gravel and Sherwood Sandstone and has a large export market particularly to South Yorkshire and the wider East Midlands. Limestone production is limited with most imported from Derbyshire and Leicestershire.

Whilst aggregate mineral resources are present in the Nottingham City boundary, the opportunities to work these minerals are limited due to the built up nature of the area. As a result, all aggregates consumed in the city are supplied from either Nottinghamshire or further afield. At present no sites for potential aggregate working in the city are being promoted by the minerals industry.

The recession has seen output for all aggregate minerals fall significantly since 2007. This can be seen most dramatically with sand and gravel as output in 2009 fell to its lowest level since records began in 1974.

The latest 10 year average production figures have fallen for all aggregate minerals since the first LAA was compiled in 2011. The 3 year averages for sand and gravel and Sherwood Sandstone over the same period have seen a very small increase whilst average production for limestone has remained unchanged.

Based on current evidence it is not considered that there is a need to amend the demand forecast set out the emerging Minerals Local Plan as the 2011 LAA figures take account of both a period of economic growth and recession. Annual monitoring will be undertaken to ensure that adequate reserves are identified over the plan period.

Introduction

1.1 The requirement to prepare a Local Aggregates Assessment (LAA) was introduced through the publication of the National Planning Policy Framework (NPPF) in March 2012. The purpose of the LAA is to enable Minerals Planning Authorities (MPAs) to provide a steady and adequate supply by identifying local apportionments for all aggregate minerals in their area. These apportionment figures should be based on the last 10 years average production figures taking into account national and sub national guidelines on provision and any important local considerations.

1.2 More detailed guidance on LAAs was published by the Department for Communities and Local Government (DCLG) in October 2012 and adds the requirement to produce a 3 year average production figure in order to monitor future demand.

1.3 This LAA sets out the aggregate minerals found in the geographical area of Nottinghamshire including Nottingham City, the current situation in terms of annual output, number of active quarries and the amount of aggregate that will need to be provided over the plan period.

1.4 It is important to note that whilst aggregate mineral resources are present in the Nottingham City boundary, the opportunities to work these minerals are limited due to the built up nature of the area. As a result all aggregates consumed in the city are supplied from either Nottinghamshire or further afield. At present no sites for potential aggregate working in the city are being promoted by the minerals industry.

1.5 The information used in this LAA is supplied by the East Midlands Aggregate Working Party and relates to the period 1st January to 31st December 2013.

1.6 The Aggregates Working Party is made up of MPAs from across the region and industry representatives. Its role is to provide technical advice about the supply and demand for aggregates and undertake annual monitoring of aggregate production and levels of permitted reserves across the East Midlands. This information is supplied to MPAs and to the National Aggregate Co-ordinating Group to inform national aggregate provision.

1.7 The LAA is required to be updated on an annual basis, and will enable the County and City Councils to monitor on going patterns and trends in aggregate production and ensure that adequate reserves are maintained over the plan period.

Aggregates in Nottinghamshire and Nottingham City

2.1 Aggregates account for around 90% of minerals used in construction and are essential in maintaining the physical framework of buildings and infrastructure on which our society depends. Aggregates are usually defined as hard granular materials and include sand and gravel, Sherwood Sandstone and limestone. Their main uses include concrete, mortar, roadstone, asphalt, railway ballast, drainage courses and bulk fill.

Primary aggregates

2.2 Plan 1 illustrates the following primary aggregates that are found in the geographical area of Nottinghamshire and Nottingham.

Sand and gravel

2.3 Important alluvial (river) sand and gravel deposits are found in the Trent and the Idle Valleys which have made Nottinghamshire the largest sand and gravel producing area in the East Midlands. Limited extraction also occurs in glaciofluvial sand and gravel deposits near East Leake, south of Nottingham. Sand and gravel is mainly used in ready mixed concrete production, although Nottinghamshire's reserves are particularly valuable because they meet high strength concrete specifications as the gravel is made up of quartzite.

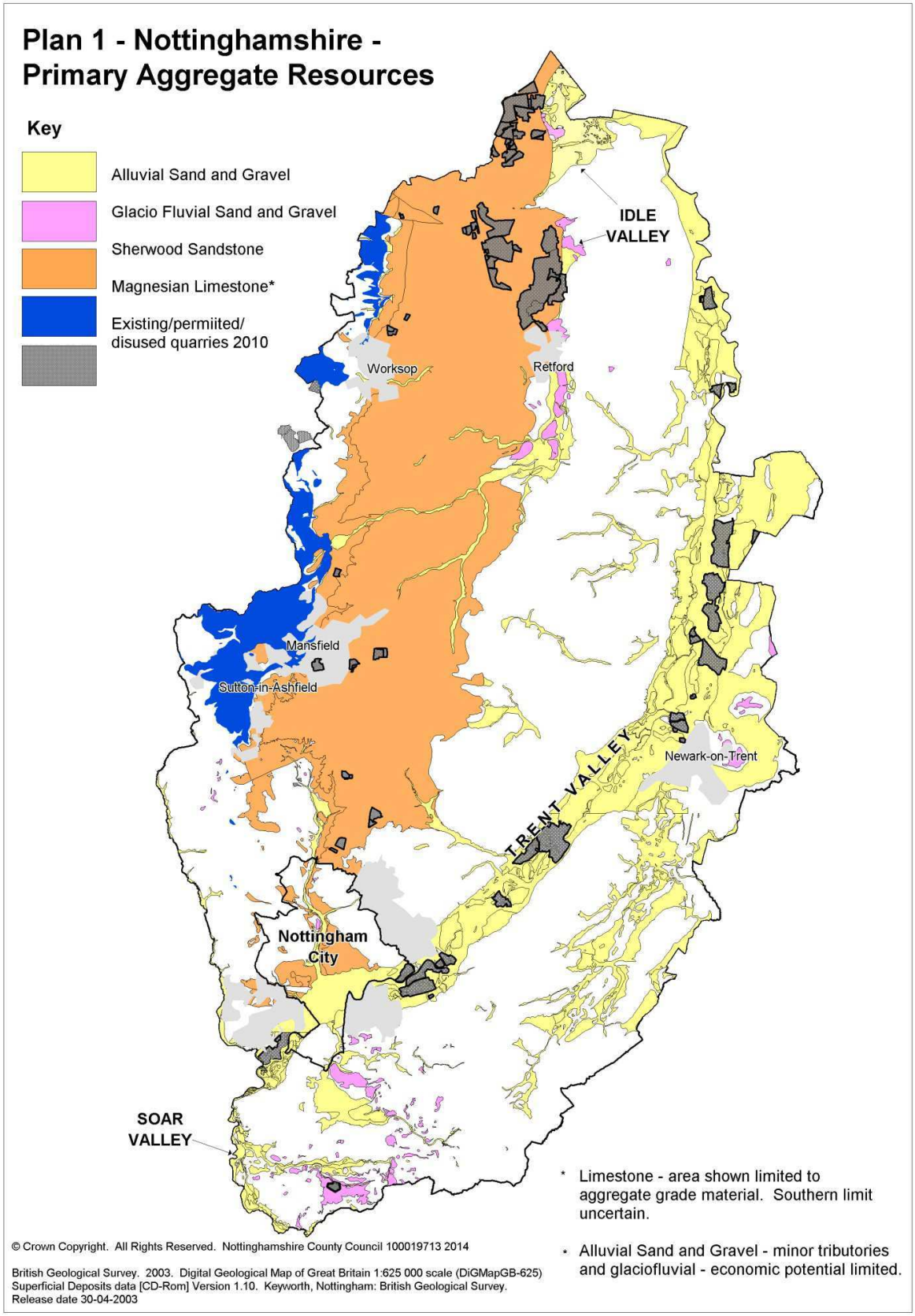
Sherwood Sandstone

2.4 Although defined as sandstone, this rock formation rapidly breaks down to sand when extracted. The sandstone occurs as a broad north-south belt stretching from the border with South Yorkshire, southwards to Nottingham. The mineral is mainly used to produce asphalting and mortar sand. There is relatively little overlap with the uses that the alluvial and glacial sand and gravels are put to. The Sherwood Sandstone is also used for non-aggregate industrial and other specialist end-uses.

Magnesian Limestone

2.5 This resource occurs as a relatively narrow belt to the west of the Sherwood Sandstone. This outcrop comprises the southernmost limits of the UK's second largest limestone resource that extends from the Durham coast through Yorkshire into Derbyshire and Nottinghamshire. Limestone suitable for use as an aggregate is only found in the Mansfield area and to the north where the mineral is used mainly as a road sub-base material although some mineral is of industrial grade quality. Production is relatively small scale and the lowest in the East Midlands. Around Linby the limestone is suitable for building and ornamental purposes, although aggregates can be produced as a by-product of utilising reject building stone.

Plan 1 - Nottinghamshire - Primary Aggregate Resources



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British Geological Survey. 2003. Digital Geological Map of Great Britain 1:625 000 scale (DiGMapGB-625) Superficial Deposits data [CD-Rom] Version 1.10. Keyworth, Nottingham: British Geological Survey. Release date 30-04-2003

Alternative aggregates

2.6 Alternative aggregates comprise secondary and recycled materials, although these terms are often used interchangeably. Recycled aggregates are materials that have been used previously and include construction and demolition waste, asphalt road planings and used railway ballast. Secondary aggregates are by-products of other processes that have not been previously used as aggregates. They include colliery spoil, china clay waste, slate waste, power station ashes, blast furnace and steel slag, incinerator ashes and foundry sands.

2.7 Alternative aggregates are currently most widely used in lower grade applications such as bulk fill. However, the range of uses is widening due to advances in technology and the increasing economic incentive to use them instead of primary aggregates.

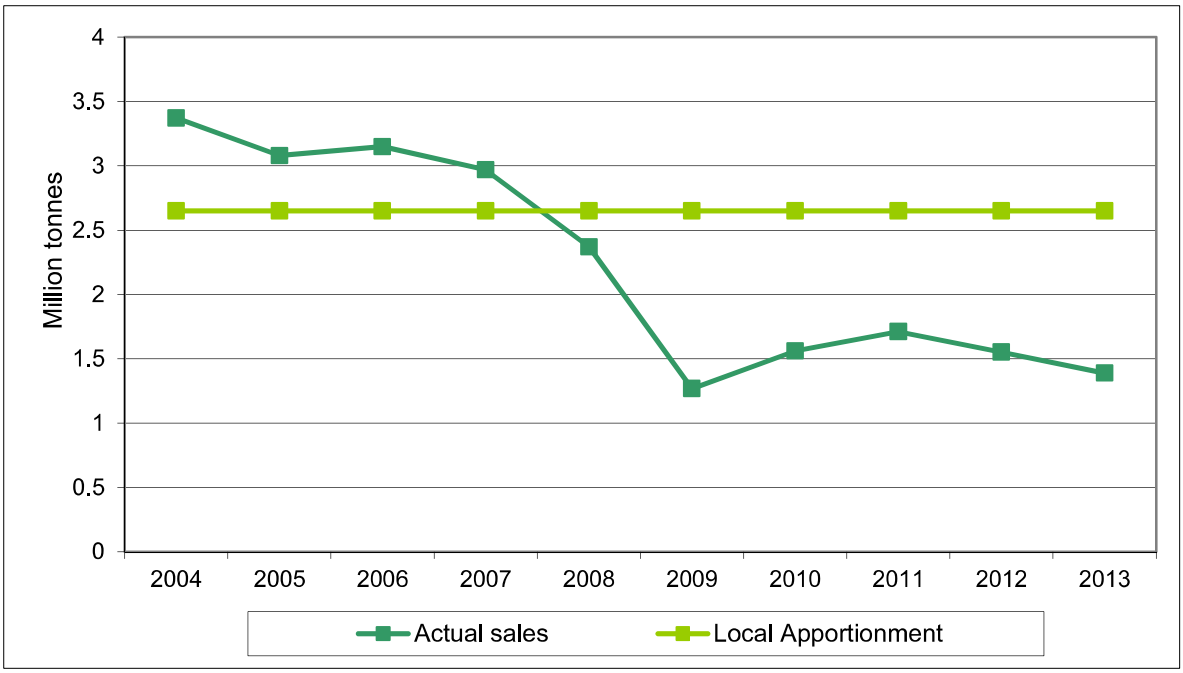
2.8 In Nottinghamshire, sources of alternative aggregates include construction and demolition waste, power station ash, river dredgings, road planings and rail ballast.

Local production

Sand and gravel

3.1 Production reached a peak of 3.37 million tonnes in 2004, well above the current apportionment of 2.65 million tonnes, before declining slightly over the following years. Production fell sharply from 2007 onwards (in line with the national output) to just 1.27 million tonnes in 2009, the lowest production figure since records began in 1973. This was a result of both the recession and production at Finningley quarry temporarily moving across the county boundary into Doncaster. Production increased slightly in 2010 and 2011as a result of extraction restarting at Finningley quarry and increased output elsewhere in the county before falling back to 1.39 million tonnes in 2013. See Figure 2 below.

Figure 2: Recent sand and gravel production, 2004-2013 (million tonnes)



Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Production (Million tonnes)	3.37	3.08	3.15	2.97	2.37	1.27	1.56	1.71	1.55	1.39

Resources and landbank

3.2 There are 12 permitted sand and gravel sites in Nottinghamshire although at present only 9 are being worked. As of December 2013 the landbank stood at 6.7 years equal to 17.8 million tonnes. This is slightly below the minimum 7 year landbank requirement set out in the NPPF.

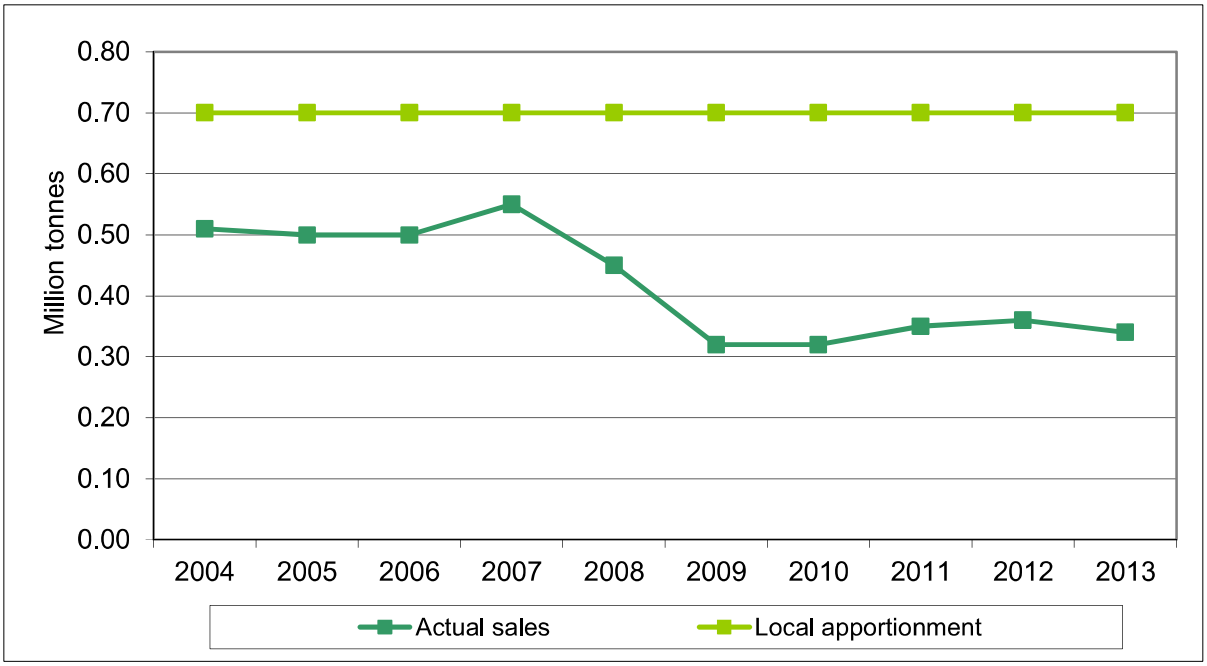
Table 1: Permitted sand and gravel quarries in Nottinghamshire

Site	Operator	Status
Langford Lowfields	Tarmac	Active
Girton	Tarmac	Active (working from stockpiles)
Besthorpe	Lafarge	Active
Sturton Le Steeple	Lafarge	Yet to be worked
East Leake	CEMEX	Active
Cromwell	CEMEX	Yet to be worked
Misson West	Hanson	Active
Misson Newington	Hanson	Active
Scrooby	Rotherham Sand & Gravel	Active
Mattersey	Rotherham Sand & Gravel	Dormant
Finningley	Lafarge	Active
Misson Bawtry Road	Rowley	Active

Sherwood Sandstone

3.3 Historically Sherwood Sandstone production has been much lower than sand and gravel production as it is generally used in different, more specialist markets. Production has slowly declined since the mid -1990s. Between 2004 and 2007 it remained relatively stable at around 0.5-0.6 million tonnes although still below the apportionment figure of 0.7 million tonnes. As with sand and gravel, output fell significantly from 2007 onwards to record lows of just 0.32mt in 2009 and 2010 as a result of the recession. Output has increased slightly since and stood at 0.34mt in 2013. See Figure 3 below.

Figure 3: Recent Sherwood Sandstone production, 2004-2013 (million tonnes)



Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Production (million tonnes)	0.51	0.50	0.50	0.55	0.45	0.32	0.32	0.35	0.36	0.34

Resources and landbank

3.4 There are seven permitted Sherwood Sandstone quarries (Table 2) although at present only six are being worked. As of December 2013 the landbank stood at 8.6 years equal to 6 million tonnes. This is above the minimum 7 year requirement.

Table 2: Permitted Sherwood Sandstone quarries in Nottinghamshire

Site	Operator	Status
Burntstump	Tarmac	Active
Bestwood 2	Tarmac	Active
Carlton Forest	Tarmac	Active
Ratcherhill	Mansfield Sand Company	Active
Rufford	Welbeck Estates	Active
Scrooby Top	Rotherham Sand & Gravel	Active
Serlby	Rotherham Sand & Gravel	Dormant

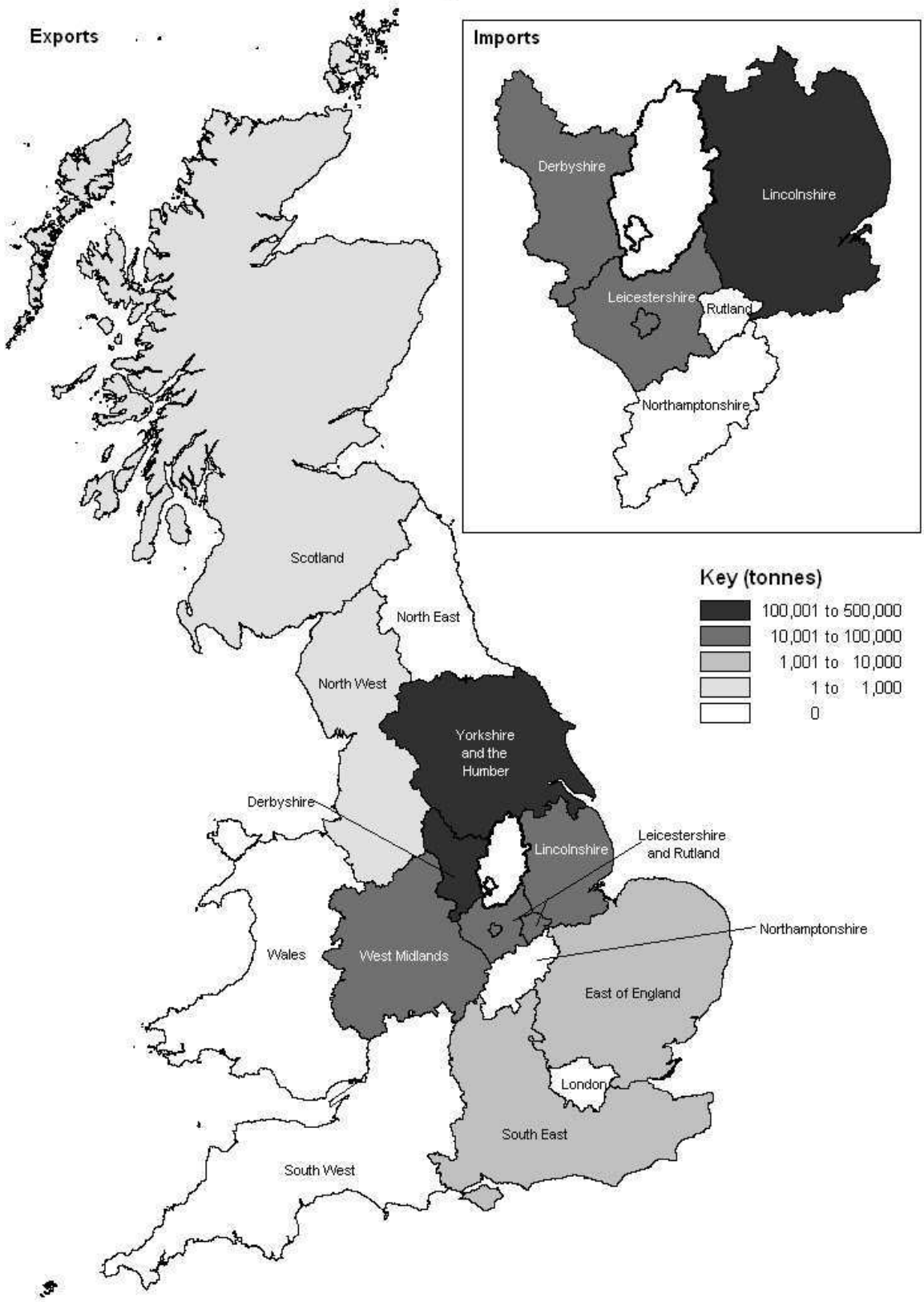
Imports and exports of sand and gravel (including Sherwood Sandstone)

3.5 Imports and exports of aggregates are only recorded in the full surveys undertaken by the East Midlands Aggregate Working Party (EMAWP), with the last full survey being 2009. This survey does not include a breakdown for Sherwood Sandstone, hence all sand and gravel import and export figures in this report include Sherwood Sandstone.

3.6 Imports of sand and gravel (including Sherwood Sandstone) from the East Midlands are very small in comparison to the amount extracted from the County's own quarries (250,000 tonnes compared to 1.60 million tonnes in 2009). It is likely that these imports supply markets close to the county boundary.

3.7 In 2009 52% of the sand and gravel (including Sherwood Sandstone) extracted in Nottinghamshire was exported out of the county (comprising of 22% to the East Midlands and 30% elsewhere). This is in part due to the high strength quartzite gravel that meets the specifications for making high strength concrete. The main export markets are South Yorkshire and neighbouring authorities in the East Midlands although some is transported a much greater distance. See Figure 4 below.

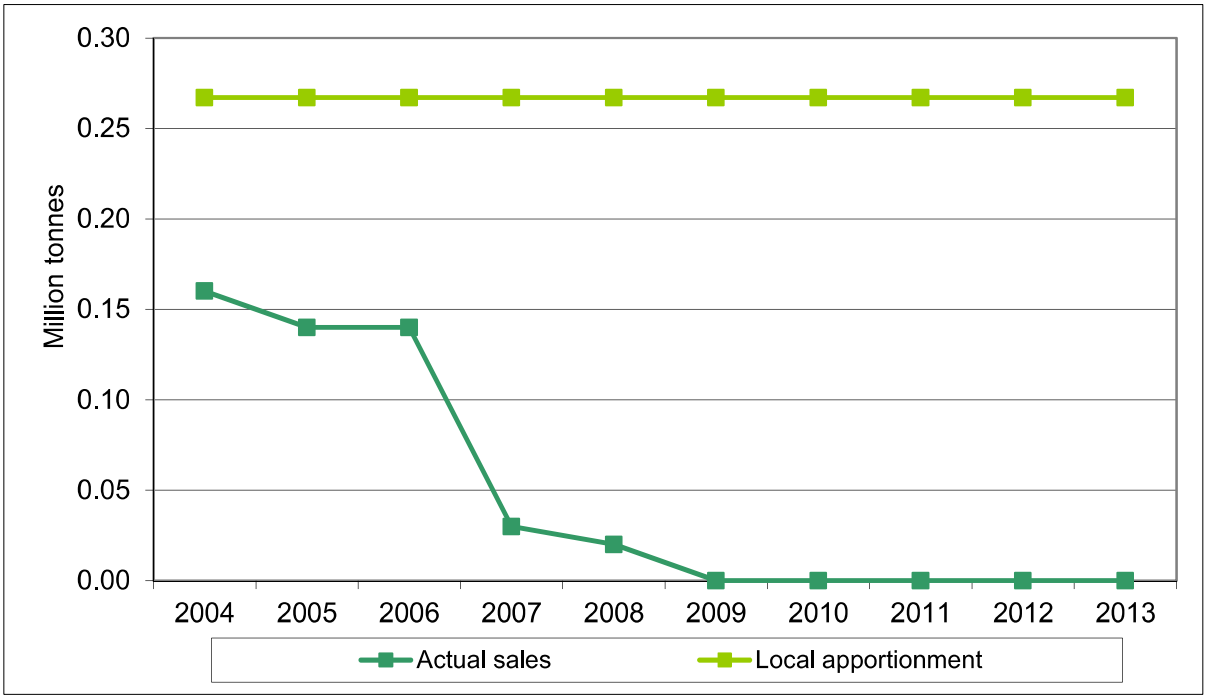
Figure 4: Sand and gravel (including Sherwood Sandstone) imports and exports, 2009 (tonnes)



Aggregate Limestone

3.8 Limestone production in Nottinghamshire has been low by regional standards. Production over the last 10 years has been well below the apportionment figure of 0.26 million tonnes. Production fell sharply from 2006 onwards, and from 2009 output was recorded as zero. See figure 5 below.

Figure 5: Recent aggregate limestone production, 2004-2013 (million tonnes)



Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Production (million tonnes)	0.16	0.14	0.14	0.03	0.02	0.0	0.0	0.0	0.0	0.0

Resources and landbank

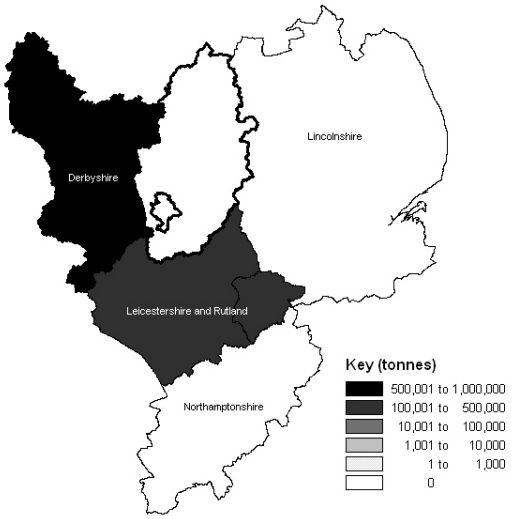
3.9 Nottinghamshire only has one dedicated aggregate limestone quarry (at Nether Langwith) and is only worked seasonally as it serves as a satellite to a much larger quarry in Derbyshire. Some aggregate is also produced from reject stone at a building stone quarry although this tonnage is small. As of December 2013 the landbank stood at 12.5 years, above the minimum of 10 years however if this was based on actual production the landbank would be significantly higher.

Imports and exports of aggregate limestone

3.10 Limestone resources in Nottinghamshire and Nottingham are relatively limited therefore the majority of limestone used is imported from Derbyshire and Leicestershire (see

Figure 6). No mineral was exported at the time of the 2009 East Midlands Aggregate Working Party survey.

Figure 6: Aggregate limestone imports, 2009 (tonnes)



Alternative aggregates

3.11 Production figures for alternative aggregates are limited to national estimates. Since 1980 there has been a significant increase in annual alternative aggregate production in Great Britain, rising from 20 million tonnes to 71 million tonnes by 2007. It has since fallen back to around 55 million tonnes in 2012[1] however this is likely due to the recession and a wider fall in aggregate production. It is estimated that alternative aggregates currently make up around 25-30% of aggregate use, three times higher than the European average. Current forecasts for the East Midlands suggest an annual production of 6.8 million tonnes per annum up to 2020[2].

3.12 Local data for alternative aggregates is very limited however the main types of alternative aggregates in Nottinghamshire are set out below:

Power station ash

3.13 Nottinghamshire has three power stations which produce furnace bottom ash and pulverised fuel ash. In total around 1.7 million tonnes of ash is produced each year[3]. The main use is in the production of building blocks, cement or as a secondary aggregate.

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[1] Minerals Products Association – Sustainability Development Report 2013

[2] East Midlands Aggregate Working Party - Annual Survey and Report 2011

[3] East Midlands Aggregate Working Party - Annual Survey and Report 2011

Construction and demolition waste

3.14 National estimates suggest that around 80-90% of construction and demolition waste is re-used or recycled, a large proportion of which usually occurs on site within the same development using mobile processing plants.

3.15 There are no local figures but estimates suggest that around 1 million tonnes was produced in 2010/11. There are also a number of permanent recycling facilities that have a total capacity of around 500,000 tonnes per annum[4].

Used rail ballast crushing

3.16 Worn out rail ballast is taken by rail to recycling centres for crushing into aggregate. As this material comprises high quality limestone or granite it can be re-processed for high-grade uses. In Nottinghamshire there is a railway ballast recycling centre at Toton railway sidings in Stapleford with an annual output of around 100,000 tonnes[5].

3.17 Further information is included in the background paper on alternative aggregates and also in the Nottingham and Nottinghamshire Waste Core Strategy documents.

[4] Environment Agency, Environmental Permit throughput data for aggregate recycling facilities, 2010 Waste Data Interrogator

[5] Environment Agency, Environmental Permit throughput data for aggregate recycling facilities, 2010 Waste Data Interrogator

Future Aggregate Provision

4.1 In order to provide a steady and adequate supply of aggregates over the plan period, the NPPF states that future apportionments should be based on the last 10 years average production taking into account national and sub national guidelines and any important local considerations.

National and Sub-National Aggregate Guidelines

4.2 Prior to the introduction of the NPPF, the supply of land-won aggregates in England was based on national and sub national guidelines for aggregates provision published by DCLG. The most recent guidelines covering the period 2005-2020 were published in 2009.

4.3 The East Midlands Aggregate Working Party used these guidelines to produce draft apportionment figures for each MPA. The figures were then approved by the East Midlands Regional Assembly in 2010 and were to be incorporated into the Regional Plan via the review process. However due to the abolition of the Regional Spatial Strategy the figures were never adopted.

4.4 It was decided at the Aggregate Working Party meeting in February 2013 that the draft 2009 figures are now considered out of date as they were only based on aggregate output from a period of economic growth, and should, therefore, not be taken into account when determining the new apportionment figures.

Future monitoring

4.5 Demand will be reviewed annually through the LAA using the 3 and 10 year averages as the key evidence base specifically monitoring trends, annual monitoring of the Local Plan will also take place based on the updates to the LAA and if required early review may be necessary.

Sand and gravel provision

4.6 By far the greatest planning issue for Nottinghamshire and Nottingham is the long term provision of sand and gravel over the plan period. Ensuring that the correct apportionment is identified will enable adequate provision to be made without resulting in overprovision and the unnecessary allocation of sites.

4.7 Based on the most recent data from 2013, the 10 year average figure stands at 2.24 million tonnes. This figure has steadily fallen since the first figures were collated for the 2011 LAA and reflects the current ongoing recession. The three year figure stands at 1.55 million tonnes, a slight increase on the 2011 figure but a slight fall from 2012. Table 3 sets out the average production figures.

Table 3: Sand and Gravel average production figures

	2011	2012	2013
10 year average production (million tonnes)	2.58	2.43	2.24
3 year average production (million tonnes)	1.51	1.61	1.55

Resource depletion in the Idle Valley

4.8 The Idle Valley, located in the north of the County has a long history of sand and gravel extraction. Traditionally a large proportion of this has supplied markets in South Yorkshire and Humberside due to its close proximity and limited mineral reserves elsewhere.

4.9 Resource depletion is now starting to limit output, and over the last 10 years the number of active quarries has fallen from 9 to 6. This has seen capacity fall from around 1.5 million tonnes in 2003 to around half in 2013. Some of the loss in capacity is due to the delay in implementing the permitted quarry at Sturton Le Steeple.

4.10 The Minerals Local Plan - Preferred Approach document published in October 2013 identified 6 potential new site allocations in the Idle Valley / North Nottinghamshire. This is made up of 2 new sites at Barnby Moor and Botany Bay and 4 extensions to existing sites at Finningley, Bawtry Rd North, Scrooby North and Scrooby South. The potential allocations identified are the total extent of all those put forward by the industry as part of the call for sites.

4.11 The impact of resource depletion in the Idle Valley on the South Yorkshire and Humber markets is discussed further in the following chapter.

Marine won sand and gravel

4.12 Marine won sand and gravel is not used in Nottinghamshire due to the availability of locally sourced land won material and the high costs involved in transporting the mineral long distances. It is therefore assumed that marine sources are not a significant issue for Nottinghamshire and will therefore not form part of this assessment.

Sherwood Sandstone provision

4.13 Sherwood Sandstone production is much lower than sand and gravel and historically has been in steady decline. This along with the drop in sales due to the recession is reflected in the 10 year average figure of 0.42 million tonnes. The 3 year average figure is 0.35 million tonnes. Table 4 sets out average production figures.

Table 4: Sherwood Sandstone average production figures

	2011	2012	2013
10 year average production (million tonnes)	0.46	0.44	0.42
3 year average production (million tonnes)	0.33	0.34	0.35

No additional specific local factors have been identified when considering the future apportionment for Sherwood Sandstone.

Limestone provision

4.14 Limestone is only worked from one quarry in Nottinghamshire and production has been very low due to the seasonal working of the site and abundance of limestone worked in Derbyshire and Leicestershire.

4.15 The 10 year average figure is 0.08 million tonnes which reflects the higher output levels earlier in the 10 year period. The 3 year average figure is 0.03 million tonnes and reflects the very low levels of extraction in recent years. See Table 5.

Table 5: Limestone Apportionment

	2011	2012	2013
10 year average production figure (million tonnes)	0.08	0.06	0.05
3 year average production figure (million tonnes)	0.00	0.00	0.00

Future provision

A pre-cast concrete factory was built near Worksop in 2009 and produces concrete structures on site for delivery and installation at construction sites. The factory uses crushed limestone as part of the production process.

Consumption has steadily increased since the factory was commissioned but remains relatively modest at around 40,000 tonnes per annum. The only limestone quarry in Nottinghamshire is currently mothballed so the factory is likely to be supplied from the nearby Whitwell quarry in Derbyshire.

If demand from the factory significantly increases in the future it could be necessary to review the apportionment but this will be identified through regular monitoring.

Future Growth

National Infrastructure Projects identified for Nottinghamshire

5.1 No new projects other than those identified previously (NET Phase 2 and A453 widening) are included through the National Infrastructure Plan 2013. The NET expansion will be completed in 2015 and will not impact on demand over the new plan period, unless further new lines are proposed. Work on the A453 is underway and is expected to be completed by summer 2015. Looking to the future the High Speed 2 line (HS2) phase two is proposed to pass along the western boundary of the county. At this stage it is difficult to identify an exact start date or indeed the exact amount of mineral that would be required for the project. However progress will be monitored through future LAAs.

Population forecasts

5.2 The population of Nottinghamshire (the geographic County, including Nottingham City) is expected to grow over the next 15 years at a rate of around 13%. This equates to approximately 7.8% over the next 10 year period and is directly comparable to previous population growth over the period of 2003-2012 (10 years) of 6.5% This development is likely to be focused around the existing major urban areas of the Nottingham conurbation, Newark and Mansfield, however it is difficult to make direct comparisons between population growth and minerals use.

House building

5.3 Nottingham City and the District/Boroughs throughout the County are at different stages of their Local Plan preparations, however, all have identified their future housing requirements set out over different time periods. Planned house-building rates for the area are estimated at 4,450 dwellings per annum. See table 6. Average completions over the last ten year period have been 3,370, peaking at 4,839 in 2005/2006. See figure 7

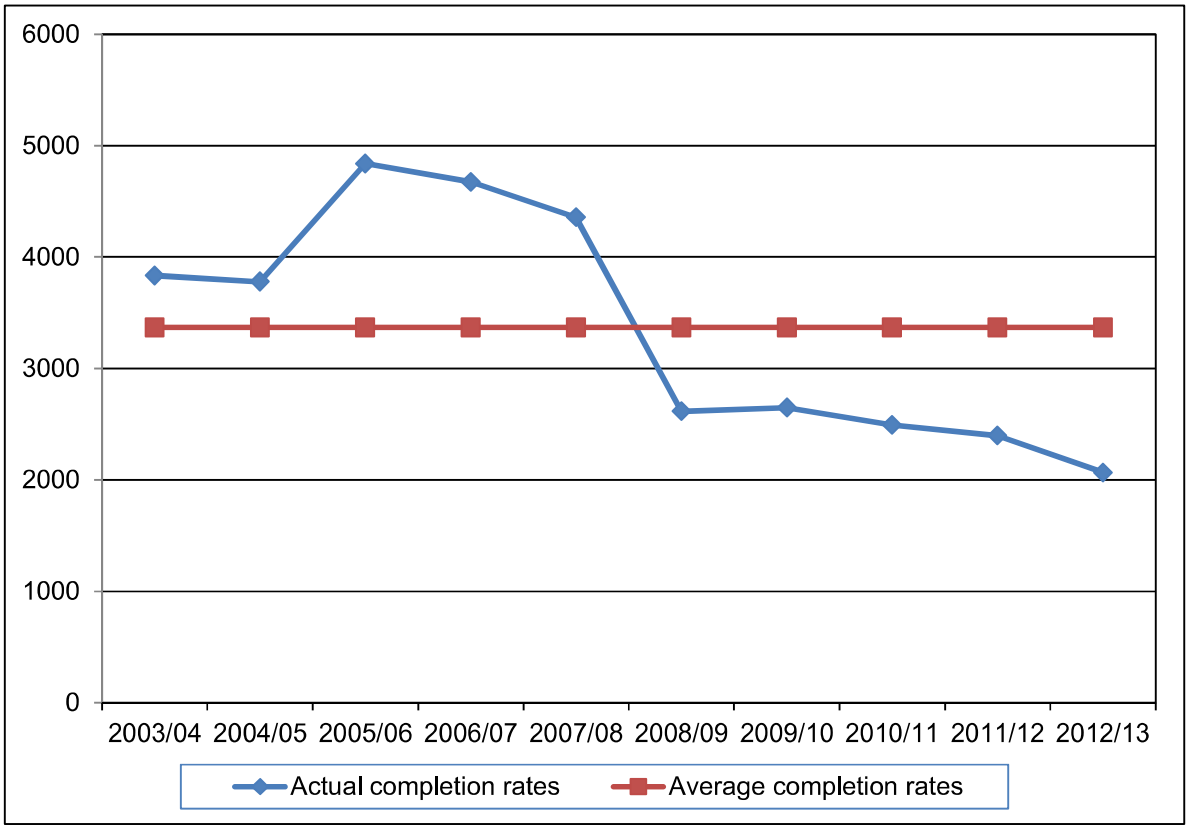
Table 6: Future house building rates per annum

District/Borough	Requirement	Requirement (per annum)
Ashfield District Council	7,094 dwellings (2010-2023)	545 dwellings
Bassetlaw District Council	6,384 dwellings (2010-2028)	350 dwellings
Broxtowe Borough Council	6,150 dwellings (2011-2028)	362 dwellings
Gedling Borough Council	7,250 dwellings (2011-2028)	426 dwellings
Mansfield District Council	7,820 dwellings (2011-2031)	391 dwellings

Newark and Sherwood District Council	14,800 dwellings (2006-2026)	740 dwellings
Nottingham City Council	17,150 dwellings (2011-2028)	1,009 dwellings
Rushcliffe Borough Council	13,150 dwellings (2011-2028)	773 dwellings
	TOTAL	**4,596 dwellings**

5.4 Depending on future local economic conditions, housing completions are expected to increase over the life of the plan period, however there is some uncertainty regarding the potential achievement of the planned housing completion rates. As with sand and gravel production, the 10 year average completion figures provide a useful insight into likely completion rates as it takes in to account both a period of significant growth as well as the period of recession.

Figure 7: Housing completions 2004-2013



5.5 It is also important to note that whilst house building uses a significant amount of aggregates, the Minerals Product Association estimate that new house building only makes up approximately 20% of overall aggregate use and therefore is only part of the equation when considering future demand.

Future demand from Doncaster MBC

5.6 As mentioned earlier, Nottinghamshire has historically supplied a large proportion of sand and gravel to the South Yorkshire and Humberside markets particularly from the Idle Valley. The most recent Aggregate Working Party full survey undertaken in 2009 estimated that approximately 30% of Nottinghamshire's output was transported to South Yorkshire and Humberside markets. The export figure of around 30% is comparable to the previous full survey undertaken in 2005. As such 30% of Nottinghamshire's output based on the adopted apportionment figure of 2.65 million tonnes is 795,000 tonnes per annum.

5.7 The Rotherham and Doncaster Local Aggregates Assessment 2013 identifies a shortfall of 6.65 million tonnes over the life of their plan (17 years) that they are unlikely to be able to fully meet in the long term. However with a landbank equivalent to 5.6 years (2010) short term output is likely to be sustained. The shortfall over the 17 years equates to an annual expected output of 391,000 tonnes per annum.

5.8 Given that Nottinghamshire has traditionally supplied sand to the South Yorkshire and Doncaster area at a much higher level, the identified shortfall is unlikely to be completely new demand that Nottinghamshire would have to meet on top of the existing supply. Bearing in mind the above, it is likely that in the short term, output from the Idle Valley/north Nottinghamshire will be maintained at current levels from permitted reserves.

5.9 A permitted but unused quarry at Sturton Le Steeple with an estimated output of 500,000 tonnes per annum has yet to be worked by the operator presumably due to lack of demand. If opened this quarry would provide a valuable long term source of sand and gravel to supply North Nottinghamshire and the South Yorkshire and Humber markets. The operator has informed the County Council that this site is likely to be opened in 2017 and has a life of approximately 20 years. In addition for the medium term the Minerals Local Plan Preferred Approach document published in October 2013 identifies a number of potential allocations in the Idle Valley.

5.10 Longer term, output from the Idle Valley is likely to fall as the remaining reserves are used up and will be monitored through the LAA process. If sand and gravel from Nottinghamshire continues to supply this market in the longer term it would need to be sourced from the Trent Valley close to Newark, a significantly greater distance from the markets. In this scenario other resources outside of Nottinghamshire may start become increasingly viable, however at this stage it is difficult to predict the extent of this. It is important to note the LAA is reviewed annually and an Annual Monitoring Report is prepared by the County Council to monitor the effectiveness of the Local Plan, if a shortfall in provision is identified, then early review of that element of the Plan will be necessary.

5.11 A memorandum of understanding has been signed between Nottinghamshire County Council and Doncaster MBC which identifies the above issues and states that provision from Nottinghamshire will continue in the short term however long term reserves are less certain. Further agreements/discussions will be required in the future.

Conclusion

6.1 The NPPF set out the requirement for Mineral Planning Authorities to calculate their own aggregate apportionments through a Local Aggregates Assessment based on the past 10 year average sales and other relevant local information. This is a departure from the previous apportionment methodology which was based on national and sub national guidelines published by Central Government.

6.2 The recession has seen aggregate output at a local and national level fall significantly since 2007. In Nottinghamshire this can be seen most dramatically with sand and gravel output in 2009 which fell to its lowest level since records began.

6.3 The provision of sand and gravel is the biggest issue for Nottinghamshire and Nottingham over the plan period with resource depletion in the Idle Valley is likely to be the biggest factor potentially influencing exports to South Yorkshire. The extent of the impact will depend on the level of demand (due to the economic conditions) over the plan period, but it is likely that sand and gravel will either be sourced from quarries around Newark or from other markets beyond Nottinghamshire to meet demand which could affect the amount of mineral being provided.

6.4 Sherwood Sandstone production is much lower than sand and gravel and over the plan period no specific issues have been identified.

6.5 Limestone production is very low due to the limited reserves however demand in the County could increase in the future due to the recently built pre-cast concrete factory. Although the only permitted quarry in Nottinghamshire is currently mothballed, reserves at the quarry are likely to be sufficient for the plan period. Significant reserves are also available at Whitwell quarry which, although in Derbyshire, is in easy reach of the factory.

6.6 The construction of the NET Phase 2 and the A453 widening will be completed by the time the Minerals Local Plan is adopted. Longer term, the proposed route of the HS2 could increase demand for aggregates, however the timetable for this is unclear at present. An increase in house building is likely from that seen during the economic downturn however, the overall the rate of housing completions is likely to be similar to the average rate experienced over the past 10 years. Previous levels of higher housing completions are also reflected in 10 year average sales figures.

6.7 The latest 10 year average production figures have fallen for all aggregate minerals since the first LAA was compiled in 2011. The 3 year averages for sand and gravel and Sherwood Sandstone over the same period have seen a very small increase whilst average production for limestone has remained unchanged.

6.8 Based on current evidence it is not considered that there is a need to amend the demand forecast set out in the emerging Minerals Local Plan as the 2011 LAA figures on which it is based takes account of a period of economic growth and recession and allows for flexibility to support short term economic growth.

6.9 This is particularly the case for sand and gravel as the 2011 LAA figure of 2.58 million tonnes is 66% higher than the most recent 3 year average figure of 1.55 million tonnes and 15% higher than the most recent 10 year average figure of 2.24 million tonnes.

6.10 This LAA will be monitored annually alongside the annual monitoring of the Minerals Local Plan (when adopted). The monitoring of the levels of demand from significant new infrastructure projects will also be key and will be undertaken through the annual review of the LAA. This will ensure that there is an adequate and steady supply of aggregate minerals provided over the plan period and that any fluctuations in future requirements can be addressed.