

Provision of Primary Minerals

~~3.76 The MPA is required to plan for a steady and adequate supply of aggregates. This Plan provides the framework for identifying new mineral sites to meet these requirements and the landbank provides the mechanisms for securing and maintaining mineral supplies at the County level. They work by reflecting the time taken to obtain planning permissions and bring sites into production. The extent of the landbank provides a useful indicator for deciding when new permissions for extraction are required. The approach to future SARS provision across Essex will also need to have regard to the aims and objectives of any Enterprise Zone and supporting Local Development Orders which facilitate the delivery of sector focused industries.~~

3.76 The NPPF requires the MPA to plan for a steady and adequate supply of aggregates by:

- Preparing an annual 'Local Aggregate Assessment' based on a rolling average of 10 ten-years sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources),
- Taking part in the operation of the relevant Aggregate Working Party (East of England AWP) and taking the advice of the Working Party into account when preparing the Local Aggregate Assessment,
- Making provision for land-won and other elements of the Local Aggregate Assessment in the Mineral Minerals Local Plan, having taken into account the advice of the Aggregate Working Party and the National Aggregate Coordinating Group, and
- Taking account of the latest published National and Sub-National Guidelines on future provision and using this guideline when planning for future aggregate demand and supply.

Within Essex, the only aggregate that needs to be provided for is sand and gravel. This Plan provides the framework for identifying new mineral sites to meet these requirements.

National policy on landbanks

3.77 The landbank provides the mechanism for securing and maintaining mineral supplies at the County level. The role of the landbank is to reflect the time taken to obtain planning permissions and bring sites into production. The extent of the landbank provides a useful indicator for deciding when new permissions for extraction are required. A 'landbank' is a current a stock of mineral reserves with planning permissions permission for extraction. for the winning and working of minerals into the future. The size of a landbank is measured in terms of a number of years. It is calculated by working out:

- The total capacity (in tonnes) of all permitted mineral reserves with planning permission, and then,
- Dividing this total capacity by the annual rate of mineral supply provision (in tonnes per year) proposed in this Plan for the plan-period, and then,
- Expressing this calculated figure in terms of years' equivalent (e.g., the landbank is 8.4 years).

3.78 Policies providing for the maintenance of sufficient landbanks are an important

feature of this Plan. They enable the minerals industry to respond to changes in market demand and also provide a secure long-term, steady and adequate supply of permitted mineral reserves to justify capital investment in plant, machinery and manufacturing capacity. They also enable the wider planning and environmental consequences of long-term provision to be considered in an orderly, timely and effective way through periodic reviews of this Plan.

3.79 The NPPF provides guidance instruction on the minimum length of mineral sand and gravel landbanks, as follows:

3.80 ~~Aggregate minerals~~

- At least a seven-year landbank for sand and gravel, ensuring that the capacity of operations to supply a wide range of materials is not compromised. Longer periods may be appropriate to take account of the need to supply a range of aggregates, locations of permitted reserves relative to markets and productive capacity of permitted sites.
- Ensuring that large landbanks bound up in very few sites do not stifle market competition.



3.81 ~~Industrial minerals~~

- At least ten years for individual silica sand sites; or at least fifteen years for silica sand sites where significant new capital is required.
- At least 25 years for brick clay.
- Where relevant, take account of the need for the provision of brick clay from a number of different sources to enable appropriate blends to be made.

The Plan's approach to landbanks

~~3.80 3.82~~ The Plan maintains a single County-wide landbank of at least seven years for sand and gravel based on plan provision up to 2029 ~~and also site-specific landbanks of at least ten years for silica sand (at Martells Quarry, Park Farm, Ardleigh) and at least 25 years for brick clay (to serve both Bulmer Brickfield and Marks Tey, respectively).~~ It is considered unnecessary and impractical to maintain separate landbanks for County sub-areas or to distinguish between building sand and concreting aggregates, ~~although further monitoring of building sand will be undertaken to establish whether this situation needs to be reviewed.~~

~~3.81 3.83~~ As of 31 December 2011, the combined Essex and Thurrock updated landbank for sand and gravel was 8.3 years. Planning permissions secured on the Preferred Sites identified in this Plan will increase the permitted landbank which otherwise decreases through sales of the aggregate.

~~3.82 3.84~~ The Plan will be monitored annually and regularly reviewed every five years to ensure that the Essex sand and gravel landbank is maintained to at least seven years throughout the plan period to 2029. This will be monitored through the Annual Authority Monitoring Report (AMR) and annual Local Aggregate Assessment (LAA), which includes a rolling ten-year average assessment of sand and gravel sales. ~~Where the landbank falls below seven years there will be an opportunity to bring Reserve Sites forward for extraction. In addition a five yearly plan review will be undertaken as part of a “plan, monitor, and manage” approach, or if the landbank shows signs of falling below the seven years’ requirement, whichever comes sooner (see policy IMR1). The proposed annual monitoring and the commitment to a five yearly Plan review provides sufficient flexibility in the Plan, removing the need to plan for further additional resources at the end of the plan period which may potentially amount to over provision contrary to the Minerals Supply Hierarchy. A second trigger is also in place; should the AMR show that minimum landbanks are not being maintained (of at least seven years for sand and gravel, ten years for silica sand or 25 years for brick clay – see Policy S7), the MPA will explicitly consider whether an early review of the MLP is required or whether there are mitigating circumstances, and publish the conclusion in the AMR.~~

National guidelines on aggregate supply provision *Ensuring a Steady and Adequate Supply of Minerals is Made in Essex*

~~3.85~~ The NPPF requires the MPA to plan for a steady and adequate supply of aggregates by:

- ~~Preparing an annual ‘Local Aggregate Assessment’ 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);~~
- ~~Taking part in the operation of the relevant Aggregate Working Party (East of England AWP) and taking the advice of the Working Party into account when preparing the Local Aggregate Assessment;~~
- ~~Making provision for land won and other elements of the Local Aggregate Assessment in the Mineral Local Plan, having taken into account the advice of the Aggregate Working Party and the National Aggregate Coordinating Group;~~

- Taking account of the published National and Sub-National Guidelines on future provision, and using this guideline when planning for future aggregate demand and supply.

Sub-National Aggregate Apportionment

3.83 ~~3.86~~ The 'National and Sub-National Guidelines for Aggregates Provision in England 2005-2020' (DCLG, June 2009) set out how much aggregate should be provided for in each of the English sub-national areas up to 2020. This Plan was adopted in 2014 and was subject to the provisions of these guidelines during its preparation and for approximately half of its lifetime. However, these guidelines have since expired and were no longer appropriate to be used as a basis for forecasting future mineral need as part of the Review of the Plan. As set out previously, the NPPF requires the MPA to plan for a steady and adequate supply of aggregates by preparing an annual 'Local Aggregate Assessment' based on a rolling average of ten-years sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources). For the East of England, the following million tonnes to 2020 are required.

3.84 After sub-division of the East of England apportionment as set out in the aforementioned National and Sub-National Guidelines down to the MPA level by the East of England Aggregate Working Party, Essex was apportioned 4.31 mtpa of sand and gravel. The Essex provision figure of 4.31 mtpa for sand and gravel equated to a total plan provision of 77.58 mt over the 18-year plan-period of 2012-2029 inclusive (excluding existing permissions). After deductions for existing permitted reserves at the base date (36.034 million tonnes at 31 Dec 2011 for Essex only reserves and excluding estimated reserves of 0.98mt for Thurrock) and deducting new permissions granted since 1 January 2012 (0.88mt from 2 sites) the planning requirement for primary extraction from new site allocations in Essex was set at 40.67 million tonnes. This requirement was accommodated through site allocations made through the first iteration of this Plan.

3.85 Following the expiration of the National and Sub-National Guidelines during the MLP Review, recourse was made to previous sand and gravel sales to forecast any additional provision that may be needed to ensure a steady and adequate supply of sand and gravel to the end of the Plan period. Information on aggregate sales is collected by the MPA annually for use in Local Aggregate Assessments. As set out in background papers supporting the MLP Review, it was considered appropriate to adopt a new plan apportionment of 3.74 mtpa for sand and gravel, which equated to an average of the previous ten years of sales plus 20%.

3.86 When taking into account existing permitted reserves, applications within the planning system and those existing allocations that had yet to come forward at the time that a new plan provision figure was proposed in 2021, a minimum of 8.67mt of sand and gravel was calculated to be required to support provision to the end of the Plan period and ensure the maintenance of a seven-year landbank. This needed to be found through additional site allocations. A Call for Sites was initiated as part of the Review and additional sites allocated following adoption of this amended Plan.

3.87 Those sites allocated through the original adoption of the Plan in 2014 as well as those added through the MLP Review are set out in Policy P1, Table 5.

Table 3. 2005 – 2020 Guidelines for Sub-National Apportionment in the East of England (million tonnes)

Guidelines for land-won production			Key assumptions:	
Land-won sand & gravel	Land-won crushed rock	Marine sand & gravel	Alternative materials	Net imports to England
236	8	14	117	7

Notes:

1. Marine dredged sand and gravel is to be supplied to the extent that environmentally acceptable sources can be identified and exploited, within the principles of sustainable development.

2. Alternative materials include recycled construction and demolition waste.

3.87 These sub-national supply guidelines for land-won sand & gravel were apportioned to the individual mineral planning authorities within the East of England. This process was completed by the former Regional Planning Body (the East of England Regional Assembly) on the advice of the East of England Aggregate Working Party (EEAWP). The latter comprises representatives from each of the mineral planning authorities (MPAs) in the East of England, including Essex, as well as industry representatives.

3.88 There is no EEAWP apportionment available for either land-won crushed rock or alternative materials. The crushed rock resource in the East of England is very limited and is not of sufficient high quality for it to be economic to transport any significant distance. As such, it is not considered a truly regional resource and Essex does not have any local resource of sufficient economic significance (see Part 3, Spatial Portrait). The EEAWP was unable to apportion 'alternative materials' within the region due in part to the limited data available.

3.89 The Greater Essex land-won sand and gravel provision figure of 4.45 mtpa has been divided as follows:

- 4.31 mtpa to Essex, and;
- 0.14 mtpa to Thurrock.

3.90 For information, Southend-on-Sea is unable to make a contribution to the Greater Essex mineral supply because of its tightly defined and built-up administrative area and lack of mineral resource.

3.91 In summary, this sub-national apportionment process has been approved by the EEAWP and the former East of England Regional Assembly (March 2010), with the appropriate Greater Essex MPA shares having been subsequently agreed between Essex County Council and Thurrock Council.

Land Won Sand and Gravel Sales

3.92 Information on aggregate sales is collected on an annual basis for all MPAs in the East of England by the AWP, and this information is included in individual MPA Annual Monitoring Reports and Local Aggregate Assessments.

3.93 The Greater Essex Local Aggregate Assessment includes the latest ten-year rolling average of aggregate sales for the period 2002-2011, recorded as 3.76 mtpa for Greater Essex (Essex, Southend-on-Sea and Thurrock). This is below the 3.9mtpa recorded across Greater Essex for the period 2001-2010, and below the Greater Essex

apportionment figure of 4.45 mtpa.

~~3.94 Between 2001-2007 when the economy was more buoyant, the sales of sand and gravel regularly exceeded 4mtpa. Lower figures have been reported from 2008 onwards, reflecting the economic recession and the consequent fall in construction activity, and this has acted to reduce the ten-year rolling average figure. Paragraph 174 of the NPPF makes it clear the Plan should 'facilitate development throughout the economic cycle.' As such, basing future mineral provision on recessionary levels of sales would in effect be planning for a continuation of the current recession and this would be contrary to the national growth agenda that this Plan must support.~~

Plan provision for future sand and gravel extraction

~~3.95 This Plan has therefore been prepared to provide 4.31mtpa of sand and gravel over the plan period, to be provided by existing sites with permission as well as Preferred and Reserve Sites proposed by the Plan. The 4.31mtpa provision figure for the County is consistent with the sub-national aggregate apportionment figure and with the current stance of the East of England Aggregates Working Party. Although as stated recent sales figures in Essex/ Thurrock combined are below this plan provision, current sales reflect a recessionary period in the national economy and is untypical in the context of historic performance in recent decades. In addition, taking a longer term view to 2029, it is anticipated that the UK economy will recover with higher sales volumes needing to be facilitated.~~

~~3.96 The numerical difference between the sub-regional apportionment figure and the sales figures provides for flexibility in the Plan. The provision allocated through both Preferred and Reserve sites meets the 4.31 mtpa sub-regional apportionment figure. The provision for solely Preferred sites is based on 10 year average sales. Should sales figures 'bounce back' to higher volumes closer to recent pre-recessionary experience, then this is addressed in the Plan through the ability to bring forward the allocated Reserve sites while continuing to provide certainty to local communities and the minerals industry about where minerals development will take place.~~

~~3.97 The Essex provision figure of 4.31 mtpa for sand and gravel equates to a total plan provision of 77.58 mt over the eighteen-year plan period of 2012-2029 inclusive (excluding existing permissions). After deductions for existing permitted reserves at the base date (36.034 million tonnes at 31 Dec. 2011 for Essex only reserves and excluding estimated reserves of 0.98mt for Thurrock) and deducting new permissions granted since 1 January 2012 (0.88mt from 2 sites) the planning requirement for primary extraction from new site allocation in Essex is 40.67 million tonnes.~~

Therefore, the Plan needs to identify an additional 40.67 million tonnes from Preferred Sites for Land Won Sand and Gravel.



3.98 Part Four of this Plan identifies the Preferred and Reserve Sites for sand and gravel extraction in the County on a site-specific basis which will achieve this overall scale of provision up to 2029.

Self-sufficiency of the County

3.88 3.99 The majority of sand and gravel extracted within the County will serve the local Essex market. The Local Aggregate Assessment estimates the proportion at about 78% and this is considered unlikely to significantly change over the long-term, should Essex continue to be able to rely on current rates of import. The main economic drivers of future production will be the mineral demands created by major development and new infrastructure projects in Essex, and the ongoing need for building and infrastructure maintenance and repair. The LAA monitors import and export information on an annual basis.

3.100 The majority of future development will be focused spatially to supply a dispersed market having regard to the national growth areas of South Essex Thames Gateway and Haven Gateway (Essex), and the Key Centres of Basildon, Chelmsford, Colchester and Harlow. There are also Key Centres in the neighbouring areas of Southend-on-Sea and Thurrock which will experience significant growth and development. The Spatial Portrait identifies some of the major infrastructure projects which may also create a demand for minerals.

Links with neighbours

3.89 3.101 Essex's strategic location to the north-east of London means that there will always be some market demand for the County's mineral resources from neighbouring

areas. The Local Aggregate Assessment concluded that 22% of sand & gravel extracted within Essex is exported outside of the greater Essex area, 14% of which is exported outside the East of England, with London likely being the largest consumer. Essex also imported approximately 20% of its *imports* sand and gravel requirements (both land won and marine sourced), *as well as crushed rock*, and as such it is important that our current links can be maintained.

3.90 3.102 The Greater London conurbation is highly urbanised and relies on imported minerals for its development, growth and regeneration *and this will likely continue into the future*. The adopted London Plan (2011) confirms the capital will continue to rely on imported aggregates delivered by sustainable transport modes (rail and water). Inter-regional movements have already been accounted for in the sand and gravel provision made in this Plan.

3.91 3.103 The London Aggregate Working Party Annual Monitoring Report 2011 states “London continues to be *London is likely to be* heavily dependent on marine aggregate supplies to meet its aggregate requirements”. The Local Aggregate Assessment and data received from the British Geological Survey will allow for the monitoring of sales of sand and gravel within Essex to ascertain whether *land-won* sales begin to reduce in light of the above *as a result of an increase in usage of aggregate sourced from other sources, including the marine environment, both within Essex and elsewhere*.

3.92 3.104 The members of the East of England Aggregate Working Party (*EEAWP*), of which Essex and all the other Mineral Planning Authorities within the former East of England region are a part, have agreed to maintain plan provision to the extent of the annual apportionment originally presented in the East of England Regional Spatial Strategy. Since the annual apportionment was set to equate to local need, there is no requirement for Essex County Council to make any specific provision to serve any neighbouring area. Nevertheless, all MPAs recognise that there will be some cross-boundary movement of mineral supply as this is the nature of the market. *However, there is no requirement for the MPA to make any specific provision to serve any neighbouring area as this will be accommodated by ensuring sufficient provision is maintained, based on an understanding of previous sales and future growth. EEAWP provides an effective forum for ensuring the ongoing cooperation of participant authorities in addition to the formal Duty to Cooperate process.*

The Mineral Planning Authority’s MPA consideration of non-Preferred Sites *allocated sites*

3.93 3.105 To ensure future sand and gravel extraction is clearly focused on the Spatial Strategy and the identified Preferred and Reserve Sites in this Plan, other proposals for sand and gravel extraction at locations situated outside of the areas identified for future working will normally be resisted by the Mineral Planning Authority (MPA) *unless there is* – There may, however, be circumstances where an ‘over-riding justification’ and/or ‘over-riding benefit’ *as set out in Policy S6* for mineral development can be demonstrated.

3.94 3.106 Proposals *A potential overriding justification or benefit* for mineral extraction on these ‘non-Preferred Sites’ *non-allocated sites* may occur in relation *include, but is not limited* to:

- Agricultural irrigation reservoirs – where mineral is extracted and exported to create the reservoir landform,
- Borrow pits – where extraction takes place over a limited period for the exclusive use of a specific construction project such as for a specific road scheme,

- Prior extraction to prevent mineral sterilisation – this may be required on occasions where significant development takes place (on a site of ~~over~~ 5 hectares or more for sand and gravel) and where a workable mineral resource could otherwise be permanently lost through sterilisation (as set out in Policy S8).

~~3.95~~ ~~3.107~~ Such proposals will be considered on their own individual merits and the MPA will pay particular regard to the justification/-need that is cited by applicants when determining planning applications. The MPA must be satisfied that there are exceptional reasons for permitting such applications, after having considered all the relevant circumstances so as not to prejudice the overall strategy of the document. All proposals will be considered against policies in the Development Plan. For agricultural irrigation reservoir proposals involving extraction and exportation, clauses may be imposed to ensure that the after-use is restricted for agricultural use.

~~3.96~~ ~~3.108~~ Where proposals are put forward on the basis of fulfilling some form of ‘mineral need’ for minerals extraction, then the MPA will always require consideration of the whole of the County for the purposes of estimating the adequacy of the landbank or the sufficiency of the Plan’s provision. The MPA does not consider that information about ~~mineral supply in specific County sub-areas, or the~~ individual commercial business need of a mineral operator to continue production at a particular mineral extraction site, to be relevant or material to its decisions in respect of non-Preferred Sites allocated sites.

~~3.97~~ ~~3.109~~ No allowance for non-Preferred Sites allocated sites coming forward has been made in determining the Plan’s provision up to 2029. This is because the location, ~~and~~ timing and quantity of these sites cannot be predicted, and they would therefore not normally contribute to meeting the spatial strategy which is central to this Plan.

~~3.98~~ ~~3.110~~ A plan-led approach excluding such an allowance and identifying Preferred ~~and Reserve~~ Sites, provides greater certainty for local communities and the minerals industry about where minerals development will take place over the long-term. In any event, the Plan will be reviewed at regular intervals and as such the emergence of any non-Preferred Sites allocated sites can be taken account of through their impact on the permitted reserve as the Plan is updated and rolled forward over a further time period.

Policy S6 - General Principles for Sand and Gravel Provision Provision for sand and gravel extraction

The Mineral Planning Authority shall endeavour to ensure reserves of land won sand and gravel are available until 2029, sufficient for at least 7 seven years extraction or such other period as set out in national policy. The rate of plan provision is set at 3.74 mtpa.

~~The working of Reserve sites will only be supported if the landbank with respect to the overall requirement of 4.31mtpa is below 7 years. Policy P1 provides for the provision of sand and gravel through the allocation of Preferred Sites for extraction.~~

Mineral extraction outside Preferred or Reserve Sites will be resisted by the Mineral Planning Authority unless the applicant can demonstrate:

- a) An overriding justification and/or overriding benefit for the proposed extraction, and
- b) The scale of the extraction is no more than the minimum essential for the purpose of the proposal, and
- c) The proposal is environmentally suitable, sustainable, and consistent with the relevant policies set out in the Development Plan.

Spatial Vision: Policy links to the delivery of theme B.

Strategic Objectives: Policy links to the delivery of objectives 6a 10.