9th Annual Minerals and Waste Monitoring Report

1st April 2012 to 31st March 2013

Kent Minerals and Waste Local Plan

December 2013

Kent County Council
kent.gov.uk

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Abbreviations

AA	Appropriate Assessment
AMR	Annual Monitoring Report
AONB	Area of Outstanding Natural Beauty
CDE	Construction, Demolition and Excavation Waste
C&D (Recycling)	Construction & Demolition (Recycling)
C&I	Commercial and Industrial Waste
CPRE	Campaign to Protect Rural England
DCLG	Department for Communities and Local Government
DECC	Department of Environment and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
DF	Development Framework
DPD	Development Plan Document
EA	Environment Agency
EfW	Energy from Waste
EIA	Environmental Impact Assessment
EiP	Examination in Public
ESCC	East Sussex County Council
EU	European Union
GVA	Gross Value Added
HCI	Household, Commerical and Industrial Waste
HRA	Habitat Regulations Assessment
HWRC	Household Waste Recycling Centre
KCC	Kent County Council
KJMWMS	Kent Joint Minerals and Waste Municipal Strategy
KPOG	Kent Planning Officers Group

Abbreviations

KWP	Kent Waste Partnership
KWT	Kent Wildlife Trust
LAA	Local Aggregate Assessment
LEP	Local Enterprise Partnership
LNP	Local Nature Partnership
LNR	Local Nature Reserve
LPA	Local Planning Authority
MMO	Marine Management Organisation
mt	Million Tonnes
mtpa	Million Tonnes Per Annum (that is Million Tonnes Per Year)
MPA	Minerals Planning Authority
MRF	Material Recycling Facility
MSW	Municipal Solid Waste
MWDF	Minerals and Waste Development Framework
MWDS	Minerals and Waste Development Scheme
MWLP	Minerals and Waste Local Plan
NDA	Nuclear Decommissioning Authority
NPPF	National Planning Policy Framework
NNR	National Nature Reserve
PROW	Public Rights Of Way
RSPB	Royal Society for the Protection of Birds
RSS	Regional Spatial Strategies
SA	Sustainability Appraisal
SEEAWP	South East England Aggregate Working Party
SEWPAG	South East Waste Planning Advisory Group
SPA	Special Protection Area
tpa	Tonnes Per Annum (that is Tonnes Per Year)

UK	United Kingdom
WCA	Waste Collection Authority
WDA	Waste Disposal Authority
WMU	Waste Management Unit
WPA	Waste Planning Authority

Abbreviations

i Executive Summary

i.0.1 This Annual Monitoring Report (AMR) covers the period from 1st April 2012 to 31st March 2013. The preparation of annual monitoring reports is a statutory requirement of all Local Planning Authorities and Minerals and Waste Planning Authorities. Kent County Council (KCC) is responsible for waste management and minerals planning in the Kent administrative area (i.e. excluding Medway) and is required to produce Minerals and Waste Plans to replace saved policies of the existing Minerals and Waste Local Plans.[1] The AMR documents progress in meeting the milestones of the adopted Minerals and Waste Development Scheme (MWDS) and will monitor the impact of policies once the Plans are adopted.

i.0.2 Progress continued on the key draft plans of the Kent Minerals and Waste Local Plan during the monitoring period: public consultations took place on the two separate Minerals and Waste Site Plans 'Preferred Options' documents between 28th May and 23rd July 2012. There was a high level of interest and response to consultation documents: the waste plan received 283 comments from 124 consultees and the minerals plan received 596 comments from 377 consultees.

i.0.3 KCC will be revising the Minerals and Waste Development Scheme (MWDS) in January 2014. The revised MWDS 2010-16 will alter the timetable of the scheme and will move all dates forward by around six months, but will make no significant changes to the structure of the Plans being developed. The revised scheme will change the scheduled consultation date of the next (pre-submission) draft of the Kent Minerals and Waste Local Plan 2013-2030 from summer 2013 to January 2014.

i.0.4 The policy monitoring section of this report examines the relationships between the relevant contextual indicators (population growth, household growth, the economy and housing completions) to construction aggregate sales and municipal solid waste (MSW) arisings. Currently there are no clear correlations between the 2012/13 aggregates sales and waste arisings data to the most recent data available for the contextual indicators. Although that said, household waste arisings have continued to decrease despite the steady rises in population and household waste. The 2012/13 AMR monitors four Core Output Indicators and eight Local Output Indicators, which are summarised below.

Minerals

i.0.5 The annual production of primary land-won aggregates in Kent for 2012 was approximately 1,570,000 tonnes for all sand, gravel and crushed rock. This is a decrease of around 300,000 tonnes from production in 2011.

1 In September 2007 a Direction from the Secretary of State approved the saving of a number of policies in the minerals and waste local plans. Schedules of saved policies are available at: http://www.kent.gov.uk/environment_and_planning/planning_in_kent/minerals_and_waste/existing_plans.aspx

i.0.6 The estimated sales of secondary and recycled aggregates in Kent in 2012 was 774,607 tonnes, an increase of almost 100,000 tonnes (14%) from 2011 sales, although it should be noted that the rate of returns to the 2012 survey were slightly higher.

i.0.7 The reserves of sand and gravel for aggregate use in Kent stood at 18,527,212 tonnes on the 31st December 2012, which is equivalent to a landbank of 12.1 years based upon the latest 10 year average sales figures for sand and gravel (2003-2012). Although exact figures cannot be reported, Kent has an over 40 year landbank of crushed rock based on the 10 year crushed rock average sales.

i.0.8 There are three permitted landbanks of clay and brickearth with remaining reserves in Kent, which have a combined landbank of over 25 years, meeting national policy requirements. Only one of the three Kent silica sand sites does not currently meet the national requirement of maintaining a 10 year landbank per site at existing sites. While there are no active cement quarries in Kent, there is a consented quarry with over 25 years of reserves adjacent to the permitted, but not yet built Holborough Cement works. Kent's chalk reserves for agriculture and engineering purposes, on the basis of the 2012 rate of sales at six active sites, have an indicative permitted landbank of 15.5 years of chalk reserves at the end of 2012; alternatively a calculation based on the average rate of chalk sales between 2003 and 2012 would indicate a landbank figure of just over 11.6 years.

i.0.9 There were 12 wharves[(2)] and 3 rail depots active in the county in 2012. A total of 2,584,589 tonnes of construction aggregates were sold at Kent's wharves in 2012 (7% decrease from 2011) and an approximate total of 300,000 tonnes were sold at Kent's rail depots (30% decrease from 2011).

Waste

i.0.10 The new permissions granted in 2012/13 have resulted in an increase of 1,238,245 tonnes per year of new C&D Recycling, Energy from Waste and Transfer waste management capacity.

i.0.11 Municipal Solid Waste (MSW) arisings in Kent have decreased by 3.81% from 2011/12 which continues a downward trend since 2005/6.

i.0.12 During 2012/13 a total of 687,978 tonnes of MSW was managed in Kent. The management routes for this waste were: 30.6% recycled, 15.1% composted, 34.1% sent for energy recovery and 20.2% sent to landfill. When compared with the previous monitoring period, the amount of MSW sent to landfill has decreased by around 10.2%, while waste sent for energy recovery and composting have both increased by around 2.2% and 0.5% respectively. There has been a decrease in waste sent for recycling from the previous monitoring period of around 7.1% which could either be a result of the economic climate or due to success in national initiatives to reduce the amount of packaging.

2 One wharf was active for part of the monitoring period, closing in August 2012.

i.0.13 The most recent data relating to Construction, Demolition and Excavation (CDE) waste arisings that has been disaggregated for the area of Kent was produced in 2005. The indications from comparison with previous studies are that arisings of this waste type are relatively stable and that no annual growth occurs. KCC's estimates based on past survey data have produced a working estimate for CDE arisings of 2.6 million tonnes per annum.

i.0.14 The most recent data relating to Commercial and Industrial (C&I) waste arisings that has been disaggregated for the area of Kent was surveyed in 2009. This suggests that Kent's C&I arisings were 961,000 tonnes in 2009. By making an estimation of the amount of growth since 2009 using both a high and low scenario for growth, the amount of C&I waste arising in 2012/13 is estimated to be somewhere between 961,000 tonnes and 1,005,000 tonnes. It is anticipated that annual C&I waste will continue to grow at a rate somewhere between a low growth scenario of no annual growth and a high growth scenario of 2.5% per year initially decreasing to 1.5% in 2016 and to 1% in 2021.

i.0.15 In 2012 more waste was managed annually in Kent than the annual arisings of Kent waste and Kent was therefore a net importer of waste for management. However, different conclusions about export or imports of waste can be drawn for each individual stream of waste. Less non-hazardous waste was managed in Kent than the arisings of Kent non-hazardous waste therefore Kent was a net exporter of non-hazardous waste. Less hazardous waste was managed in Kent than the arisings of Kent hazardous waste and Kent was a net exporter of hazardous waste. More inert waste was managed in Kent than the annual arisings of Kent inert waste and Kent was a net importer of inert waste.

i.0.16 Within the municipal waste stream, the exports of green waste decreased during the monitoring period while exports of recyclables and residual (landfill) waste significantly increased. These changes from the previous period result from contractual changes and do not indicate either the opening of new facilities in Kent or the lack of any non-hazardous landfill capacity in the county.

i.0.17 During the monitoring period there were 295 waste management facilities other than landfill sites in Kent, consisting of composting, recycling, C&D recycling, Metal/ELV facilities, treatment, incineration, transfer facilities and wastewater treatment plants. These sites have an estimated maximum annual capacity of 12,359,875 tonnes per year. There were also 21 landfill sites which have an estimated remaining void-space of 16,656,252 tonnes (consisting of: 12,428,969 tonnes for inert landfill, 3,190,905 for non-hazardous landfill and 1,005,375 for hazardous landfill). The annual capacity of non-landfill facilities has decreased since the last monitoring period as well as the reserve of landfill void-space; portraying that the remaining void space is continuously being used up.

Next Year

i.0.18 Next year's AMR will report on the relevant key milestones of the plan programme as set out in the latest version of the Development Scheme (December 2013), to include the consultation on the pre-submission draft of the Kent Minerals and Waste Local Plan scheduled for January 2014. The future editions of this report will change as plans are adopted; monitoring and reporting on the implementation and relevance of the policies in the Minerals and Waste Local Plan and the Sites Plans will become the report's main function.

1 Setting the Scene

1.1 Introduction

1.1.1 Kent County Council (KCC) is the Mineral Planning Authority (MPA) responsible for the production of minerals and waste planning documents. The Plans apply to the KCC administrative area (i.e. excluding the Medway Unitary Authority) and will progressively replace the existing Kent Minerals and Waste Local Plans.

1.1.2 Previously Section 35 of the Planning and Compulsory Purchase Act 2004 required every Local Planning Authority (LPA) to make an annual report to the Secretary of State containing information on its Local Development Scheme and the extent to which the policies in its Local Development Documents are being achieved. This applies to the Kent Minerals and Waste Development Scheme (MWDS) and the policies within the Kent minerals and waste plans. However, the Localism Act 2011 removed this requirement since the Government wish to 'take a step back' from monitoring the preparation and content of local plans previously carried out by the Government Office Network.

1.1.3 However, monitoring remains an important aspect of evidence-based policy making. According to the National Planning Policy Framework (NPPF) each LPA should ensure that their Local Plan is based on adequate, up-to-date and relevant evidence about the economic, social and environmental characteristics and prospects of the area.[3]

1.1.4 Following the enactment of the Localism Act it is now down to each LPA to decide what to include in their monitoring reports whilst ensuring that they are prepared in accordance with relevant UK and EU legislation. KCC still attaches importance to the national indicators (5A, 5B, 6A, 6B), used as the basis for monitoring in previous years, and will continue to report on them.

1.1.5 Annual Monitoring Reports (AMRs) are published on the Council's website. This is the ninth AMR for minerals and waste planning in Kent and covers the period from **1st April 2012 to 31st March 2013**. It documents the progress made in preparing Kent's Minerals and Waste Plans during this period and monitors the indicators that form the basis for assumptions on which Kent's planning policies will be developed.

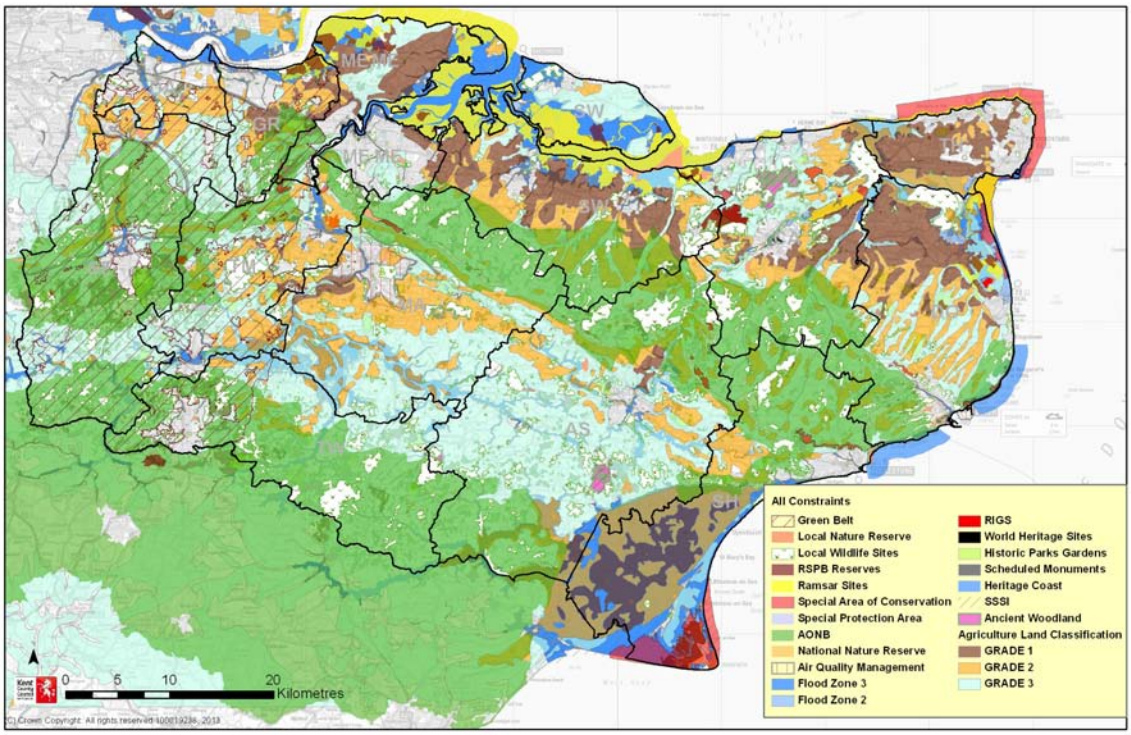
1.1.6 As KCC's Minerals and Waste Plans are yet to be adopted, the AMR 2012/13 focuses on reviewing the progress of the plans against the latest MWDS timetable, any wider policy developments and the contextual indicators and minerals and waste output data for Kent during the monitoring period.

3 National Planning Policy Framework (2012), para. 158

1.2 County Context

1.2.1 The administrative area covered by KCC has a population of approximately 1,480,200 people.[4] Kent is subject to a number of planning and environmental constraints; 20% of the county is covered by sites that are internationally or nationally important for their nature conservation value and one third of the area is covered by the Kent Downs or High Weald Areas of Outstanding Natural Beauty (AONB). There are significant areas within coastal or fluvial flood plains and land of high (best and most versatile) agricultural quality. Figure 1 shows the planning and environmental constraints within Kent.

Picture 1 - Planning and Environmental Constraints in Kent



Planning and Environmental Constraints

1.2.2 Kent is rich in minerals including chalk, clays, brickearth, ragstone, and a variety of sand and gravels including silica sand. Construction aggregates (sand, gravel and ragstone) are the main types of economic mineral found and extracted in Kent. Significant proportions of the minerals used in Kent are imported via rail and wharf facilities. Minerals imported into Kent also serve the market elsewhere in the south east, and in London. An increasingly significant proportion of Kent's construction aggregate need is met by the recycling or re-use of wastes, such as that arising from

4 Kent County Council mid 2012 estimate: this figure is based on the population headcount recorded from the national 2011 Census with an additional estimate for the number of births, deaths and net migration that took place between Census Day (27 March 2011) and the mid-year point (30 June 2012).

construction and demolition waste. Ensuring that appropriate provision is made for land-won, imported and secondary and recycled minerals is a key issue for the emerging Minerals and Waste Local Plan (MWLP).

1.2.3 Large volumes of waste are produced in Kent, of which the majority is within the Construction, Demolition and Excavation (CDE) waste stream. Municipal Solid Waste (MSW) makes up a significantly smaller proportion of the overall waste produced and has seen a decrease in arisings in the last few years. Waste requires careful management and treatment in an environmentally sustainable and sound manner, taking into account the waste hierarchy[(5)] and the need for self-sufficiency. Kent already has a wide range of waste management facilities, from non-hazardous and inert landfills to recycling and composting facilities, although a proportion of Kent's waste is currently sent for treatment or disposal outside of the county. Achieving self-sufficiency in waste management and provision of waste facilities further up the waste hierarchy are key issues for the emerging MWLP to address.

1.3 Existing Development Plan

1.3.1 Saved policies of the following 'old style' Minerals and Waste Local Plans currently apply to Kent until they are replaced by the relevant part of the new Minerals and Waste Plans:

- Kent Minerals Subject Plan: Brickearth (adopted May 1986), covering the period to 2001.
- Kent Minerals Local Plan: Construction Aggregates (adopted December 1993), covering the period to 2006.
- Kent Minerals Local Plan: Chalk & Clay/Oil & Gas (adopted December 1997), covering the period to 2011.
- Kent Waste Local Plan (adopted March 1998), covering the period to 2011.

1.3.2 In March 2007 the County Council applied to the Secretary of State for Local Plan policies to be saved beyond the initial three year period set out under the transitional arrangements accompanying implementation of the Planning and Compulsory Purchase Act 2004 (2004 Act). In September 2007 a Direction from the Secretary of State approved the saving of the majority of these policies. Schedules of the policies now saved are available from our website.[(6)] All other policies within the Kent Minerals and Waste Local Plans were no longer operative from September 2007.

5 See Appendix F.
6 See the relevant links from the following webpage: http://www.kent.gov.uk/environment_and_planning/planning_in_kent/minerals_and_waste/existing_plans.aspx

1.3.3 The Regional Spatial Strategy (RSS) for the south-east (the South East Plan) no longer forms part of the development plan for Kent. The revocation process, as established by the enactment of the Localism Act on 15 November 2011, was formally completed on 25th March 2013.[7] The Plan was revoked with the exception of Policy NRM6 which concerns new residential development near the Thames Basin Heaths Special Protection Area (SPA), which is not within Kent. However, as the RSS policies and it's evidence base were tested for soundness through an Examination in Public (EIP), it can where relevant still form part of the evidence base for the Kent MWLP.

1.4 Minerals and Waste Plan Programme

1.4.1 The saved, old style MWLP policies and proposals will be progressively replaced by the new MWLP policies. The detailed timetable for production and scope of each document is contained in the Minerals and Waste Development Scheme (MWDS) which can be found on our website.[8]

1.4.2 A new MWDS will be bought into effect by the County Council in January 2014. The revised MWDS 2010-16 will alter the timetable of the scheme but will make no significant changes to the structure of the suite of Minerals and Waste Plans to be produced.

1.4.3 The MWDS sets out two tranches of production:

Table 1 - Minerals and Waste Development Scheme: Production Tranches

1st Tranche	2nd Tranche
Minerals and Waste Local Plan	Mineral Sites Plan
	Waste Sites Plan

1.5 Developments in Minerals and Waste Policy

The Town and Country Planning (Local Planning) (England) Regulations 2012

1.5.1 In April 2012 the Department for Communities and Local Government (DCLG) published a planning policy document comprising legal requirements for LPAs, such as County Councils, for the purpose of minerals and waste development planning).[9]

1.5.2 The 2012 Regulations consolidate the existing Town and Country Planning (Local Development) (England) Regulations 2004 as amended, and made new provision and amendments to take account of the changes made by the Localism Act 2011. The 2012 Regulations cover:

7 Regional Strategy for the South East (Partial Revocation) Order 2013 (S.I. 2013/427)

8 See http://www.kent.gov.uk/environment_and_planning/planning_in_kent/minerals_and_waste/development_scheme.aspx

9 Department for Communities and Local Government, Town and Country Planning (Local Planning) (England) Regulations 2012, available from: http://www.legislation.gov.uk/uksi/2012/767/contents/made

- **General Processes -** notification that regulations apply to LPAs in England only, the provision of a general overview of interpretations throughout the document and requirements concerning communications;

- **Duty to Co-operate** - LPAs are obliged to co-operate with prescribed bodies identified by central government to comply with the *duty to co-operate*. In relation to the Kent MWLP preparations such bodies include: the Environment Agency (EA), English Heritage, Marine Management Organisation, Natural England, Highways Agency and the Coal Authority;

- **Local Plans, Local Development Documents and Supplementary Planning Documents -** provision of prescribed documents to be prepared as Local Development Documents and those to be prepared by Local Authorities. As well as guidance for procedures of plan preparation: publication, consultations, considerations and adoption;

- **Authorities' Monitoring Reports and Availability of Documents -** provisions regarding the content of monitoring reports, which LPAs must prepare, the availability of documents and improving transparency. There is no longer a requirement to prepare a monitoring report for the Secretary of State; Councils are instead required to make the report on key issues to be determined locally, as set out in the Act;

- **Revoking Supplementary and Development Plan Documents -** the regulations permit LPAs to remove/revoke local planning documents before the adoption of plans. If the development plan document has been submitted for independent examination, the council no longer requires a recommendation from the person carrying out the examination or a direction from the Secretary of State that the document should be withdrawn.

Town and Country Planning (Local Planning) (England) (Amendment) Regulations 2012

Duty to Co-Operate

1.5.3 Section 110 of the Localism Act (2011) provides for a duty on LPAs, County Councils and other bodies with statutory functions to co-operate with each other. Co-operation includes constructive and active engagement as part of an on-going process to maximise effective working on the preparation of development plan documents (including minerals and waste plans), in relation to sustainable development or the use of land which would have a significant impact on at least two planning areas. It is not however a duty to agree.

1.5.4 Following the release of Town and Country Planning (Local Planning) (England) (Amendment) Regulations 2012, Local Enterprise Partnerships (LEPs) and Local Nature Partnerships (LNPs) were added to regulation 4 in Section 33a and are therefore, prescribed bodies.

Guidance for Local Planning Authorities on Implementing Planning Requirements of the European Union Waste Framework Directive (2008/98/EC)

1.5.5 In December 2012, DCLG published a guidance paper highlighting principal legal and policy provisions for Local and Waste Planning Authorities (WPAs) and their compliance with the Waste Framework Directive (2008/98/EC) and Waste (England & Wales) Regulations 2011.[(10)] The guidance comprises:

- A general explanation of the '*Waste Hierarchy*' and its application through planning policy (Planning Policy Statement 10) along with guidance on co-operation between LPAs and WPAs relating to this notion;
- A description of requirements from LPAs and expectations of WPAs under planning policies ensuring appropriate management of waste and the practice of protection of human health and the environment;
- An outline of policy requirements for WPAs relating to the implementation of principles of self sufficiency and priority;
- An explanation of duties WPAs are obliged to comply with when preparing waste management plans; considering National Waste Management Plan (DCLG) and responsibilities concerning the preparation of AMRs (AMRs must compliment evidence throughout Local Plans);
- A notification of requirements of WPAs with regards to inspections of waste management facilities.

Quality Action Plan: proposals to promote high quality recycling of dry recyclates

1.5.6 A national action plan published by DEFRA in February 2013[(11)] conveying a government aim to nationally increase the quantities of material recycled and improve the quality of dry recyclates (paper, plastic, glass and metal) from household and commercial waste streams; maximising the environmental and economic benefits of reprocessing raw materials from the global market. In summary the plan includes:

- Explanations of processes implementing national aims;

10 Department for Communities and Local Government Guidance for Local Planning Authorities on Implementing Planning Requirements for the European Union Waste Framework Directive (2008/98/EC) 2012. Available from: http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37011/Guidance_for_local_authorites_on_implementing_planning_requirments_of_the_European_Union_Waste_Framework_Directive__2008-98-EC_.pdf

11 Department for Environment, Food and Rural Affairs (February 2013) Quality Action Plan. Available from: http://www.gov.uk/government/publications/improving-the-quality-of-recyclates-quality-action-plan-england-only

- Collaborating with the EA in England and Wales; enhancing the effectiveness of the enforcement of exporting regulations;
- The development of a voluntary grading system for different materials and quality of outputs depending on end use;
- Guidance on the requirements from the revised Waste Framework Directive (separate collection for varied recyclates);
- Reform of Packaging Recovery Note and Packaging Export Recovery.

Amending the Waste Regulation 2011 on the Separate Collection of Recycling 2013

1.5.7 In February 2012 (prior to this monitoring period), DEFRA and the Welsh Government introduced a consultation on the amendments to the Waste Regulations 2011 (ending in April 2013) as a requirement from the revised Waste Framework Directive (2008/98/EC) and published a Summary of Responses in July 2012 comprising:

- Guidance on the meanings of concepts throughout the regulations;
- Notification that DEFRA and the Welsh Government will take responsibility for making decisions about collection arrangements;
- The provision of valid criteria to consider in particular decision making processes;
- The provision of expected evidence to support such decisions;
- The use of the European Commission's Waste Framework Directive guidance to form the basis of developing guidance on domestic regulations.

Energy From Waste Guide

1.5.8 A series of brief papers (for local authorities and the waste management industry) published in February 2013 by DEFRA, DECC and the Welsh Government[12] resulting from the revision of the Waste Management Technology Brief (2007) prepared under DEFRA's Waste Implementation Programme. The documents present the role of Energy from Waste (EfW) in managing waste and comprise explanations of: the technological processes diverting Municipal Solid Waste (MSW) from landfill, national policy, markets, national and European examples, planning, permitting and social perception issues and the contribution of such processes towards national targets. Such guidance papers also published in February 2013 include:

12 Brief papers from Department for Environment, Food and Rural Affairs, Department of Environment and Climate Change and the Welsh Government (February 2013). Available from: https://www.gov.uk/government/publications/energy-from-waste-a-guide-to-the-debate

- Mechanical Heat Treatment of MSW Policy Paper;
- Advanced Biological Treatment of MSW Policy Paper;
- Advanced Thermal Treatment of MSW Policy Paper;
- Incineration of MSW Policy Paper.

Wood Waste Landfill Restrictions in England

1.5.9 From July 2012 to September 2012 DEFRA ran a consultation on introducing restrictions to wood waste landfill operations later publishing an analysis in February 2013. The analysis concluded that as levels of wood waste sent to landfill will continue to decline without further interventions from government and due to financial costs, restrictions diverting wood waste from landfill will not be issued.

Guidance on the Managed Aggregate Supply System

1.5.10 In October 2012, DCLG published a guidance document on the Managed Aggregate Supply System.[13] It seeks to ensure a steady and adequate supply of aggregate minerals to handle the significant geographical imbalances in the occurrence of suitable natural aggregate resources and the areas where they are most needed.

1.5.11 The Government considers that a steady and adequate supply of aggregate minerals should be delivered by decentralising more power to MPA's to determine the appropriate level of mineral extraction. The key principle under this reformed Managed Aggregate Supply system is the new annual aggregate assessment which covers:

- A forecast of the demand for aggregates based on the average of 10 years sales data.
- An analysis of all aggregate supply options, as indicated by landbanks, mineral plan allocations and capacity data.
- An assessment of the balance between demand and supply and the economic and environmental opportunities and constraints that may influence the situation.

13 Department for Communities and Local Government Guidance on the Managed Aggregate Supply System. Available from: https://www.gov.uk/government/publications/guidance-on-the-managed-aggregate-supply-system

1.6 Emerging Developments in Minerals and Waste Policy

Draft Materials Recovery Facility (MRF) Regulations for insertion into Environmental Permitting (England & Wales) (Amendments) Regulations 2013

1.6.1 In February 2013, DEFRA published a consultation proposing regulations for Material Recovery Facilities (MRFs) to be inserted within the Environmental Permitting (England & Wales) (Amendments) 2013.[14] The draft Regulations are part of wider measures to improve and promote high quality recycling nationwide. Such measures are described within DEFRA's Quality Action Plan 2013. The regulations are to help stimulate the market conditions necessary to improve the quality of materials produced by MRFs. The proposed drafted measures comprise:

- The requirement of operators of MRFs to test the composition of samples of materials inserted into the sorting process, residues and usable outputs;
- Operators of MRFs must keep records of measurements made of inputs and outputs of recyclates whilst measurements are are to be made transparent by the EA to Local Authorities and re-processors.

These requirements are limited to permitted facilities managing over 1000 tonnes per annum (tpa) and those sorting mixed fry recyclates from householder and commercial co-mingled collections.

Waste Prevention Programme for England

1.6.2 In March 2013 DEFRA published Call for Evidence[15] for the forthcoming Waste Prevention Programme for England (due to be published in December 2013) following the introduction of a consultation in March 2013. In summary the proposed Waste Prevention Programme will:

- Assist businesses to identify and respond to potential savings through the prevention of waste and improved resource efficiency, contributing towards a sustainable economy;
- Improve access to knowledge for people to understand how to reduce waste levels and re-use items no longer needed;
- Support action by local and central government, businesses and the civil society to capitalise on these opportunities.

14 DEFA (February 2013) Draft Materials Recovery Facility (MRF) Regulations for Insertion into Environmental Permitting (England & Wales) Regulations 2013 consultation. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221106/mrf-env-permit-consult-doc-20130201.pdf

15 Department for Environment, Food and Rural Affairs, Waste Prevention Programme for England Call for Evidence can be found at https://www.gov.uk/government/consultations/call-for-evidence-waste-prevention-programme-for-england

Planning Practice Guidance for onshore oil and gas

1.6.3 In July 2013 DCLG published planning practice guidance for onshore oil and gas,[16] providing advice on the planning issues associated with the three phases of extraction of hydrocarbons. The document reiterates NPPF guidance for mineral development and recognises that unconventional hydrocarbons are an emerging and important part of the UK's energy mix whilst the country moves to low carbon energy supplies. It also recognises that there is a pressing need to establish via exploratory drilling whether there are sufficient recoverable quantities to support viable production. The practice guidance covers:

- An explanation of the various phases involved - exploration, testing and production;
- The roles of the regulators;
- The main environmental issues for the MPA's to consider and the issues it can leave to other regulators;
- Advice on development management procedures including Environmental Impact Assessment (EIA);
- Restoration and aftercare.

16 DCLG (July 2013) Planning Practice Guidance for onshore oil and gas. Available from: https://www.gov.uk/government/publications/planning-practice-guidance-for-onshore-oil-and-gas

2 Review and Progress of the Minerals and Waste Local Plan

2.0.1 This section of the Annual Monitoring Report (AMR) sets out the milestones and achievements between 1st April 2012 and 31st March 2013 relating to the preparation of the Kent Minerals and Waste Plans.

2.1 Development Plan Documents

2.1.1 During the 2012-13 monitoring period the following progress was made in developing the key plans of the Kent Minerals and Waste Local Plan (MWLP).

Kent Minerals and Waste Local Plan 2013-30:

2.1.2 Progress on the main plan was focused on updating the May 2011 Kent MWLP Strategy and Policy Directions consultation document and it's supporting evidence base to reflect the latest policy changes, data and previous consultation comments to form a new Pre-Submission draft of the document. The public consultation on this draft was originally scheduled for summer 2013, just outside of this monitoring period. However, staff changes and resource shortages resulted in the need to review the scheduled work program in the Local Development Scheme. The Pre-Submission document is now scheduled for a six week consultation from January 2014.

Mineral and Waste Site Plans:

Preferred Options Consultations (28th May to 23rd July 2012)

2.1.3 The two separate Minerals and Waste Site Plans - Preferred Options (Regulation 25) consultations formed the second stage (of a three stage process) in the preparation of final Sites Plans. The 'preferred options' were the sites considered to be the best and most sustainable to meet mineral supply and waste management requirements in Kent up to the end of 2030. There were 25 sites for mineral development and 21 sites for waste development put forward for consultation as the 'preferred options' out of all the sites submitted by industry during the 'Call for Sites', as published in the previous Minerals and Waste Site Plans 'Options' consultations (May 2011). The remaining sites were identified as ‘non allocated’ sites, unlikely to be suitable for allocation in the final Sites Plans.

2.1.4 There was a high level of interest and response to consultation documents; the waste plan received 283 comments from 124 consultees and the minerals plan received 596 comments from 377 consultees.

2.1.5 Further progress on the draft minerals and waste site allocations will continue after the final version of the Kent MWLP 2013-30 is adopted.

2.2 Supporting Documents

Minerals and Waste Development Scheme (MWDS)

2.2.1 The MWDS is a public statement of the County Council's programme for the production of Minerals and Waste Plans and supporting documents. It sets out the stages against which the County Council must monitor progress in their AMRs, as well as information on the status of 'saved' policies from the existing Minerals and Waste Local Plans.

2.2.2 A revised MWDS will be bought into effect by the County Council in January 2014. The MWDS 2010-16 revision will alter the timetable of the scheme, moving future stages of the process forward by around six months, but will make no significant changes to the structure of the suite of Minerals and Waste Plans being produced. See tables 2 and 3 for further details.

Table 2 Kent Minerals and Waste Local Plan 2013-2030

Stages	Dates
Scoping of Sustainability Appraisal Consultation	September - October 2009
Issues Consultation	September - November 2010
Strategy & Policy Directions Consultation	May - August 2011
Mineral Safeguarding Consultation	February - March 2013
Pre-submission Consultation	January 2014
Submission	May 2014
Pre-hearing Meeting	July 2014
Inspector's Report	January 2015
Adoption	April 2015

Table 3 Minerals and Waste Sites Plans

Stages	Dates
Call for Sites	May - October 2010
Options Consultation	May - August 2011
Supplementary Options Consultation	October - December 2011
Preferred Options	May - July 2012

Stages	Dates
Pre-submission Consultation	April 2015
Submission	August 2015
Pre-hearing Meeting	November 2015
Inspector's Report	May 2016
Adoption	August 2016

Minerals and Waste Evidence Base

2.2.3 A credible evidence base is required to provide the basis for proposed plans. The Kent MWLP evidence base continued to develop over the monitoring period to take into account the latest available data. The following public consultation was also held:

Minerals Safeguarding consultation (11th February - 4th March 2013)

2.2.4 Mineral 'safeguarding' is the term used to describe the process of ensuring that natural mineral resources are not unnecessarily sterilised by other types of development, thereby leaving insufficient mineral supplies for future generations. A revised draft topic paper was published for comment for six weeks in February 2013. The document had been revised in response to the comments on the County Councils earlier Minerals and Waste Plan consultations, evidence base consultations and organised consultee workshop events. In order to shape the final mineral safeguarding policies and mineral safeguarding maps in Kent MWLP, the County Council invited views on:

- Our approach to mineral safeguarding in Kent.
- The extent of the proposed safeguarding areas for individual mineral types on the maps prepared for Kent County Council (KCC) by the British Geological Society (BGS).

2.2.5 The consultation received 85 comments from 54 consultees. The comments received have influenced the approach to the draft policies to be published in the Pre-Submission version of the Kent MWLP policies CSM5: Land-Won Mineral Safeguarding and CSM11: Safeguarded Wharves and Railheads. The summary commentary report on the consultation is available online.

2.3 Duty to Co-operate

2.3.1 Following the amendment of the Planning and Compulsory Purchase Act 2004 and implementation of Section 33a within the Localism Act in 2011, Local Planning Authorities (LPAs), County Councils and other prescribed bodies are obliged to co-operate with each other throughout the plan making process; maximising the efficiency in the preparation of development plans.

2.3.2 The duty imposed requires such bodies to engage constructively, actively and on an on-going basis throughout the plan making process and consider the activities of other authorities relevant to the LPA in question. For Kent, this comprises the 12 districts within Kent as well as neighbouring planning authorities and authorities involved in the movement of minerals and waste to and from Kent.

2.3.3 Prescribed bodies that KCC must engage with throughout the preparation of the Kent MWLP for the purpose of implementing Section 33a (i) are set out in the Town and Country Planning (Local Planning) (England) Regulations 2012 and include:

- The Environment Agency (EA)
- English Heritage
- Marine Management Organisation
- Natural England
- Highways Agency
- The Coal Authority

2.3.4 Following the release of the published Town and Country Planning (Local Planning) (England) (Amendment) Regulations 2012, Local Enterprise Partnerships (LEP) and Local Nature Partnerships (LNP) are now part of regulation 4(2) and are therefore considered as statutory '*prescribed bodies.'* The amendment, regulation 4(3) identifies LEPs and LNPs as the following:

- **LEP** - a body established for the purpose of creating or improving conditions for economic growth, designated by the Secretary of State.

- **LNP** - a body established for the purpose of protecting and improving the natural environment in an areas and their benefit, designated by the Secretary of State.

The National Planning Policy Framework (NPPF)

2.3.5 Although introduced prior to the annual monitoring period 2012/13, further details on implementing the Duty to Co-operate, as set out in the NPPF[17], still apply and state that public bodies should:

- Co-operate on planning issues that cross administrative boundaries, particularly those relating to strategic priorities including the jobs needed in an area, climate change mitigation and adaption and conservation of the natural and historic environment;

17 DCLG (2012) National Planning Policy Framework, para. 178-181

- Jointly work on areas of common interest for the mutual benefit of neighbouring authorities;
- Work collaboratively with other bodies to ensure that strategic priorities across local boundaries are properly co-ordinated and are clearly reflected in Local Plans;
- Consider producing joint planning policies on strategic matters and informal strategies such as joint infrastructure and investment plans;
- Consider different geographic areas, including *travel-to-work* areas. In two tier areas, county and district authorities should co-operate on relevant issues and strategic planning priorities to enable the delivery of sustainable development in consultation with LEPs and LNPs. LPAs should also work collaboratively with private sector bodies, utility and infrastructure providers;
- Demonstrate evidence of effective co-operation throughout plan preparations concerning issues with cross boundary impacts when local plans are submitted for examination. This may include: plans or policies prepared as part of a joint committee, a memorandum of understanding or a jointly prepared strategy later presented as evidence of an agreed position. Co-operation should be a continuous process of engagement from initial thinking through to implementation; resulting in a final position where plans are in place to provide the land and infrastructure necessary to support current and projected future levels of development.

Evidence of duty to co-operate for the period of 2012/13

2.3.6 The following consultations were held throughout the monitoring period and stakeholder workshops held in July 2012 were attended and responses were made by district/borough councils, neighbouring authorities, the minerals and waste industry, representatives from prescribed bodies and non-statutory interest groups:

- The Kent MWLP Minerals Site Plan and Waste Sites Plan Consultation and 'Preferred Options' stage (28 May 2012 to 23 July 2012).
- The Kent MWLP Proposed Minerals Safeguarding Areas Document Consultation (January to March 2013).
- A Minerals and Waste Industry Stakeholder Workshop (18 July 2012, Lenham Community Centre, Maidstone).
- A Stakeholder Workshop for consultation on the Preferred Options for Minerals Sites Plan and Waste Sites Plan (12 July 2012, Lenham Community Centre, Maidstone).

Neighbouring Planning Authorities

2.3.7 Meetings were held between representatives from Medway Council and the MWLP team throughout 2012 concerning the Joint Medway Imports Study, minerals and waste apportionment and joint issues, as well as the progress of site allocations for the Minerals and Waste Core Strategy.

2.3.8 Meetings between Essex County Council and the MWLP team were also held during 2012 and included discussions on the issue of land banking and advice on drop in sessions for the Kent MWLP.

2.3.9 East Sussex County Council provided responses/comments on both Kent MWLP Minerals and Waste Sites - Preferred Options and Supplementary Options and the Kent MWLP Proposed Mineral Safeguarding Areas Document consultations.

2.3.10 Both Surrey County Council and Medway Council attended a meeting with the MWLP team on 12 June 2012 discussing the following documents: *Waste Sites Plan Preferred Options, Minerals Sites Plan Preferred Options, Local Aggregate Assessment* (LAA), *Sustainability Appraisal* (SA)*, Habitat Regulations Assessment, Strategic Flood Risk Assessments* and other evidence based topic papers. Updates on mineral safeguarding issues were also provided.

Inter-County Co-operation

2.3.11 Multiple meetings were held with district/borough councils during the annual monitoring period (2012/13):

- A meeting was held with representatives from 10 of the 12 district/borough councils on the Kent MWDF Core Strategy Consultation (4 May 2012);
- Meeting with Gravesham Borough Council discussing wharf safeguarding within Gravesham (14 August 2012);
- Meeting with Shepway District Council concerning the Kent MWLP Draft Nuclear Waste Policy and Associated Evidence Base Report on Nuclear Waste (18 October 2012);
- All districts/boroughs within Kent were provided with an update on issues/concerns raised regarding the Industrial Estates Topic Paper (4 February 2013);
- Correspondence with Dartford Borough Council on Waste Arising Figures presented in Jacobs' Waste Needs Assessment 2011 Update report[18] (8 February 2013);

18 Jacobs (January 2012) Waste Needs Assessment 2011 Update report

- Meeting with Ashford Borough Council covering specific sites in the Waste Sites Plan located in Ashford (17 February 2013);

- Discussions with Swale and Ashford Borough Councils on Kent MWDF Minerals Site Development Plan Document - Options Consultation and Waste Site Development Plan Document - Options Consultation (2 and 31 March 2013).

2.3.12 The MWLP team also engaged with Kent's town and parish councils:

- Meetings with both Charing and Shoreham Parish Councils on the progress of the Kent MWLP and local issues/concerns with such plans relevant to Charing and the Kent MWLP Preferred Options document (13 November 2012 and 11 April 2012).

- Throughout June 2012 parish and towns councils and residents were provided with the opportunity to consult with planning officers from KCC as drop in sessions were held throughout multiple town and parish centres as part of the Kent MWLP Minerals Sites Plan and Waste Sites Plan consultation and its 'Preferred Options' stage.

Co-operation within KCC

2.3.13 The MWLP team has co-operated with other teams within KCC concerning issues on both the Kent MWLP Preferred Options Stage and Kent MWLP Proposed Minerals Safeguarding Areas Document consultations.

2.3.14 Meetings with the Kent Highways & Transportation team were held on 18 January 2013 and 13 November 2012 covering the Kent MWLP Industrial Estates Topic Paper and concerns related to specific sites within a local parish.

2.3.15 On 26 March 2013 the MWLP team met with the Kent Downs Area of Outstanding Natural Beauty (AONB) team regarding updates on the MWLP preparations, the evidence based Strategic Landscape Appraisal and safeguarding wharves.

2.3.16 During the monitoring period (2012/13) the MWLP team has continuously corresponded with the Kent Planning Applications Group covering issues such as minerals and waste planning applications and the preparation of development plan documents.

Working with Statutory Stakeholders and Non-Statutory Interest Groups

2.3.17 The MWLP team has met with representatives from both legislative '*prescribed bodies'* and non-statutory interest groups throughout the monitoring period:

- Meeting with The Crown Estates was held on 6 July 2012 discussing marine dredged aggregates reserves, safeguarding wharves and the Draft Kent MWLP;
- On 20th September 2012 the MWLP met with the EA on the properties of the 'Preferred Options' stage. The EA has also responded to consultations during the monitoring period;
- The MWLP collaborated with Kent Waste Partnership on the Kent Joint Municipal Waste Management Strategy; contributing towards policy refresh from the beginning of the plan period to year 2020/21;
- Meetings with the Dungeness Stakeholder Site Group and South East England Aggregate Working Party were held throughout 2012/13 covering the notions ranging from nuclear waste policy to evidence based topic papers (further details can be found in Appendix E).

Co-operation with Minerals and Waste Planning Authorities and Industries

2.3.18 During the monitoring period 2012/13, the MWLP team has consulted with stakeholders from the minerals industry on the current and future movements of minerals from international origins into and Kent and their availability for the duration of the plan period.

2.3.19 MPAs have also co-operated with the MWLP team on the future supply of mineral aggregates imported into Kent.

2.3.20 On 18 October 2012 a meeting was held with Magnox Ltd and EDF Energy Dungeness Power Station from the waste industry concerning the Kent MWLP Draft Nuclear Waste Policy and Associated Evidence Base Report on Nuclear Waste.

3 Policy Monitoring

3.1 Introduction

3.1.1 Contextual indicators set out the wider social, environmental and economic background against which the minerals and waste policies will operate. They contribute to the 'backdrop' against which the effects of policies can be considered.

3.1.2 Part of the Annual Monitoring Report's (AMR) role is to assess the extent to which the minerals and waste policies are being implemented and, where they are not, offer some explanation to address this circumstance. Output indicators are a tool for measuring the implementation of these policies. Following the enactment of the Localism Act on 16 November 2011, there is no longer a requirement to report on previously established National core output indicators.[19] However, Kent County Council (KCC) still attach importance to the national indicators (5A, 5B, 6A, 6B) which are outlined later in this chapter and will continue to report on them for our own monitoring purposes.

3.1.3 Local output indicators are intended to report on the areas not covered by the core output indicators. They should therefore be more closely tailored to local policies and should provide sufficient data to allow for a robust assessment of policy implementation.

3.1.4 Additional data sources have been added to the contextual indicators to assist with the analysis of the recession and its affect on minerals and waste in Kent. The annual Aggregate Monitoring Survey is designed to provide a wider range of information on a four-yearly basis and the next extended survey will take place in 2014 for the 2013 calendar year.

3.1.5 The monitoring framework will evolve as the policy framework for the minerals and waste plans develops further.

3.1.6 Full data tables for all indicators can be found in Appendix A.

3.2 Contextual Indicators

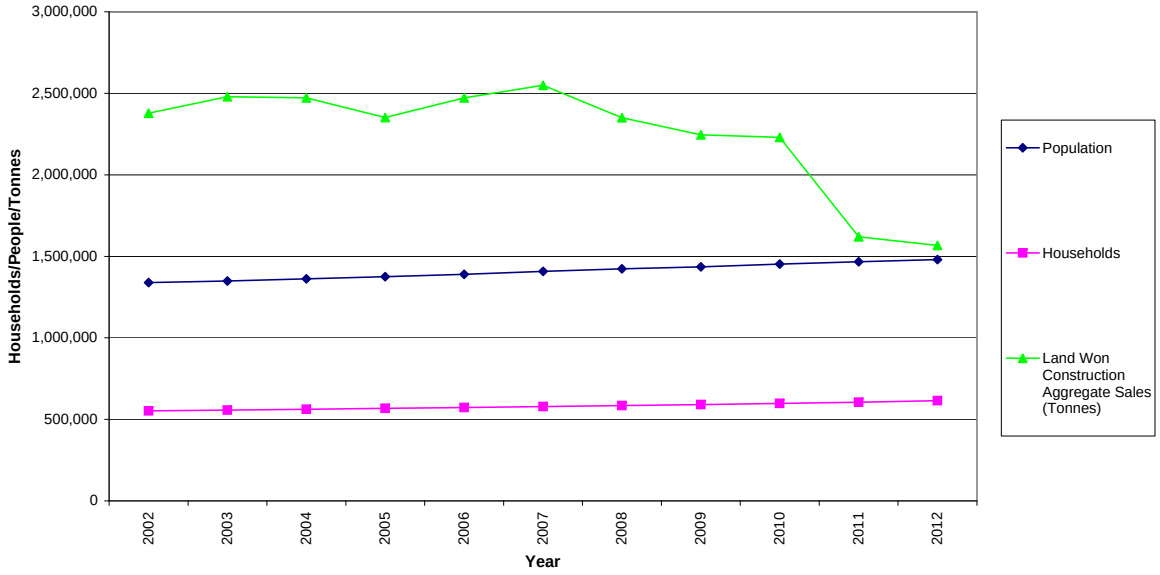
Contextual Indicator 1: Population and Household Growth

3.2.1 Population and household levels have increased steadily in Kent over the past 10 years. Between 2011 and 2012 the population rose by 13,700 (this excludes the Medway Authority area), an increase of 0.9%. Over the last 10 years (2002-2012) there has been a rise of 10.6% in population increasing by 141,200 people bringing the total population up to 1,480,200. The number of households has also increased from 552,600 in 2002 to 614,388 in 2012 which represents an 11.8% increase. In 2011/12 4,612 new dwellings were completed within the KCC area. There was a

19 'Regional Spatial Strategy and Local Development Framework Core Output Indicators – Update 2/2008'

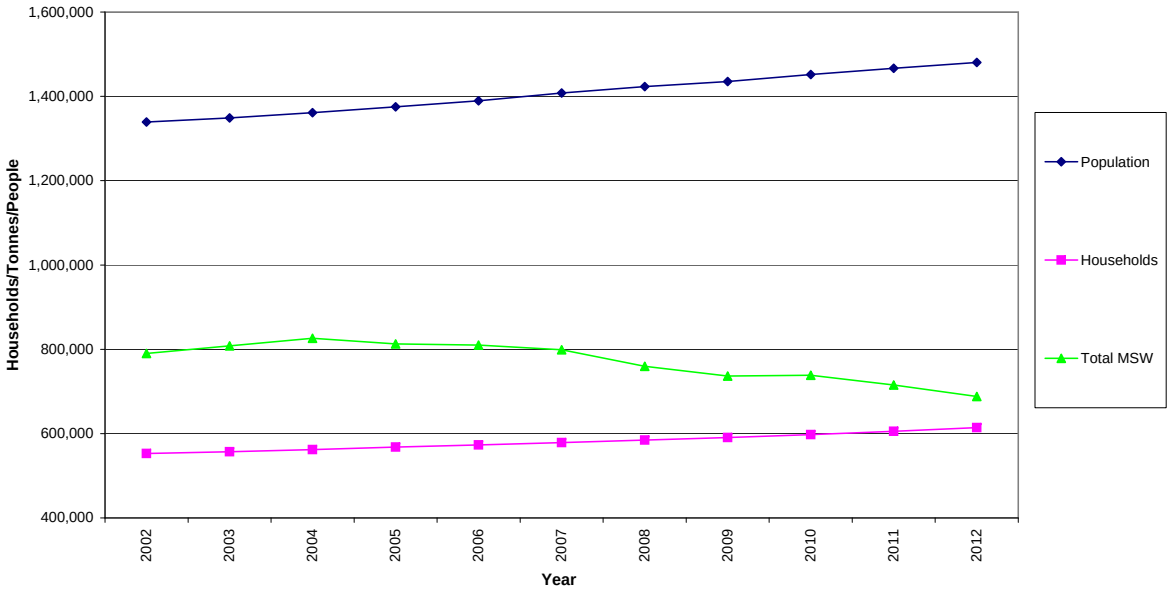
substantial fall in the sale of land-won construction aggregates since 2002, and in 2011 there was an even more dramatic drop in sales from the previous year by nearly 30%. The drop appears to start levelling out in 2012.

Figure 1 - Population, Households and Land Won Aggregate Sales in KCC Area 2002-2012



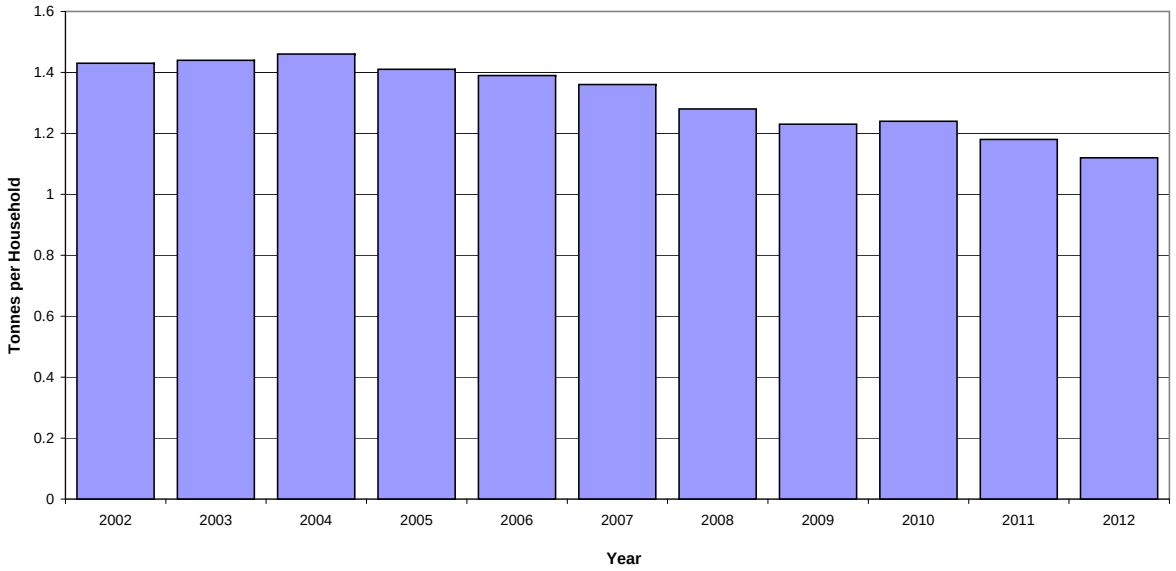
3.2.2 Historically there has been a relationship between growth in the number of households and growth in Municipal Solid Waste (MSW) arisings. However, the graph below suggests that this relationship started to falter from 2004/05 as MSW arisings have decreased despite growth in population and households. MSW arisings have decreased by 27,280 tonnes (-3.8%) between 2012/13 and 2011/12, whereas the the population increased by 0.9%.

Figure 2 - Population, Households and MSW Arisings in KCC Area 2002-2012



3.2.3 Figure 4 shows that since 2004 household waste arisings decreased until 2010 when there was a slight increase in output. However, this may have been an anomaly as MSW arisings decreased again in both 2011 and 2012.

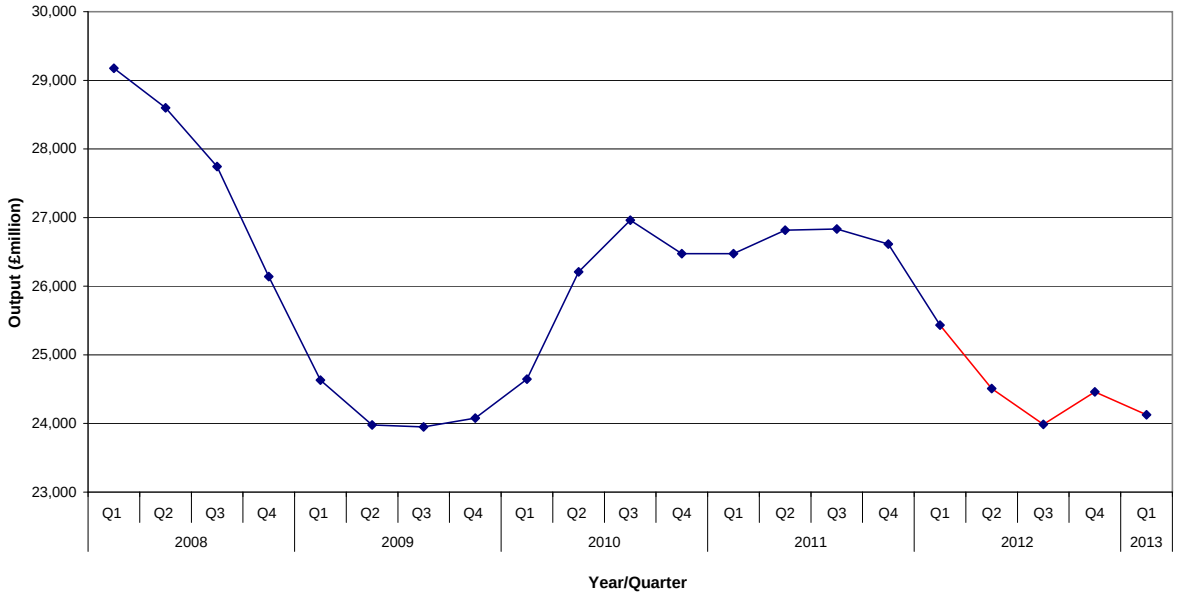
Figure 3 - Waste Produced Per Household in KCC Area 2002-2012



Contextual Indicator 2: The Economy

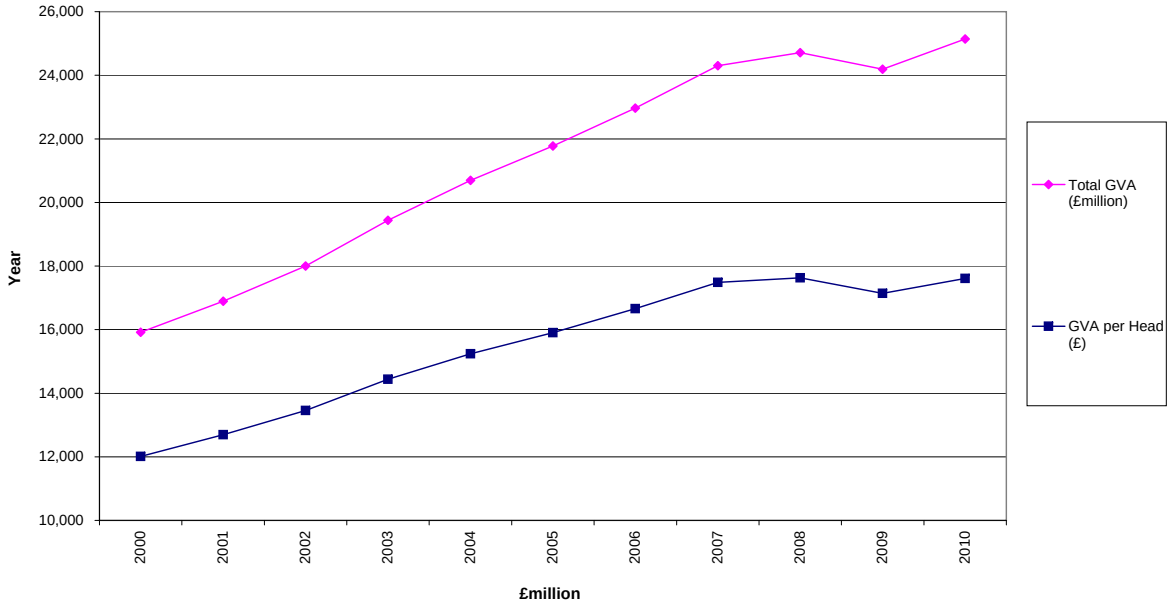
3.2.4 Figure 5 shows a decline in construction output since 2008. There was a brief improvement in 2010 but this levelled off and 2012 shows a further decline. That said, the first quarter of 2013 shows another potential improvement in construction output. Construction output refers to new housing work, new work (non-housing), housing repair and maintenance and non-housing repair and maintenance.

Figure 4 - National Construction Output between 2008 and 2013



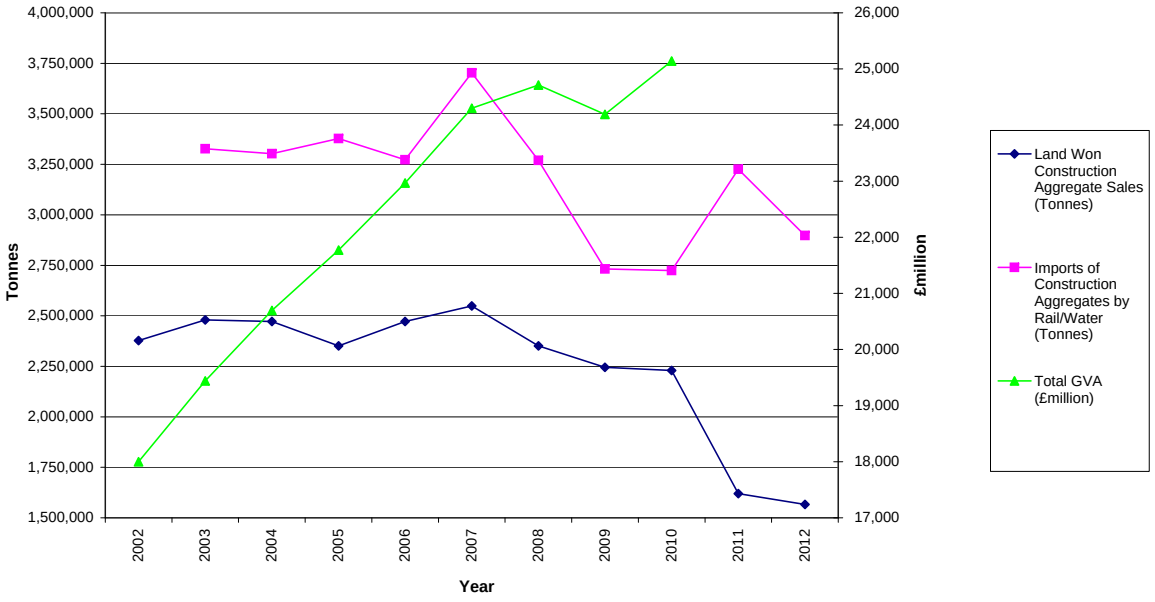
3.2.5 Previous AMRs have reported on the Kent economy using data on the Gross Value Added (GVA) for the county. There is a delay of two years in the availability of this data, therefore this year's AMR only uses data up to 2009. GVA is defined by the Office for National Statistics as "*the difference between output and immediate consumption for any given sector/industry. That is the difference between the value of goods and services produced and the cost of raw materials and other outputs which are used up in production"*. The line chart shows the county experienced increasing levels of total GVA and GVA per head during the period 2000 to 2010.

Figure 5 - GVA per head and total GVA for KCC area 2000-2010



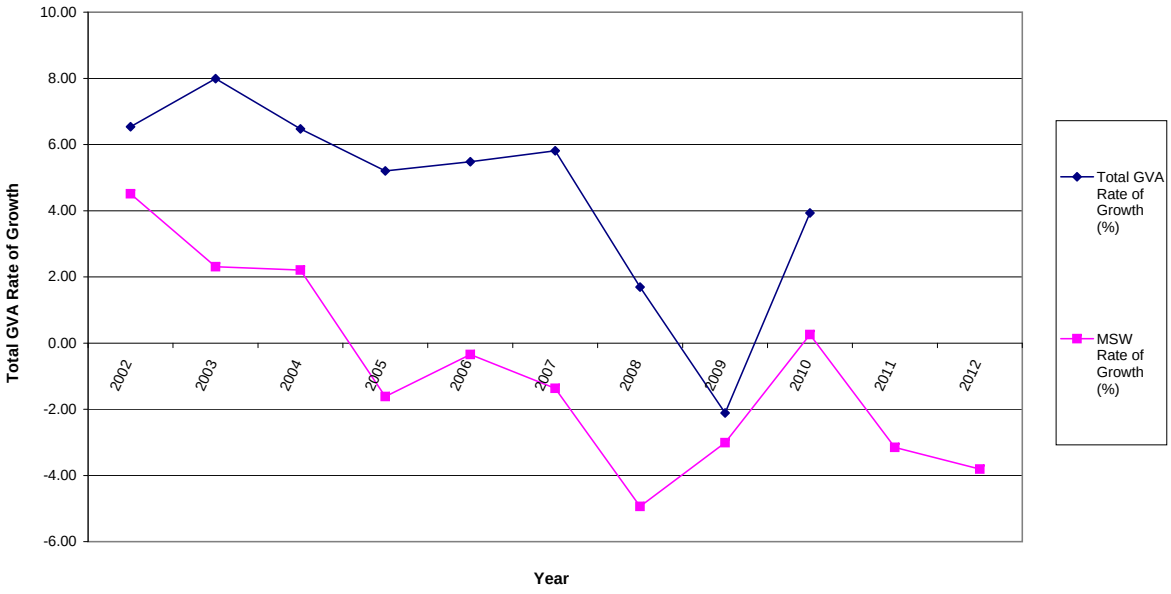
3.2.6 Figure 7 indicates that there is not a direct relationship between land-won construction aggregate sales and total GVA. Land-won construction aggregate sales have continued to drop since 2007, this was also mimicked by imports of construction aggregates until 2011 when there was a sharp increase compared to the continual reduction of sales of aggregates. 2012 sees a further decrease in both land-won sales and imports of construction aggregates.

Figure 6 - Construction Aggregate Sales and GVA in KCC Area 2002-2012



3.2.7 Growth in MSW is often associated with economic growth. The following graph suggests that this is true in Kent as the MSW growth rate and total GVA rate of growth broadly follow the same trend. Since 2003 the trend has become weaker as waste arisings have fallen. However, in 2009 the MSW arisings increased whereas the GVA did not, this is the first time the rates have not echoed each other.

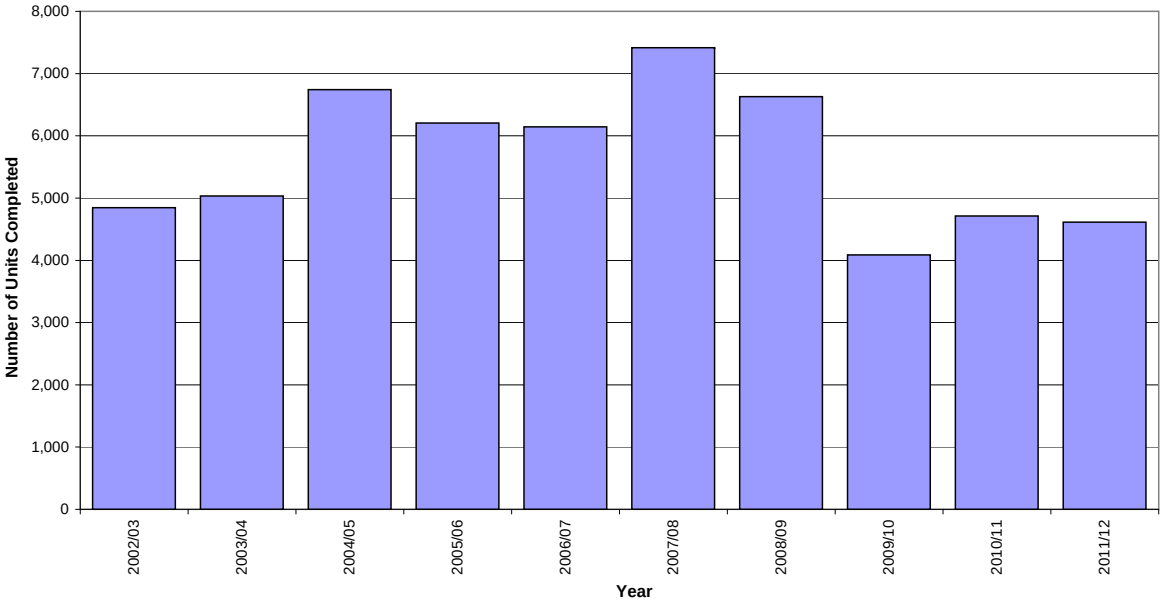
Figure 7 - MSW Managed in KCC Area 2002-2012



Contextual Indicator 3: Housing Completions

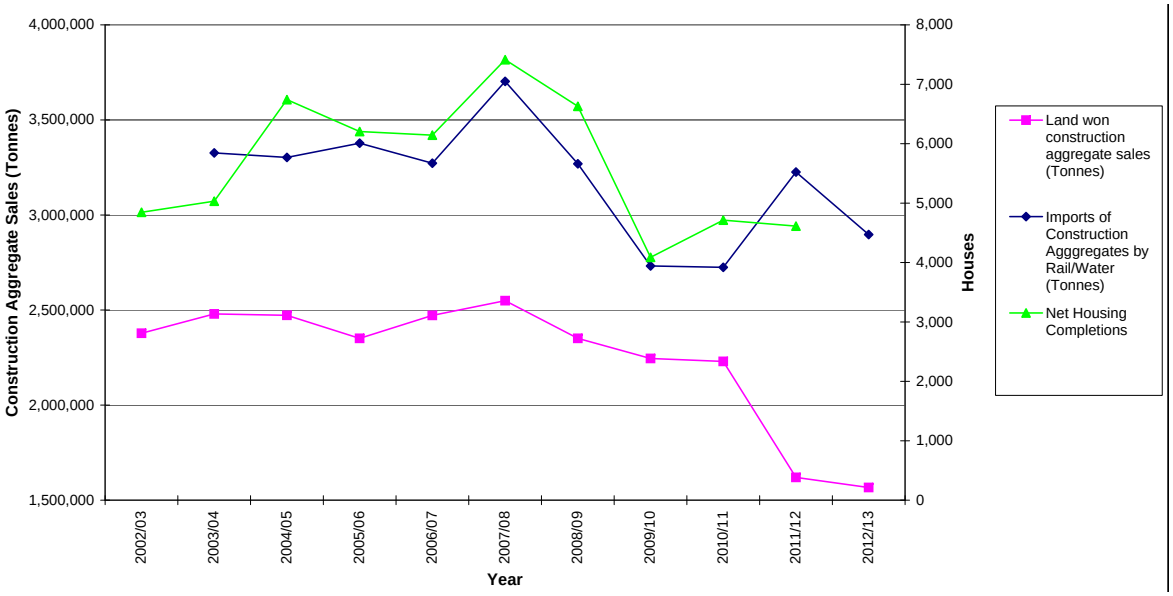
3.2.8 The number of new housing completions has fallen from 6,629 in 2008/09 to 4,086 in 2009/10. However, 2010/11 figures show that there was a slight recovery in housing completions with a 13.4% increase to 4,714 completions. There was a further decrease in 2011/12 where figures show a slight fall by 2.2% to 4,612 completions.

Figure 8 - Housing Completions in KCC Area 2002 - 2012



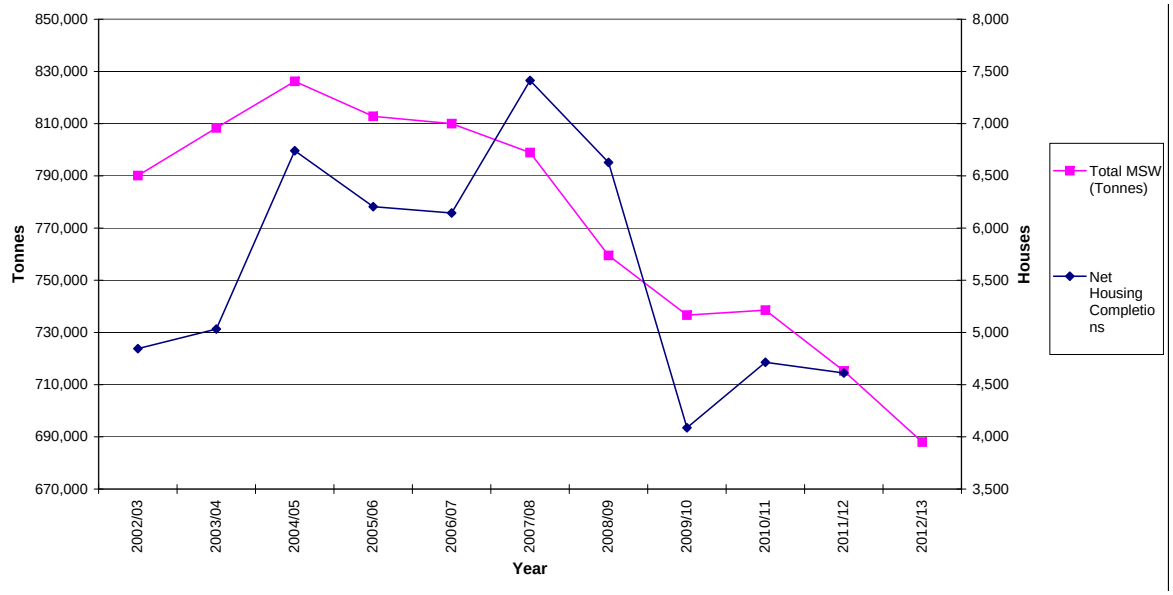
3.2.9 The importation of construction aggregates by rail and water has seen a sharp increase since 2011/12 and a further decrease can also be seen for land-won aggregate sales. More recent housing completion data was not available for this AMR, however it was seen to level off in the previous 2011/12 AMR after the increase in 2010/11.

Figure 9 - Construction Aggregate Sales and Housing Completions in KCC Area 2002-2013



3.2.10 Over the past 10 years MSW arisings have broadly followed the same pattern as net housing completions. Since 2007/08 MSW arisings have decreased whereas net housing completions rose between 2006/07 and 2007/08 before decreasing. The graph shows that between 2009/10 and 2010/11 there was a slight recovery in Housing Completions and along with this MSW arisings also increased, however the latest data shows a sharp fall in MSW arisings for 2011/12 and again in 2012/13.

Figure 10 - Housing Completions and MSW Arisings in KCC Area 2002-2013



3.3 Output Indicators: Minerals

Core Output Indicator 5A: Production of Primary Land-won Aggregates

3.3.1 Indicator 5A requires separate figures for the provision of sand and gravel and crushed rock. This approach is not appropriate in Kent as there are only two sites producing crushed rock in the county. Data from three sites or more are required for aggregated figures in order to protect commercial confidentiality.

3.3.2 The annual production of primary land-won aggregate in Kent for 2012 was approximately 1,570,000 tonnes for all sand, gravel and crushed rock,[20] which is a decrease of around 300,000 tonnes from the position in 2011.

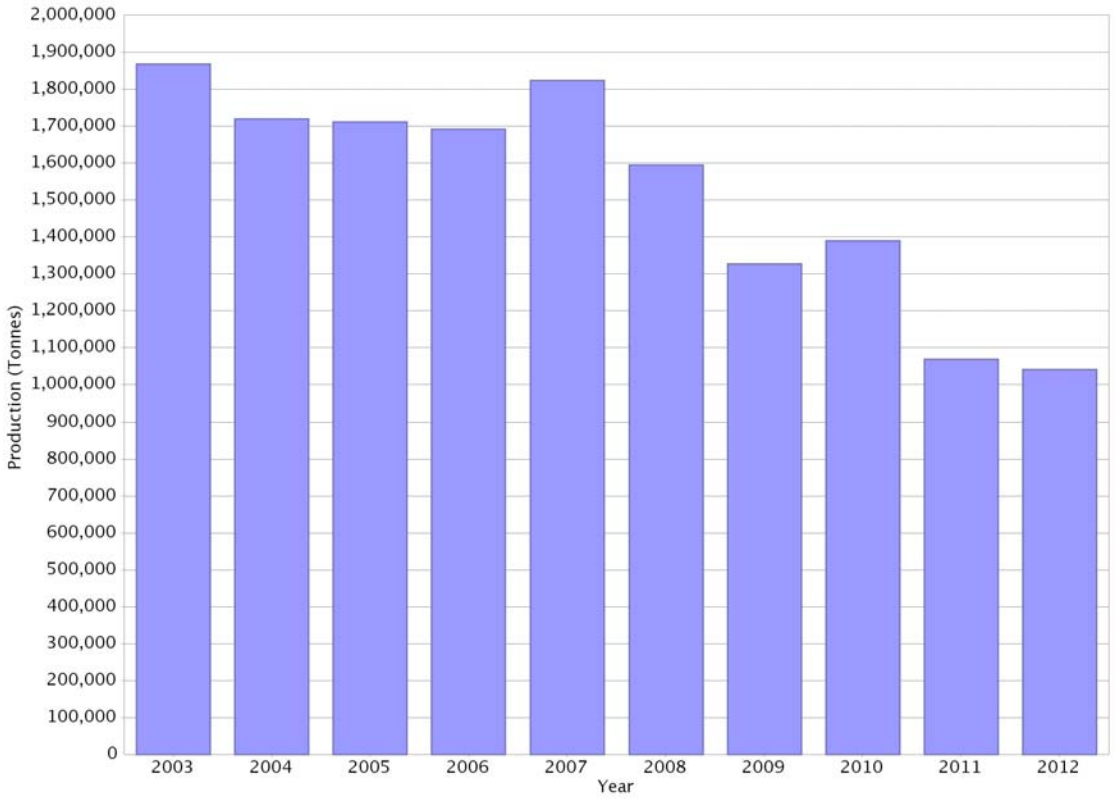
3.3.3 The Regional Spatial Strategy (RSS) for the South East of England (the South East Plan) Policy M3 on construction aggregates, used for the basis of policy monitoring in recent years, has been revoked. However, the details within the 2010 proposed changes for Policy M3: Construction Aggregates,[21] together with the supporting evidence base, remains relevant and credible following testing at the Plan's Examination in Public. The revised policy apportionments for Kent also closely reflected past sales.

3.3.4 While the revised M3 Policy required KCC to make provision for a landbank of at least seven years of planning permissions for land-won sand and gravel with an apportionment of 1.63 million tonnes per annum (mtpa), the National Planning Policy Framework (NPPF) requires Mineral Planning Authorities (MPA) to prepare an annual Local Aggregate Assessment (LAA) based on a rolling average of **10 years** sales data and other relevant local information, assessing all aggregate supply options.[22]

3.3.5 Figure 12 shows the trend in annual land-won sand and gravel sales in Kent over the last ten years. This combines data for both soft sand and sharp sand and gravel into one data set per year.

20 Figures rounded to preserve confidentiality of crushed rock figures.
21 GOSE (2010) The South East Plan. The Secretary of States's Proposed Changes. Policy M3 - Primary Land-won Aggregates Sub Regional Apportionment
22 DCLG (2012) National Planning Policy Framework, para.145

Figure 11 Sand and Gravel Sales in Kent between 2003 and 2012



3.3.6 Sand and gravel sales in 2012 were a 3% decrease from the 2011 sales figures. Whilst there was a generally stable trend in land-won sand and gravel sales between 2003 and 2007, sales have mostly steadily decreased since 2007. Although the initial fall was assumed to be a result of the of on-going impact of economic downturn in the UK, the lower sales for land-won sand and gravel in recent years could instead be partly attributed to a increased preference for imported sand and gravel: *See Local Output Indicator 4: Safeguarding of Wharves and Rail Depots for imported aggregate sales figures*. It is worth noting that since 2011 operations at one of the largest sand and gravel quarries in Kent moved across the county boundary into a neighbouring authority. Whilst production is continuing at that site, the aggregates produced are not extracted in Kent. This has contributed to the significant drop in sales from Kent sand and gravel sites since 2010.

3.3.7 Table 4 shows the average sand and gravel sales over the last three, five and ten years. The figures indicate that the sales of sand and gravel in Kent have been declining over the last ten years. The decline is thought to be due to site closures, particularly during the economic downturn, and diminishing demand for land-won sand and gravel.

Table 4 - Average Sales of Land-won Sand and Gravel: Kent Area

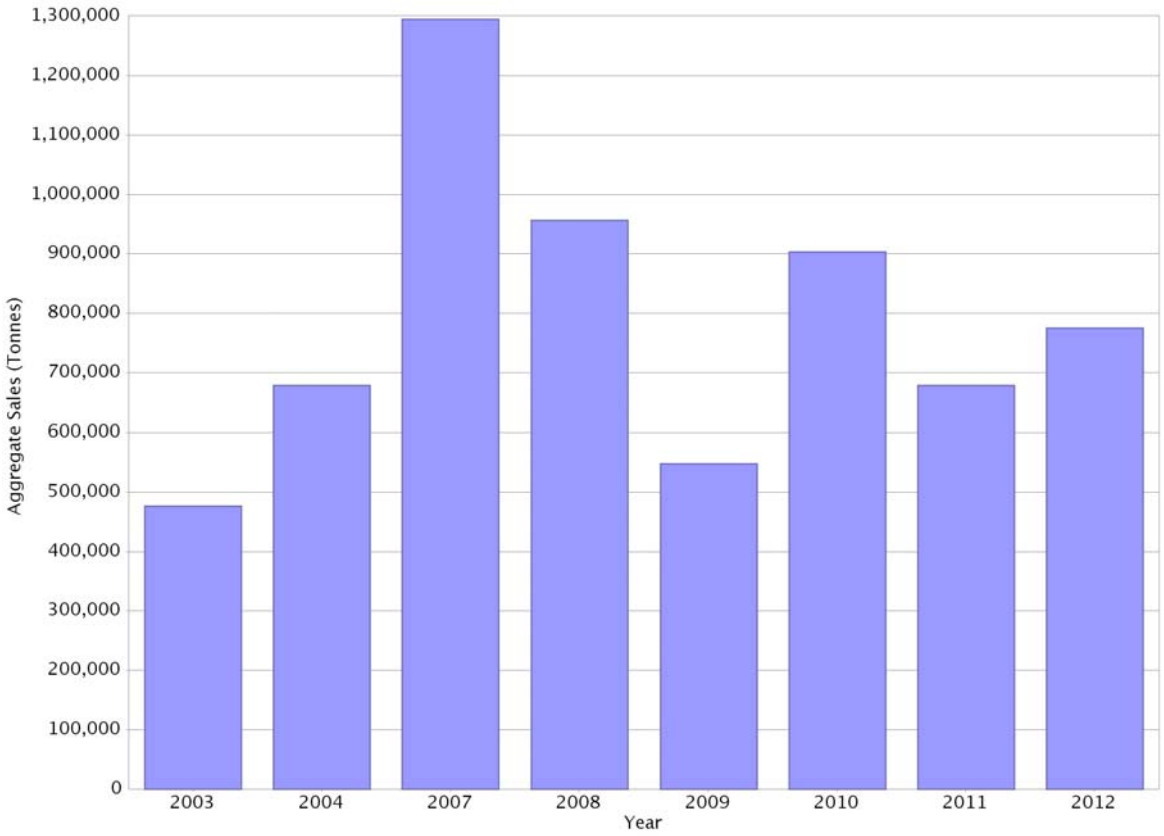
Average	Tonnes
Last 10 years	1,523,498
Last 5 years	1,283,976
Last 3 years	1,166,018

Core Output Indicator 5B: Production of Secondary/Recycled Aggregates

3.3.8 As the South East Plan and it's evidence base are still relevant to the Kent Minerals and Waste Local Plan (MWLP), the County Council is continuing to use the minimum production targets from Policy M2 of the revoked South East Plan, which required Kent to make provision for the production of 1.4mtpa of secondary and recycled aggregates by the year 2020, increasing to 1.56mtpa for the period up to 2030. The 2012 Aggregate Monitoring Survey indicates that the production of secondary and recycled aggregates in Kent was 774,607 tonnes, equivalent to just over half (55%) of this target.

3.3.9 Figure 13 shows that, aside from some minor annual variation, secondary and recycled aggregate sales have generally declined since reaching a peak in 2007. However, secondary and recycled aggregate production appears to have risen in Kent in 2012 with an increase of almost 100,000 tonnes (14%) from 2011 sales, although it should be noted that the rate of returns to the 2012 survey were slightly higher.

Figure 12 Secondary and Recycled Aggregate Sales in Kent between 2003 and 2012



3.3.10 It should be noted that the Aggregate Monitoring Survey only considers the production of secondary and recycled aggregates at fixed sites. No account is taken of the recycled aggregate produced by mobile crushers on building sites and similar short term developments.

Local Output Indicator 1: New Mineral Reserves

3.3.11 During the 2012/13 monitoring period there were eight minerals related planning applications granted planning permission, none of which increased Kent's permitted mineral reserves.

3.3.12 Appendix B provides a full list of significant minerals and waste planning application decisions for the monitoring period (1st April 2012 to 31st March 2013).

Local Output Indicator 2: Construction Aggregate Landbank[23]

3.3.13 The revised South East Plan Policy M3 on Construction Aggregates required Kent to maintain a landbank apportionment of planning permissions for land-won sand and gravel at 1.63 mtpa and 0.78mtpa of crushed rock until 2026. Following the publication of the NPPF in March 2012, MPAs are now required to prepare an annual LAA based on a rolling 10 year sales data and other relevant local information

23 Landbank figures are as at 31st December 2012 and are based on the returns for the 2012 Aggregate Monitoring Survey. Survey data is collected on a calendar year basis.

and an assessment of all supply options. The NPPF retained the requirement for MPAs to make provision for the maintenance of landbanks of at least seven years for sand and gravel and at least ten years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised. Longer periods may be appropriate to to take account of the need to supply a range of types of aggregates, locations of permitted reserves relative to markets and productive capacity of permitted sites.[24]

Land-won Sand and Gravel Landbank

3.3.14 The reserves of land-won sand and gravel for aggregate use in Kent stood at 18,527,212 tonnes on the 31st December 2012.

3.3.15 The NPPF requires the sand and gravel landbank for Kent (which includes both soft sand and sharp sand and gravel) to be based on the latest rolling 10 year sales average. The rolling 10 year sales average (from 2003 to 2012) for all land-won sand and gravel is 1,532,888 mtpa. The estimated landbank for Kent for land-won sand and gravel is therefore 12.1 years at the end of 2012 (using the rolling 10 year sales figure average).

3.3.16 The annual Aggregate Monitoring Survey collects data on sales of sand and gravel by use type; this collection of data by use categories[25] enables the calculation of separate sales and reserve data for soft sand and sharp sand and gravel. Using the past 10 year average sales figure, the ratio of sales of land-won soft sand to sharp sand and gravel is: 40.7% soft sand to 59.3% sand and gravel. On this basis, Kent had a 23.6 year landbank for soft sand and a 4.2 year landbank for sharp sand and gravel at the end of 2012.

Crushed Rock landbank

3.3.17 National minerals policy guidance in the NPPF requires the maintenance of a landbank of at least 10 years for crushed rock. Using the assumed 10 year rolling average sales figure over the period to the end of 2030 as the average rate, existing reserves would provide a remaining landbank of over 40 years.

3.3.18 As there are only two operating crushed rock (ragstone) quarries in Kent, precise landbank figures cannot be identified due to commercial confidentiality.

Local Output Indicator 3: Other Mineral Landbanks

3.3.19 Permitted reserves and production rates for other (non-aggregate) minerals are not monitored in the same way as construction aggregates. KCC have conducted its own Non-Aggregates Mineral Surveys in recent years (2008 and 2011) as part of the evidence gathering for the Kent MWLP. A further update was carried out for the 2012 calendar year (to mirror the data received annually for Aggregates Monitoring

24 DCLG (2012) National Planning Policy Framework, para.145

25 The use categories are soft sand, sharp sand and gravel, and sand and gravel or hoggin for constructional fill.

Survey) requesting mineral reserve and sales figures from operators. However, unlike the Aggregate Monitoring Survey conducted by the South East England Aggregate Working Party (SEEAWP), our own 'other minerals' surveys do not benefit from the support of trade associations and as such they don't achieve a full response rate. The information obtained from this survey has therefore been combined with estimates of reserves and production rates drawn from previous survey returns, planning applications and other publicly available documents.

Brick and Tile Making from Clay or Brickearth

3.3.20 The NPPF[26] requires MPAs to maintain landbanks of brickclay (including brickearth) of at least 25 years and to take account of the need for provision of brick clay from a number of different sources to enable appropriate blends to be made.

3.3.21 The brickwork closures in recent years have had a substantial impact on the capacity in Kent and on the distance that currently consented material travels within the county. Whilst there are currently no operational brickworks in Kent which use clay as a raw material, there is a tile manufacturer (Babylon Tile Works) in the Weald of Kent south of Maidstone, which makes Kent peg tiles from clay reserves adjacent to the works; the permitted reserves at this site meet the requirements within the NPPF for brick clay (at least 25 years) but the existing planning permission requires extraction to cease by April 2022 and for Kent peg manufacture to cease after a further year.

3.3.22 During the monitoring period planning permission expired at one site with remaining reserves. This leaves three separate, active, permitted landbanks of clay and brickearth in Kent which all together have a landbank of over 25 years (see Table 5).

Table 5 - Clay and Brickearth Landbanks at Active Brick and Tile Works

Name of Works	Operator	Source	Estimated Length of Supply
Babylon Tile Works, Maidstone (Kent peg tile manufacturer)	V&M Gash	Weald Clay	Over 25 years
Funton Factory, Sittingbourne[27] (Hempstead House)	Ibstock Brick Ltd	Brick Earth	Less than 10 years
Smeed Dean Brickworks, Sittingbourne (Claxfield Farm)	Wienerberger Ltd	Brick Earth	Less than 5 years

26 DCLG (2012) National Planning Policy Framework, para. 146

27 After the factory closure in 2008 the production of the yellow Faversham stock bricks using brickearth from north Kent has now moved to Ibstock's brick works in Ashdown in East Sussex.

3.3.23 The following clay and brickearth sites in Table 6 are either in the process of being restored or planning permission has expired.

Table 6 Kent Clay and Brickearth Landbanks Restored, Closed or with Expired Planning Permissions

Name of Works	Operator	Source	Status
Hammill Brickworks, Sandwich	Hammill Brick Ltd	Thanet Sands	Hammill Clay Quarry is in the process of being restored. Brickworks closed in 2008.
Tilmanstone Brickworks, Dover	Hanson Building Products	Weald Clay, Gault Clay & Colliery Shale	Closed in 2010.
Ospringe Brickworks, Faversham	Cremer & Whiting Ltd	Brick Earth	Site restoration and aftercare completed.
Pluckley Quarry, Ashford	Korex Limited	Brick (Weald Clay)	Over 25 years supply. Planning permission expired in December 2012.

Silica Sand

3.3.24 National minerals policy guidance on silica sand requires MPAs to ensure that silica sand landbanks of at least 10 years are maintained at individual, existing sites and of at least 15 years for sites where significant new capital is required.[28]

3.3.25 Silica sand is extracted from several quarries in Kent. Currently Aylesford Quarry near Maidstone, Addington (Wrotham) Sand Pit and Nepicar Farm Sand Pit are regarded as sites that produce and market primarily silica sand. The estimated length of supply at these sites, indicated in Table 7, have been calculated from 2012 sales rates. Currently two sites meet the required 10 year minimum landbank for existing sites.

3.3.26 The length of supplies are approximate estimates as the rate of consumption of silica sand can be dependent upon the products produced by the site, the length of the planning permission and where the silica sand reserves are located in relation to the other sand reserves within the site.

28 Communities and Local Government (2012) National Planning Policy Framework, para. 146

Table 7 - Landbanks at Silica Sand Quarries in Kent

Name of Site	Operator	Length of Supply
Addington (Wrotham) Sand Pit	Hanson Aggregates	Less than 3 years
Aylesford Sand Pit	CEMEX[1]	Over 15 years
Nepicar Farm	J Clubb	Over 15 years

1. Operations closed during monitoring period (May 2012). Sold to new operator on 01 November 2013.

Cement Making Materials

3.3.27 National minerals planning guidance in the NPPF requires MPAs to maintain landbanks of permitted reserves of raw materials for cement plants. These landbanks should include the industry's primary materials (chalk and limestone) and also secondary materials (clay and shale). Landbanks should be calculated on a per site basis and new sites should have a stock of permitted reserves to last more than 25 years for cement's primary and secondary materials to support a new kiln.[29]

3.3.28 There are currently no active cement quarries in Kent. There are significant amounts of consented reserves of chalk and clay for cement manufacture adjacent to the permitted, but not yet built, Holborough Cement Works as detailed in Table 8.

Table 8 - Chalk and Clay Landbanks at Cement Works in Kent

Name of Site	Operator	Length of Supply
Holborough Cement Works	Lafarge Cement UK	Not yet constructed – Over 25 years at planned consumption rate

Chalk and Clay for Agricultural and Engineering Uses

3.3.29 Chalk is used in agriculture and engineering in Kent, as well as being used in the production of bricks, tiles and cement. Clay is also required in some engineering processes. While chalk for engineering and agricultural use is not covered specifically in current national minerals policy, the former South East Plan Policy M4: Other Minerals required MPAs to make future provision for chalk as a regionally significant mineral of national importance.

3.3.30 A survey of land-won chalk extractors in Kent undertaken for 2011 indicated that sales were considerably higher than previously estimated due to a large volume of sales from one site, with total sales of 203,500 tonnes of land-won chalk from six operational sites. On this basis of the 2011 production rates it was estimated that the remaining chalk reserves would be sufficient for 13 years. However, the 2011 higher rates of sales did not continue into 2012, decreasing by around 100,000

29 DCLG (2012) National Planning Policy Framework, para. 146.

tonnes. On the basis of the 2012 rate of sales at six active sites, the existing chalk landbank would be sufficient for around 15.5 years. Alternatively, a calculation based on the average rate of chalk sales between 2003 and 2012 would indicate a landbank figure of 11.6 years.

3.3.31 Kent has a number of freestanding clay working permissions with significant deposits of consented clay. However, only one of these sites remains active. The reserves tied to the other sites have not been worked for many years, or are dormant Interim Development Order sites and therefore cannot be realistically included in the current landbank. Whilst this AMR cannot report on sales from individual sites due to commercial confidentiality, it can be reported an average of 27,400 tonnes per annum of clay from land-won sources was sold in the years between 2000-2009 for which data is available.

Local Output Indicator 4: Safeguarding of Wharves and Rail Depots

3.3.32 National minerals policy requires MPAs to safeguard existing, planned and potential sites which can accommodate railheads, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterway of minerals.[30]

3.3.33 KCC worked jointly with Medway Unitary Authority to update the previous Kent and Medway Imports Survey (2006). The updated report was published as part of the evidence base for the Local Plan - Strategy and Policy Directions consultation in May 2011.[31]The Imports Survey reiterated the importance of continuing a steady supply of both marine dredged aggregates from the dredging grounds around the coast and crushed rock from Europe as land-won resources of aggregates are further depleted.

3.3.34 At the end of 2012 there were 11 active wharves in Kent.[32] There were also three active rail depots in the county, located around Maidstone, Tonbridge and Ashford.

Local Output Indicator 5: Sales of Construction Aggregates at Wharves and Rail Depots

Wharves:

3.3.35 The construction aggregate sales (from both land-won and marine sources) at Kent's wharves in 2012 were as follows:

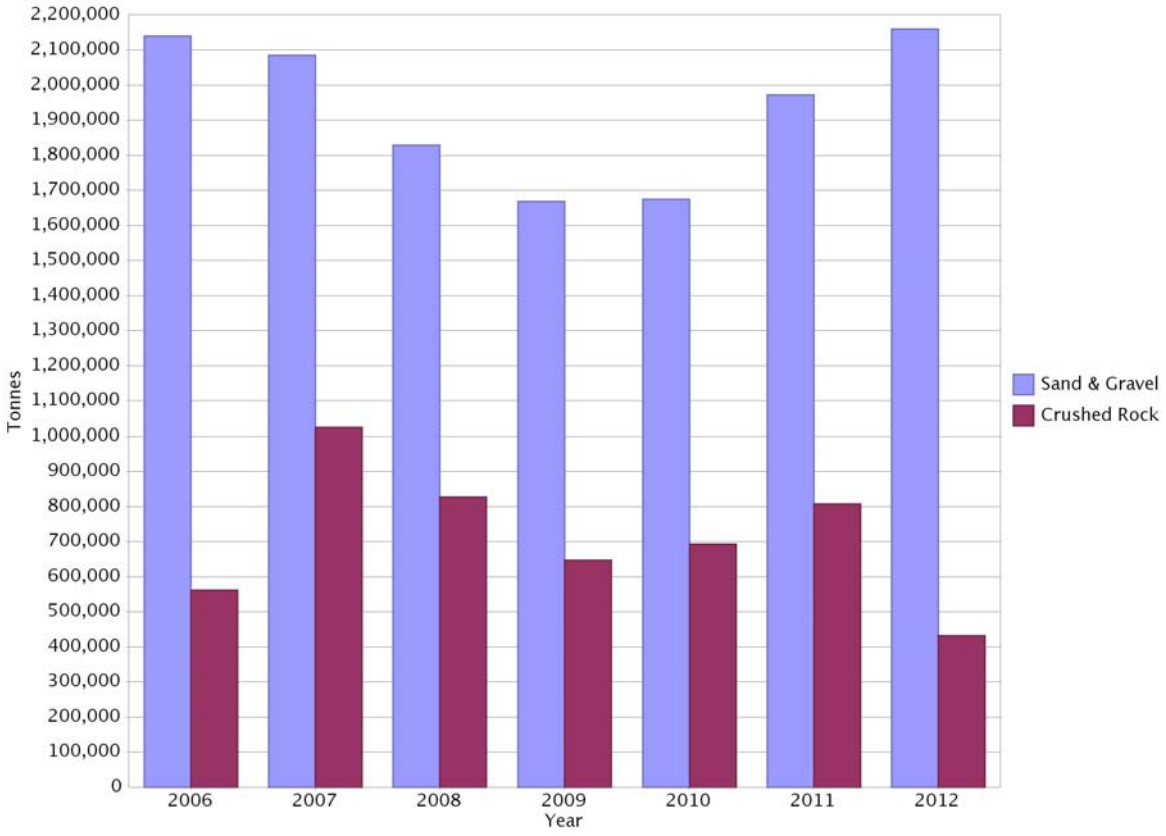
- 2,161,031 tonnes of sand and gravel (9% increase from 2011).
- 432,677 tonnes of crushed rock (46% decrease from 2011).

30 DCLG (March 2012) National Planning Policy Framework, para. 143
31 Kent County Council and Medway Council (May 2011) Kent and Medway Imports Study
32 Two of the wharves (at Ridham and Robins Wharf Northfleet) have two operators.

3.3.36 Despite the significant fall in imported crushed rock sales in 2012, the total imported aggregates sales were partly compensated by highest imported sand & gravel sales for seven years, providing a total of 2,593,708 tonnes of construction aggregates sold at Kent's wharves in 2012, a decrease of 186,318 tonnes (7%) from 2011 sales.

3.3.37 Figure 14 shows the aggregates sales at Kent's Wharves between 2006 and 2012. Sales of both sand and gravel and crushed rock from Kent's wharves declined between 2007 and 2009; a likely result of economic downturn in the UK. However, the increases since 2010 have shown a recovery in sales rates that may be partly a consequence of the diminishing demand for land-won sand and gravel (see indicator 5A).

Figure 13 Sales of Construction Aggregates at Wharves 2006 - 2012



Rail Depots:

3.3.38 Construction Aggregate sales (from both land-won and marine sources) at Kent's rail depots in 2012 were as follows:

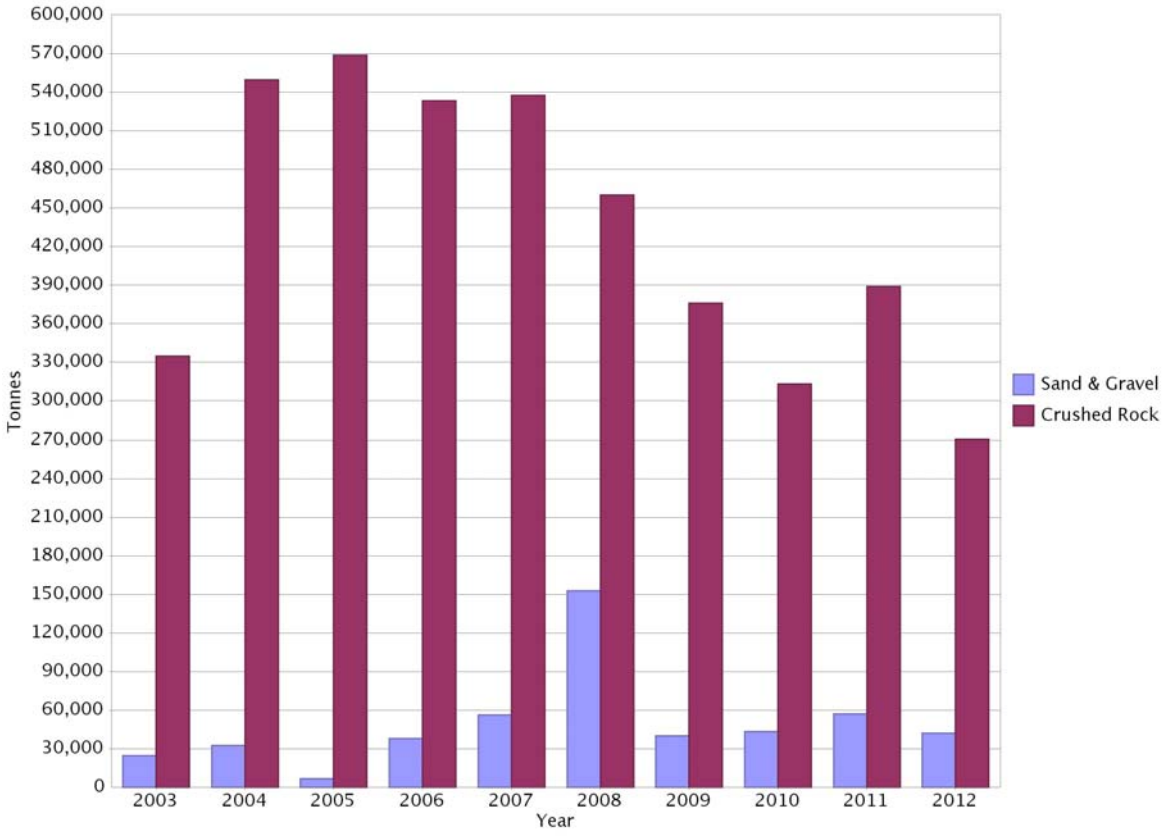
- Approximately 40,000 tonnes of sand and gravel (around a quarter decrease from 2011).[33]
- 270,586 tonnes of crushed rock (30% increase from 2011).

33 Exact figures cannot be reported due to commercial confidentiality.

3.3.39 The total sales of construction aggregates sold at Kent's rail depots in 2012 is therefore 312,714 tonnes, an overall decrease of 133,213 tonnes (30%) from sales in 2011.

3.3.40 Figure 15 shows that sales of construction aggregates at rail depots have followed similar trends to sales at Kent quarries and wharves, with sales generally decreasing between 2008 and 2010 due to the effects of economic decline with some indication of recovery in 2011. The drop in sales in 2012 can be attributed to one, formerly active, Kent rail depot being inactive that year.

Figure 14 Sales of Construction Aggregates at Rail Depots in Kent (2003 - 2012)



Construction Aggregate Summary

3.3.41 Table 9 below demonstrates that sales from land-won aggregates sources have been partly supplemented by sales at Kent's wharves and rail depots.

Table 9 - Construction Aggregate Sales Summary 2012

Aggregate Source	2012 Sales (tonnes)
Land-won Aggregate	Approx 1,570,000
Secondary/Recycled Aggregate	774,607
Wharves and Rail Depots	2,897,303

3.3.42 Table 10 provides an overview of the sources of construction aggregate sales in the Kent area.

Table 10 - Kent Summary: Construction Aggregate Sales 2007-2012

Year	Land Won Sand & Gravel (tonnes)	Land Won Crushed Rock (tonnes)	Imported Sand & Gravel (tonnes)	Marine Dredged Sand & Gravel (tonnes)	Imported Crushed Rock (tonnes)	Rail Depot Sand & Gravel (tonnes)	Rail Depot Crushed Rock (tonnes)	Total Sand & Gravel (mt)	Total Crushed Rock (mt)	Total Aggregate Sales (mt)
2012	1,040,259	*C	2,014,125	146,906	432,677	*C	270,586	3.2	1.2	4.4
2011	1,068,496	*C	128,095	1,844,558	807,373	56,921	389,006	3.0	1.8	4.8
2010	1,389,299	*C	1,674,949***		693,302	43,408	313,007	3.1	1.7	4.8
2009	1,326,569	*C	1,667,948**		647,810	*C	375,938	3.0	1.9	4.9
2008	1,595,258	*C	155,832	1,673,172	827,298	152,917	*C	3.6	2.1	5.7
2007	1,823,149	*C	214,996	1,870,206	1,023,785	56,139	537,384	4.0	2.3	6.3

Notes: **C Data subject to confidentiality restrictions*

*** Separate figures not collected in 2009 Aggregate Monitoring Survey*

**** Data merged due to confidentiality restrictions*

3.4 Output Indicators: Waste

Core Output Indicator 6A: Capacity of New Waste Management Facilities by Type

3.4.1 Between April 2012 and March 2013, KCC determined a total of 46 waste planning applications for waste management related development of which 14 resulted in additional capacity for waste management within Kent. The locations of these developments are widely distributed across the county; ten in Swale, seven in Canterbury, six in Tonbridge & Malling and Tunbridge Wells, five in Ashford, four in Dover, three in Dartford, two in Sevenoaks and Shepway and one in Thanet. Gravesham and Maidstone were the only two districts to have no waste management related planning applications throughout the year. A full list of planning applications permitting waste capacity determined by KCC can be found in Appendix B.

Table 11 - New Waste Management Capacity Granted in 2012/13

Type of Facility	Capacity Granted (tonnes per year)
Composting/Anaerobic Digestion	0
Recycling	45,000
C&D Recycling/Aggregate Recycling	175,000
Metal/ELV Facility	25,000
Treatment	100,000
Inert Landfill	3,375
Non-Hazardous Landfill	0
Hazardous Landfill	0
Transfer	655,519
Incineration/Energy Recovery	177,200
Wastewater Treatment	0
Dredging Disposal	0
Total capacity per year of facilities other than landfill	**1,171,719**

Source: KCC Planning Applications Monitoring Data

3.4.2 Eight of the new planning permissions relate to the establishment of new waste operations whilst the remaining permissions are for the expansion of established waste operations, relocation or development of adjoining/nearby land.

3.4.3 The majority of additional capacity during 2012/13 has been granted to waste management facilities operating waste management methods located towards the top of the waste hierarchy; recycling, recovery and preparing for re-use. However, differing to planning applications in 2011/12, capacity has been granted to facilities managing waste by landfill (positioned at the bottom of the waste hierarchy).

Core Output Indicator 6B: Amount of Municipal Waste Arising, and Managed by Management Type, and the Percentage Each Management Type Represents of the Waste Managed

3.4.4 Core Indicator 6B required Waste Planning Authorities (WPAs) to report on the waste categories of MSW used by DEFRA. DEFRA publishes MSW data on their website from information submitted quarterly from both Waste Disposal Authorities (WDA) and Waste Collection Authorities (WCA). Unfortunately due to ongoing reporting issues DEFRA has not published any data since 2009/10 at a level of detail that enables separate Kent data to be identified. Therefore, the data used within this report has been provided by KCC Waste Management Unit (WMU). DEFRA's MSW data for Kent would include recycling carried out by the Kent districts and District Recycling Credit Tonnage.

3.4.5 The tonnage of MSW in the KCC area in 2009/10 was recorded at 743,323 tonnes by DEFRA and 736,651 tonnes by KCC WMU; conveying a difference of 6,672 tonnes. Therefore, the following data for the monitoring period 2012/13 (provided by KCC WMU) will read lower than any data published by DEFRA (DEFRA's data will indicate higher quantities of recycling due to a small amount of recyclables such as clothing banks collected at district level is reported directly to DEFRA and not collected via KCC).

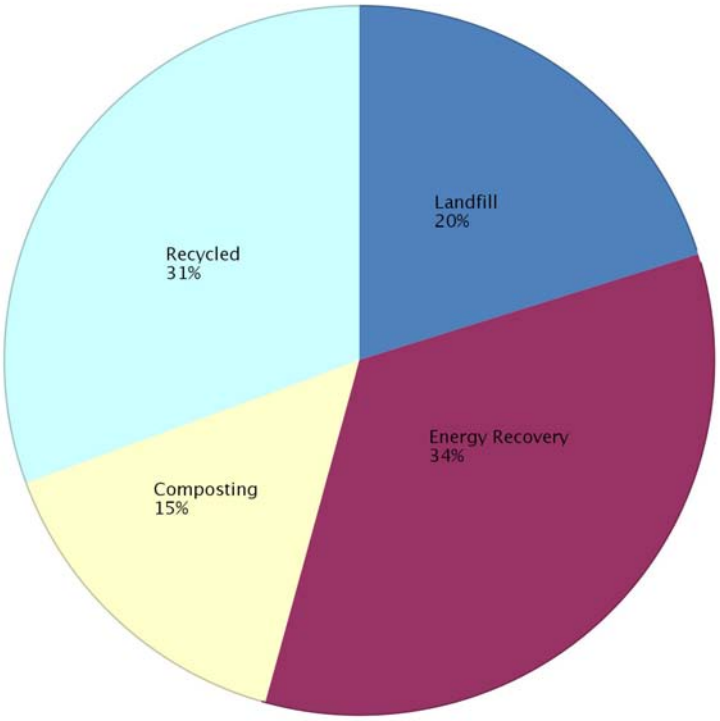
3.4.6 KCC's WMU data for MSW in 2012/13 presents a total of 687,978 tonnes. Of this:

- 210,609 tonnes were recycled (30.6% of total MSW);
- 104,000 tonnes were composted (15.1% of total MSW);
- 234,533 tonnes were sent for energy recovery (34.1% of total MSW) and
- 138,836 tonnes were sent to landfill (20.2% of total MSW).

3.4.7 Compared to data from the previous monitoring period, the amount of MSW recycled and sent to landfill have decreased by a respective 7.1% and 10.2%, while MSW sent for energy recovery has increased by a small 2.2%. The tonnage of MSW composted also decreased however by a minute 0.5%.The decline in waste recycled and sent to landfill could be a result of alterations to the economic climate, success in national initiatives to reduce the amount of packaging and the development of

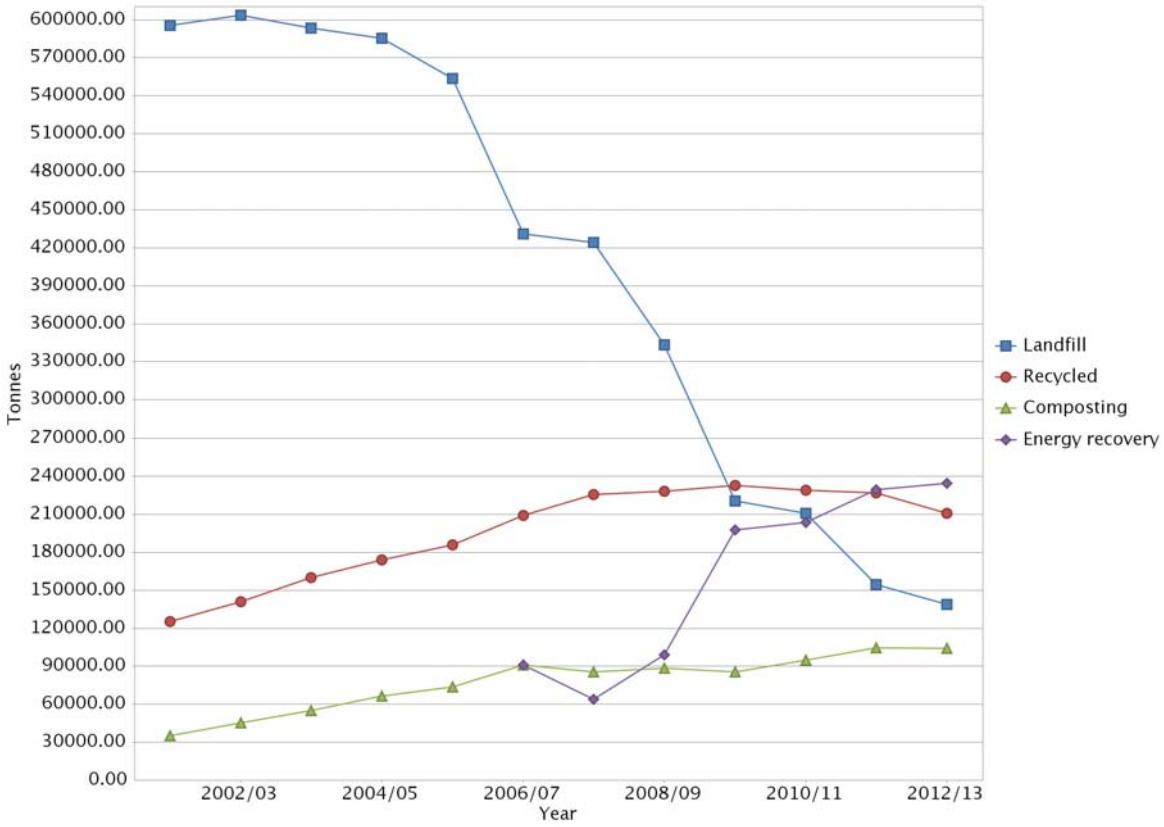
central aims to divert waste from landfill. Although there has been changes in the tonnage of waste sent to the different management methods, the general distribution remains similar to that presented in 2011/12.

Figure 15 - Management of Kent MSW Arisings 2012/13



3.4.8 From 2011/12 to 2012/13, the total amount of MSW managed in Kent has decreased by 3.81% (compared to a fall of 3.15% between 2010/11 and 2011/12) and this is reflected by the decline in quantities of MSW sent for recycling, composting and landfill. Similar to findings in 2011/12, the dominant methods of management continue to be recycling (31% of total MSW) and energy recovery (34% of total MSW). A respective decrease in the total MSW sent to landfill in 2012/13 reflects the continued trend of decline since 2004/05.

Figure 16 - MSW Arisings in Kent 2001-2013 by Method of Management



3.4.9 The graph in Figure 17 conveys that the tonnage of MSW sent to landfill has significantly decreased over the past 10 years. However, from 2011/12 to 2012/13, the rate of decline has slowed. Differing to recordings during 2001/02 to 2011/12, the levels of recycling since the last AMR have decreased for the first time (by 7.1%). The tonnage of MSW sent for composting has also fallen during the past year. However, such levels continue to fluctuate; continuing the trend seen since 2001/02. The graph also presents that MSW sent for energy recovery has increased from 2011/12 to 2012/13 by a small 2.2%, reflecting a pattern of increase since 2008/09.

3.4.10 The National Waste Strategy 2007 established a target of 40% of household waste to be recycled or composted by 2010. Kent has again exceeded this target as 45.7% of household waste waste was recycled (30.6%) or composted (15.1%) in 2012/13. Compared to the percentage during 2011/12 (46.3%), levels have fallen by 0.6%.

Table 12 - Household Waste Diverted from Landfill in KCC Area 2005-2013

Year	Household Waste Diverted from Landfill (%)
2005/06	28.1
2006/07	44.4
2007/08	44.6
2008/09	54.8
2009/10	70.0
2010/11	69.0
2011/12	78.4
2012/13	**79.8**

Source: KCC Waste Management Unit

3.4.11 Policy W5 of the partially revoked South East Plan incorporated targets (expressed as tpa) for the diversion of waste from landfill (for all waste and individual waste streams). In 2011/12 Kent diverted 560,719 tonnes from landfill and this fell by 11,577 tonnes to 546,142 tonnes in 2012/13; reflecting the reduction of total MSW managed within Kent during 2012/13. Although the levels of MSW diverted from landfill have decreased, the total percentage of MSW in Kent sent to other waste management activities has increased by 1.4% since 2011/12 (presented in Table 12). Whilst there was no specific target set for Kent in 2012, the former regional targets stating that 2.8 million tonnes and by 2015 3.9 million tonnes (mt) of MSW within the region should be diverted from landfill by 2010. As Kent's MSW diversion from landfill is 20% and 14% of both 2010 and 2015 targets, KCC continues to greatly contribute towards achieving regional targets.

Local Output Indicator 6: Waste Generation Growth Rate

Municipal Solid Waste (MSW)

3.4.12 The amount of MSW generated in 2012/13 was 687,978 tonnes. This is explained in greater detail in Core Output Indicator 6B (see above).

3.4.13 During the 2012/13 monitoring period there was negative growth in MSW with a growth rate of -3.81%. Kent has seen a general fall in the rate of MSW growth since 2005. Although a small increase occurred in 2010/11, levels in both 2011/12 and 2012/13 convey a recurrence of the trend of decline; presenting a reduction in the overall tonnage of MSW generated in Kent since 2003/04. Explanations of this continuing fall include changes to the economic climate throughout the monitoring period and an increasing public awareness of waste and waste reduction programmes.

Table 13 MSW Arising in the KCC Area 2005 - 2012

	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13
Total MSW (tonnes)	808,365	826,203	812,830	810,009	798,922	759,493	736,649	738,535	715,258	687,978
Rate of growth	2.26%	2.16%	-1.65%	-0.35%	-1.39%	-5.19%	-3.10%	0.26%	-3.15%	-3.81%

3.4.14 For the purposes for planning for future waste capacity in the MWLP, the KCC WMU has forecast an estimate of the annual arisings of MSW in Kent for the plan period. This forecast has been used by Jacobs to calculate the new waste management capacity that will need sites to be identified in the MWLP. A snapshot of the projections is in the following table along with the expected annual growth rates.

Table 14 - Projected MSW Arisings 2011-2031[(34)]

Year	**2011/12**	**2016/17**	**2021/22**	**2026/27**	**2031/32**
Quantity in Tonnes	724,000	747,000	789,000	848,000	913,000
Annual Growth Rate	-1.9%	1.0%	1.3%	1.5%	1.5%

3.4.15 Although the recorded tonnage of MSW arisings in 2011/12 was lower than those forecast, the decrease in arisings was predicted. It is evident from Table 14 that Jacobs forecast a continued growth in MSW arisings in Kent from 2011/12 for the duration of the plan period. However, the predicted pattern of growth is not reflected throughout recordings from 2012/13; portraying a negative growth rate of -3.81%.

3.4.16 The difference between the actual and forecast arisings is not considered as significant to the preparation of the MWLP as:

- It indicates that the plan preparation is on the cautious side and predicting slightly more waste arisings than levels recorded;
- The difference between actual and the forecast of arisings for 2011/12 is not significant. By the end of the plan period this difference will only result in the model overestimating MSW arisings by 11,466 tpa;
- The difference is not significant in the context of the overall results of the capacity forecasting. The plan preparation is being based upon KCC needing to manage 188,911 tonnes per annum more MSW than it is currently managing.

34 Jacobs (January 2012) Need Assessment 2011 Update

Commercial & Industrial (C&I) Waste

3.4.17 There is no data available on the amount of C&I waste produced in Kent each year. For the MWLP an estimate of C&I waste arising in Kent has been made using a national survey of C&I waste. Anticipated annual growth rates are used to produce an estimate of C&I waste arisings in Kent for each year of the MWLP plan period.

3.4.18 The most recent national survey of C&I waste arisings was conducted for the year of 2009 for DEFRA.[35] This data has been used by Jacobs to estimate the amount of C&I waste that will be produced in Kent during the MWLP period based upon the business mix in the Kent economy in 2009.[36]

3.4.19 The estimated amount of C&I waste produced in Kent for the base year of 2009 is 961,000 tonnes. Two different annual growth scenarios have been used to assist with planning for new facilities for C&I waste. These are a low growth scenario of 0% per year and a high growth rate of 2.5% per year initially which decreases to 1.5% in 2016 and to 1% in 2021. The projected tonnages of C&I waste arisings by the different methods are shown in the following table.

Table 15 - Projected Tonnages of C&I waste (rounded to 1,000 tonnes)

	2011	2016	2021	2026	2031
High Growth	1,005,000	1,104,000	1,183,000	1,243,000	1,307,000
Low Growth	961,000	961,000	961,000	961,000	961,000

Construction, Demolition & Excavation (CDE) Waste

3.4.20 The most recent national study on inert CDE waste arisings that has been disaggregated to show waste arisings for the Kent subregion (i.e. the area of Kent and Medway), was conducted in 2005 by Capita Symonds for DCLG.[37] This data has been disaggregated further by Jacobs to estimate the waste arisings in Kent based upon the relative populations of Kent and Medway in 2005.[38] The estimate of the amount of inert CDE waste that arose in Kent in 2005 is 2,600,000 tonnes.

35 DEFRA (May 2011) Survey of Commercial and Industrial Waste Arising 2010
36 Jacobs (January 2012) Need Assessment 2011 Update
37 Capita Symonds (February 2007) Survey of Arisings and Use of Alternatives to Primary Aggregates in England, 2005: Construction, Demolition and Excavation Waste
38 Jacobs (January 2012) Need Assessment 2011 Update

3.4.21 In April 2010, WRAP published a study[39] on the national arisings of CDE both for the inert and non-inert fractions of that waste stream. The year of survey is 2008 and at national level it shows a decrease in inert CDE arisings of 7%. This study does not disaggregate the national survey to regional or county levels, so the 2005 estimate for inert CDE arisings in Kent is the most up-to-date figure.

3.4.22 The Capita Symonds report[40] advised that the differences between the arisings in the 2005 survey and an earlier survey conducted in 2003 were not significant and there were no indications of any growth in waste arisings. The Kent Waste Needs Assessment Study[41] has based its forecast for future waste provision on this and does not use any factor for growth. The Kent MWLP is being prepared on the basis that there will be no growth (i.e. 0% growth rate per year) in inert CDE waste arisings.

3.4.23 Therefore, the estimated amount of inert CDE waste that was produced in Kent in 2012/13 is 2,600,000 tonnes. As the relevant survey work relates only to inert CDE waste, no separate assessment of non-inert CDE waste is possible. However, the MWLP is being prepared on the assumption that the non-inert CDE waste is included in the forecast for C&I waste as in reality it is very difficult to differentiate between the two waste types and both waste types can be handled by the same range of waste management facilities.

Local Output Indicator 7: Exports and Imports of Waste

3.4.24 After receiving data from operators at licensed waste management facilities, information concerning the quantities, origins and destinations of waste is provided annually by the EA. Please note this data set excludes waste managed at incinerators and that it is not possible to provide separate information for C&I waste as the EA combines MSW with C&I waste, creating the category: Household, Commercial and Industrial (HCI) waste. HCI waste roughly equates to non-hazardous waste and use of the EA data permits general conclusions to be reach regarding both imports and exports of inert, non-hazardous and hazardous wastes.

3.4.25 Figures 18 and 19 present the position for imports and exports for the waste streams: HCI, Inert and Hazardous in both 2011 and 2012. As a point of reference the total Kent arisings of waste are shown along with the amount of Kent waste managed within Kent.

39 Construction, Demolition and Excavation Waste Arisings, Use and Disposal for England 2008, WRAP, April 2010

40 Capita Symonds (2005) Survey of Arisings and Use of Alternatives to Primary Aggregates in England, 2005: Construction, Demolition and Excavation Waste

41 Jacobs (May 2010) Need Assessment Modelling Technical Report

Figure 17 Waste Arising in Kent or Managed in Kent in 2011

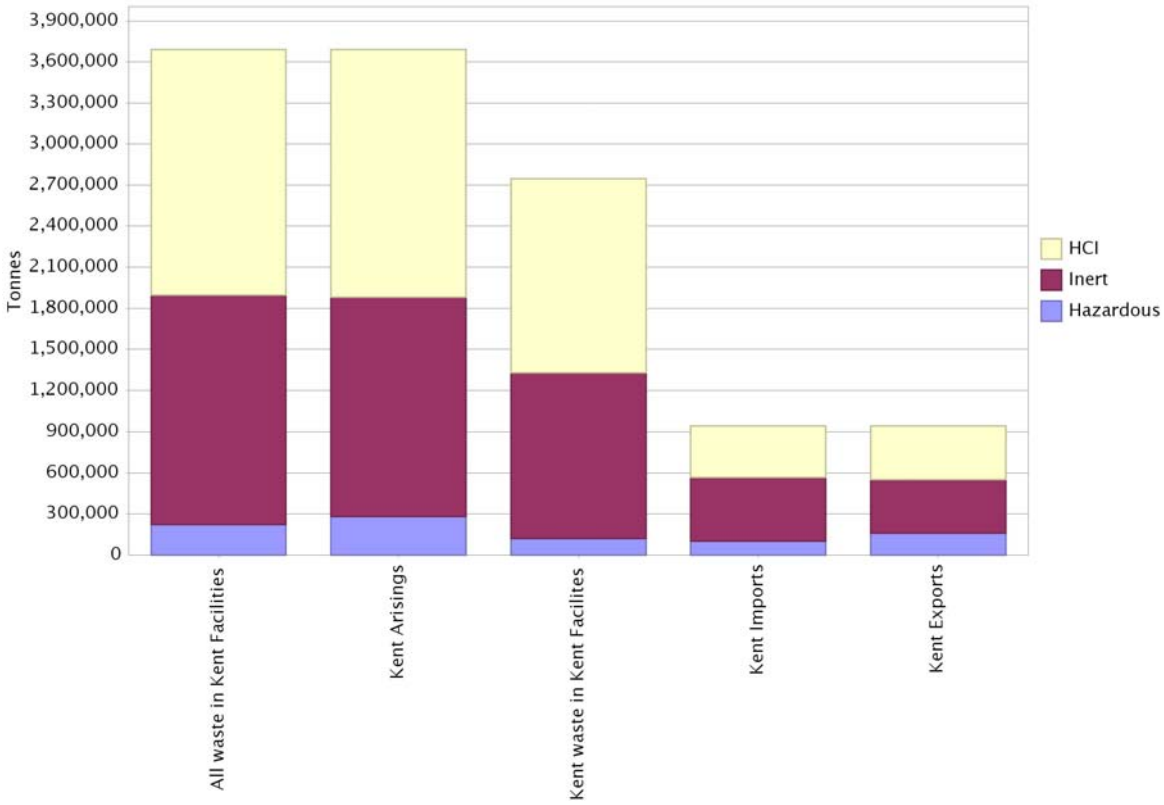
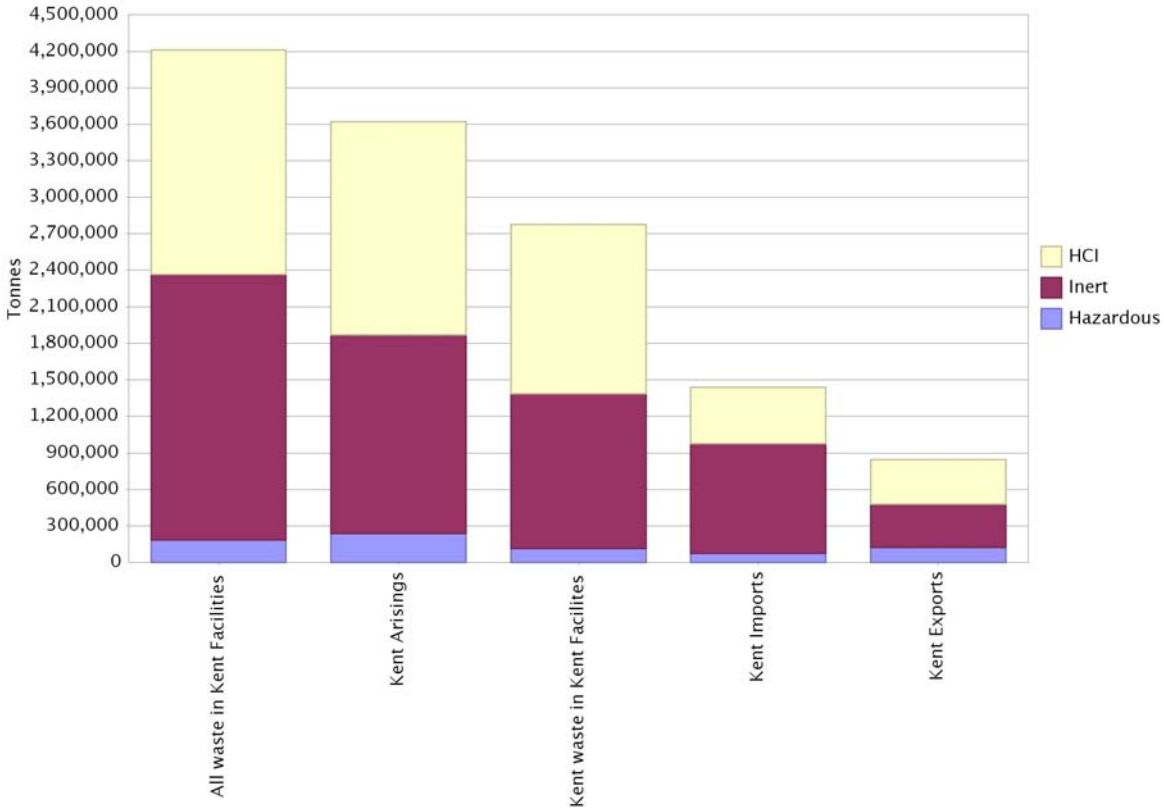


Figure 18 Waste Arising in Kent or Managed in Kent in 2012

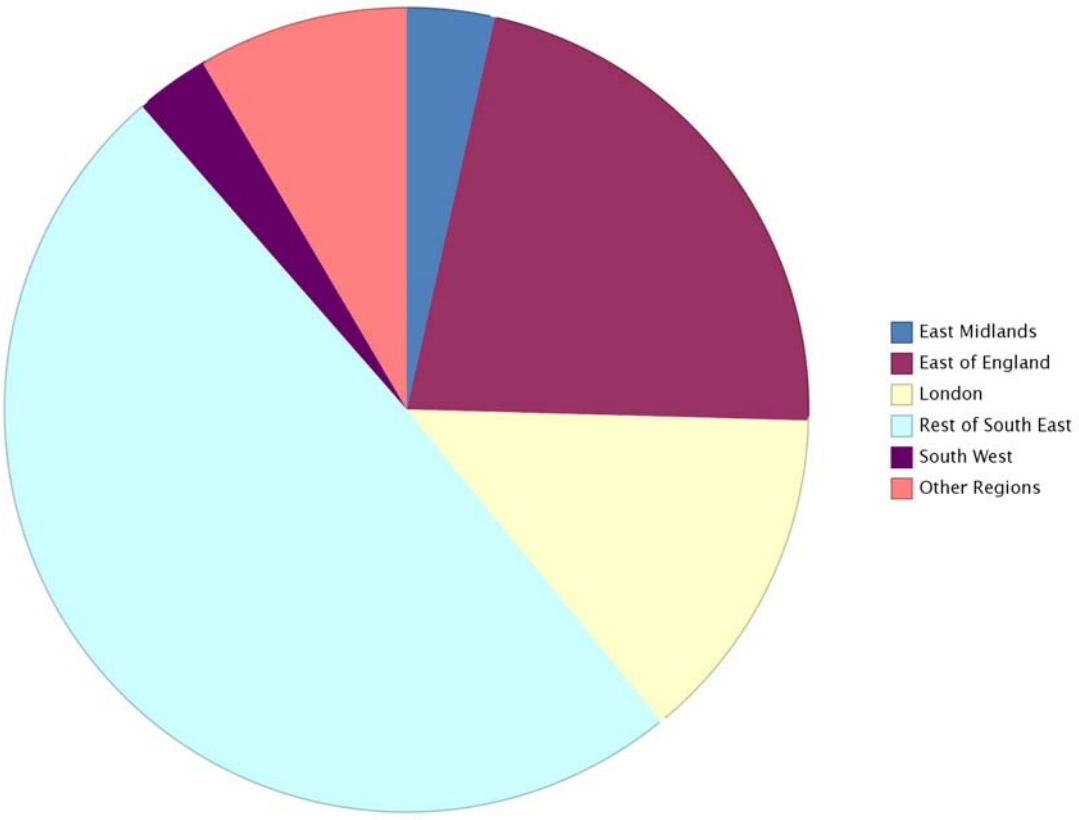


3.4.26 Similar to findings in 2010, more waste was managed than arisen annually in Kent during both 2011/12 (Figure 18) and 2012/13 (Figure 19). However, during 2012/13 Kent managed a significant 591,354 tonnes more than arisen compared to a small 2,219 tonne difference in 2011/12. Other conclusions drawn from Figures 18 & 19 above comprise:

- Less hazardous waste was managed than arisen in Kent in both 2011/12 and 2012/13, similar to findings in 2010/11;
- More inert waste was managed than arisen in Kent in both 2011/12 and 2012/13; similar conclusion to 2010;
- Less HCI waste was managed than arisen in Kent in 2011/12 (similar to results in 2010) whilst more HCI waste was managed than arisen in Kent during 2012/13.

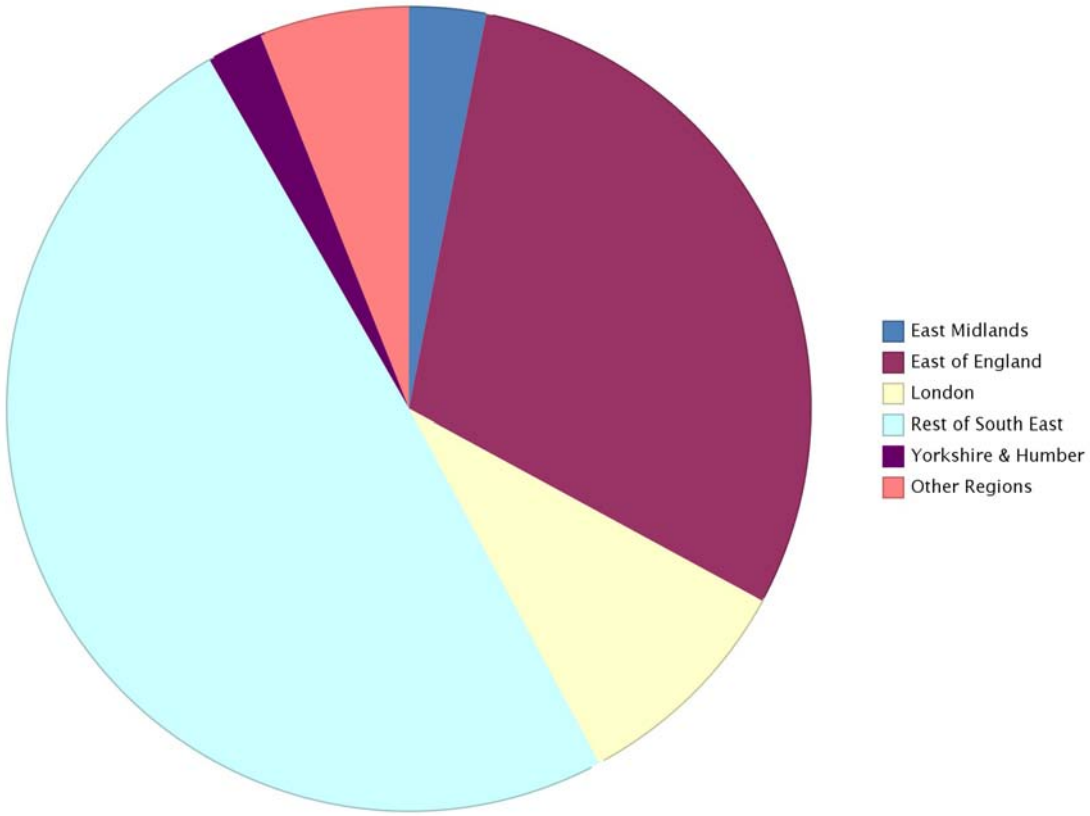
3.4.27 There are 140 different WPA areas from which waste originates and is managed in Kent or within which Kent waste is managed. This is not necessarily an indication of a capacity deficit in either Kent or the other WPA areas, it is more probably a result of specialisation in facilities particularly for hazardous waste.

Figure 19 Kent Waste Exports by Region of Destination 2011



3.4.28 Figure 20 above presents that the majority of Kent waste was exported for management to WPAs within the same region as Kent (South East) or to other adjoining regions; London and East of England. However, albeit small quantities, Kent waste was also exported to waste management facilities across all regions within England and Wales as the category named "*Other Regions"* comprise: North West, North East, Yorkshire & Humber, West Midlands, Wales; reflecting similar conclusions drawn from data in 2010/11.

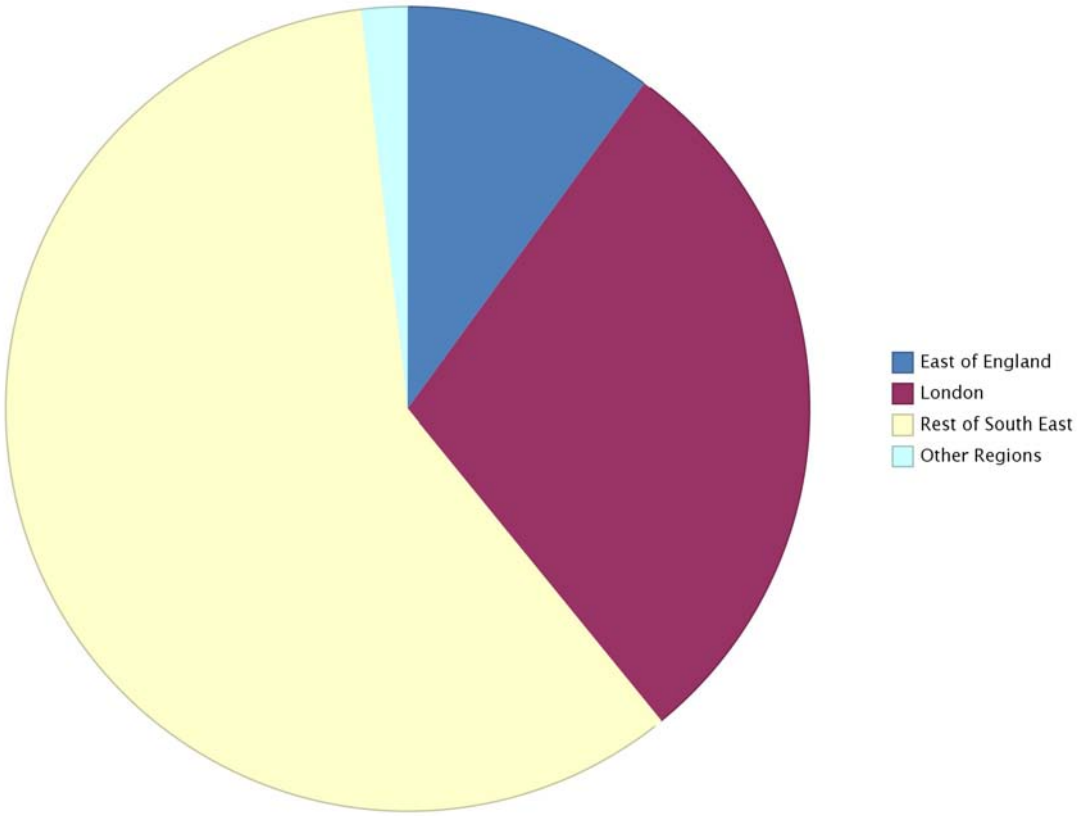
Figure 20 Kent Waste Exports by Region of Destination in 2012



3.4.29 Similar to 2011/12 (Figure 20) the majority of Kent's waste was exported to waste management facilities within the South East region and adjoining areas: London and East of England. Small quantities of Kent's waste were exported to all regions within England and Wales in 2012/13 (Figure 21). However results differing to those seen in 2010/11 and 2011/12 are evident as the pie charts show:

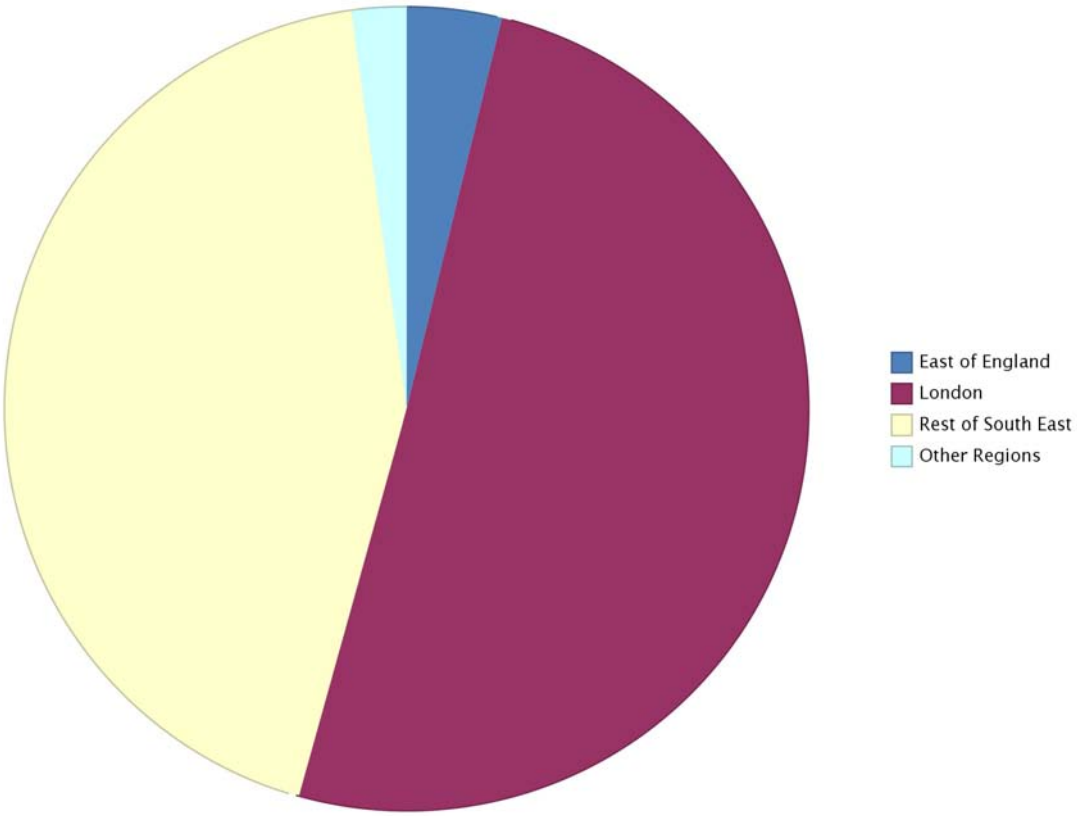
- An increase in Kent's waste exports to East of England over the last year; resulting in a decline in exports to London;
- An increase in waste exports sent from Kent to Yorkshire & Humber and a decrease in exports sent to the South West over the past year;
- In 2012 regions within the "*Other Regions"* categories comprise: North West, North East, West Midlands, South West and Wales.

Figure 21 Waste Imported into Kent for Management by Region of Origin in 2011



3.4.30 There is a similar pattern for waste imported into Kent for management during 2011/12 (Figure 22) with the majority originating from the same region of Kent or the adjoining regions of London and the East of England. However, waste (in small quantities) was also imported from all the regions in England, Wales and Scotland.

Figure 22 Waste Imported into Kent for Management by Region of Origin in 2012



3.4.31 Differing to data from the previous monitoring period (2011/12), the majority of waste imported into Kent during 2012/13 originated from London whilst the remaining largest quantities were imported from the rest of the South East (shown in Figure 23). Comparing both pie charts (2011/12 and 2012/13) indicates a decline in Kent imports received from both South East and East of England and an increase in imports from London and "*Other Regions"* (comprising the remaining regions in England and Wales and Scotland).

Municipal Solid Waste

3.4.32 A much greater level of detail on the movement of Kent MSW is available as KCC is responsible for its management.

Table 16 - MSW Exported from KCC Area 2012/13

Material	Tonnage MSW Exported	Total MSW tonnage managed by KCC	% of waste stream exported
Green Waste	589	104,000	0.57
Recyclables	32,858	210,609	15.60
Residual (Landfill)	30,716	138,836	22.12
Energy Recovery	0	234,533	0.00
Total	**64,164**	**687,978**	**9.33**

Source: KCC Waste Management Unit

3.4.33 Table 16 provided by KCC WMU conveys that the amount of green waste exported from Kent has fallen from 2,893 tonnes in 2011/12 to 589 tonnes in 2012/13; presenting a 79.6% decrease. This decline does not result from any new green waste facilities opening in Kent and does not reflect the increase in green waste arisings between the two monitoring periods. The reason for such a decrease probably relates to changes in contracts.

3.4.34 Dissimilar to the pattern of decline in 2011/12, the total of MSW recyclables exported from the KCC area has almost doubled from 16,520 tonnes in 2011/12 to 32,858 tonnes in 2012/13.

3.4.35 The residual material exported from the county has significantly increased from 3,991 tonnes in 2011/12 to 30,716 tonnes in 2012/13; 669.6% increase. This does not reflect the decrease in the total tonnage of residual waste landfilled between 2011/12 and 2012/13. The reason reflects previous alterations ceasing short term contracts for the use of Kent facilities and new facilities were awarded companies which operate landfill outside the county; resulting from most competitive proposals.

Local Output Indicator 8: Capacity for Handling Waste Materials in Kent

3.4.36 Table 17 shows the estimated permitted capacity of facilities by waste management type in Kent at the end of March 2013. New permissions granted during 2012/13 have been added to the existing database and due to its changes, a direct comparison with the figures from previous AMRs is not always possible.

For non-landfill facilities the annual capacity reflects the maximum capacity permitted under the waste management licence if the site is licenced. If unlicensed then the estimated annual capacity submitted with the planning application is used. For landfill,

the data is the void space remaining at 31 December 2012, as provided by the EA. This is based upon operators' returns as a requirement of the waste management licence.

Table 17 - Waste Management Capacity in Kent

Type of Facility	Number of Sites	Number of Sites where capacity is unknown	Capacity (tonnes)[42]
Composting/Anaerobic Digestion	11	1	237,720
Recycling	20	0	1,256,000
C&D Recycling	21	0	3,186,060
Metal/ELV Facility	47	0	1,151,476
Treatment	16	1	964,008
Incineration/Energy Recovery	9	2	1,411,115
Inert Landfill	16	1	12,428,969
Non-Hazardous Landfill	2	0	3,190,905
Hazardous Landfill	3	0	1,005,378
Transfer	70	1	2,315,053
Other[43]	101	82	1,838,443
Total landfill capacity	**21**	**1**	**16,656,252**
Total capacity per year of facilities other than landfill	**295**	**87**	**12,359,875**

Source: KCC Planning Applications Monitoring Data

42 Conversion rates for landfill void from cubic metres to tonnes are calculated using the following ratios: Inert Landfill and Dredging Disposal at 1.5 tonnes per cubic metre. Non-Hazardous Landfill at 0.8 tonnes per cubic metre. Hazardous landfill based upon the individual operator's conversion Rates

43 Other consists of Wastewater Treatment, Mobile Plant, Animal Crematoria and Cemeteries, and Dredging Sites

3.4.37 A full list of the facilities categorised by type of waste management activity can be found in Appendix C. In terms of the numbers of facilities and geographical coverage, Wastewater Treatment Works (included in the above table within the 'Other' category) are the most numerous.

3.4.38 Similar to findings in the previous monitoring report, Transfer Stations are the second most numerous and are located within all districts in Kent. This reflects the economics of the waste management industry where relatively small specialised vehicles collect waste and the waste is then bulk loaded at Transfer Stations into larger vehicles for transport to other waste management facilities. Usually a proportion of this activity results in the recovery of materials for recycling and the differentiation between this type of waste management and the recycling category is often quite minor.

3.4.39 The third most numerous waste activity and found within Kent's districts is Metal/ELV (end of vehicles) facilities. Recycling however, would have held third position if Household Waste Recycling Centres (HWRCs) were moved from the waste management category of Transfer into Recycling. Although there continues to be fewer recycling facilities within Kent in 2012/13, such sites are located within all of Kent's districts, even though Tonbridge and Malling fails to have a HWRC.

3.4.40 The distribution of capacity treating green and kitchen waste is becoming more extensive throughout Kent. However, Dartford, Gravesham, Maidstone and Thanet continue not to have sites with permission for either composting or anaerobic digestion.

3.4.41 There is a fairly good distribution of facilities managing construction waste throughout Kent. There are inert landfills in nine of the districts and C&D recycling facilities in ten of the districts. Tunbridge Wells is the only district in Kent that does not have an inert landfill or a C&D recycling facility.

3.4.42 Again there has been an increase in waste management capacity since the last monitoring report for the categories: C&D Recycling, Incineration/Energy Recovery and Transfer. There has been a significant decrease in total capacity for combined inert, non-hazardous and hazardous landfill; falling from 27,302,197 tonnes to 16,565,252 tonnes (39.3% decrease) from 2011/12 to 2012/13. The decrease in landfill capacity reflects a change in the county in line with the principles of the waste hierarchy away from landfill located at the bottom of the hierarchy. It is being caused because new applications are not being made to develop landfills and at the same time the voidspace in the existing landfills is being used up.

4 Conclusions and Next Steps

Monitoring the Progress of the Minerals and Waste Local Plan (MWLP

4.0.1 The Development Scheme for the Kent MWLP is to be revised following unforeseen delays to the plan program in 2013. However, steady progress was made during the monitoring period; a major stage in the development of the plans for future sites suitable minerals and waste development in Kent was completed and presented for public consultation in the separate Minerals and Waste Sites Plans 'Preferred Options' documents (May - July 2012). Plus, further development of the evidence base for the upcoming Draft Kent Minerals and Waste Local Plan 2013-2030 'Pre-Submission' consultation document.

4.0.2 Kent County Council (KCC) have continued to comply with the requirements under to 'Duty to Co-operate'[44] by actively engaging and involving key stakeholders in the development of the MWLP during 2012/13. A number of well attended workshops were held in July 2012 to discuss the 'Preferred Options for Minerals Sites Plan and Waste Sites Plan' consultations and specific minerals and waste issues relating to the minerals and waste industry (i.e. safeguarding). Attendees were given the opportunity to pose questions and partake in multiple discussions. During the beginning of 2013, stakeholders were invited to comment on the consultation *Kent Proposed Minerals Safeguarding Areas* and Mineral Planning Authorities (MPAs) were asked to comment on issues relevant to the movement of mineral aggregates into Kent from international and neighbouring areas. The MWLP team have also consistently corresponded with neighbouring planning authorities, MPAs, Waste Planning Authorities (WPAs), other teams within KCC, non-statutory interest groups, *prescribed bodies* and representatives from the minerals and waste industry on separate occasions covering issues related to the MWLP in further detail. These meetings have helped to inform the evidence base for the MWLP.

Policy Monitoring

Contextual Indicators

4.0.3 The data trends from recent years have largely continued with a gradual, steady rise in population and household growth in Kent. There is no apparent relationship to the sales of construction aggregates which have continued to decline, although 2012 sees this decline start to slow down and level out. Household waste arisings have also continued to decrease despite the steady rises in population and household growth.

4.0.4 In terms of the economy, national housing construction levels fell again in early 2013 after a brief rise in late 2012. This shows a general pattern of decline since 2010. Kent's Gross Value Added (GVA) was still steadily increasing according

44 Section 33A of the Localism Act amended the Planning and Compulsory Purchase Act 2004

to the latest available data (2000-2010), which as yet shows no relation to the sales of both land-won and imported construction aggregates which have largely been in decline since 2007.

4.0.5 The latest available figures show a slight decline in housing completions with a 2.2% decrease to 4,612 completions (2011/12 data); again there is currently no evident correlation between this indicator and construction aggregate sales and household waste arisings.

Minerals

4.0.6 The annual production of primary land-won aggregate in Kent for 2012 was approximately 1,570,000 tonnes for all sand, gravel and crushed rock,[45] which is a decrease of around 300,000 tonnes from the position in 2011. Sales of land-won sand and gravel continued to decline in 2012, with a small 3% reduction from 2011. However, this was balanced to some extent by increases in sand and gravel sales at wharves (by 9% to 2,161,031 tonnes) and by sales secondary and recycled aggregates sites (by 14% to 774,607 tonnes). In contrast to the rising trend since 2009, sales of crushed rock at wharves significantly fell by nearly half (46%) to 432,677 tonnes in 2012, although sales of crushed rock at rail depots increased by 30% to 270,586 tonnes. Whilst precise figures for sand and gravel sales at rail depots cannot be reported for 2012, the level of sales have fallen by around a quarter since 2011. While the overall construction aggregates sales did not increase in 2012, sales of imported aggregate are continuing to account in part for the decline from land-won sources.

4.0.7 No new or additional mineral reserves were granted planning permission during the monitoring period. KCC met the national planning requirements for construction aggregates landbanks, with a sufficient reserves of both sand and gravel and crushed rock in the county at 12.1 years and over 25 years respectively.

4.0.8 There are three permitted landbanks of clay and brickearth with remaining reserves in Kent which have a combined landbank of over 25 years, meeting national policy requirements. Only one of the three Kent silica sand sites does not currently meet the requirement of maintaining a 10 year landbank per site at existing sites. While there are no active cement quarries in Kent, there is a consented quarry with over 25 years of reserves adjacent to the permitted, but not yet built Holborough Cement works. Kent's chalk reserves for agriculture and engineering purposes, on the basis of the 2012 rate of sales at six active sites, have an indicative permitted landbank of 15.5 years of chalk reserves at the end of 2012; alternatively a calculation based on the average rate of chalk sales between 2003 and 2012 would indicate a landbank figure of 11.6 years.

45 Figures rounded to preserve confidentiality of crushed rock figures.

Waste

4.0.9 There has been a fall in the arisings of Municipal Solid Waste (MSW) of 3.81% which continues a downward trend since 2007/8. There is no regular data available on the annual arisings of Construction, Demolition & Excavation (CDE) wastes or Commercial & Industrial (C&I) wastes. For purposes of the preparation of the MWLP, it is assumed that no growth occurs in CDE waste arisings and that C&I waste would have grown by 2%, which is probably too high an estimate due to the current economic climate.

4.0.10 There has been an increase in the waste management capacity since last year's report for three of the main categories of facilities (i.e. Construction & Demolition (C&D) Recycling, Transfer and Incineration/Energy Recovery), capacities have remained the same for Composting/Anaerobic Digestion, Recycling, Metal/ELV and Treatment and capacity has declined for landfill. The decrease in landfill capacity reflects a change in the county in line with the principles of the waste hierarchy away from landfill which is at the bottom of the hierarchy. It is being caused because new applications are not being made to develop landfills and at the same time the void space in the existing landfills is being used up.

4.0.11 The types of waste management facilities that MSW was sent to has continued to change in line with the principles of the waste hierarchy. There has been a continued decrease in the amount of waste sent to landfill and a corresponding increase in the amount of waste diverted from landfill. The County Council in previous years has already exceeded the national target of 40% of household waste to be recycled or composted by 2010 and during the monitoring period the rate of composting and recycling minutely decreased to 45.7% (0.6% decline) since the last monitoring period (2011/12). No similar assessment of the types of waste management that CDE or C&I waste go to is possible as the annual data provided by the Environment Agency is not comprehensive enough to include all facilities and only provides data for waste management facilities that are licensed.

4.0.12 Overall, more waste was managed than arisen within Kent during the monitoring period. However, specifically less hazardous and Housing, Commercial & Industrial (HCI) waste was managed than total arisings whilst more inert waste was managed than arisen. Kent continues to export its waste arisings to waste management facilities within the South East, London and the East of England while Kent receives waste imports predominantly originating from London, South East and East of England (differing from results during the last monitoring period).

The Next Steps

4.0.13 Next year's AMR will report on the relevant key milestones of the plan programme as set out in the latest version of the Development Scheme (December 2013), to include the pre-submission draft of the Kent MWLP scheduled for January 2014. The future editions of this report will change as plans are adopted; monitoring and reporting on the implementation and relevance of the policies in the Minerals and Waste Local Plan and the Sites Plans will become the report's main function.

Appendix A: Policy Monitoring Indicators: Data Tables

Table 18 - Population Growth 2002-2012 (Data used in Figures 2 & 3)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Pop'n	1,339,000	1,349,000	1,361,400	1,375,200	1,389,600	1407,800	1,423,300	1,435,300	1,451,900	1,466,500	1480,200
Pop'n Rate of Growth (%)	0.59	0.75	0.92	1.01	1.05	1.31	1.10	0.84	1.16	1.01	0.93
Source: Office of National Statistics (ONS) data, prepared by KCC Research and Intelligence Team											

Table 19 - Household Growth 2002-2012 (Data used in Figures 2 & 3)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Hholds.	552,600	557,000	562,000	567,900	573,000	578,700	584,500	590,600	597,800	605,638	614,388
Hholds. Rate of Growth (%)	0.82	0.80	0.90	1.05	0.90	0.99	1.00	1.04	1.22	1.31	1.44
Source: ONS Date, prepared by KCC Research and Intelligence Team											

Table 20 - Average Waste Produced (tonnes) per Household 2002-2012 (Data used in Figure 4)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Waste produced per Hhold.	1.43	1.44	1.46	1.41	1.39	1.36	1.28	1.23	1.24	1.18	1.12
Source: Waste data from KCC Waste Management Unit; Household date from ONS prepared by KCC Research											

Table 21 - Total GVA and GVA Rate of Growth 2000-2010 (Data used in Figures 6, 7 & 8)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total GVA £m	15,914	16,895	18,000	19,439	20,696	21,773	22,967	24,301	24,712	24,190	25,141
Total GVA Rate of Growth (%)	4.18	6.16	6.54	7.99	6.47	5.20	5.48	5.81	1.69	-2.11	3.93
Source: ONS Data, prepared by KCC Research and Intelligence Team											

Table 22 - GVA per Head 2000-2010 (Data used in Figure 6)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GVA per Head (£)	12,013	12,693	13,454	14,438	15,243	15,907	16,656	17,484	17,629	17,141	17,612
Source: ONS Data, prepared by KCC Research and Intelligence Team											

Table 23 - Net Housing Completions in KCC Area 2002-2012 (Data used in Figures 9 & 11)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Net Housing Completions	4,845	5,033	6,741	6,205	6,144	7,414	6,629	4,087	4,714	4,612
Source: KCC Housing Information Audit										

Table 24 - Secondary and Recycled Aggregate Production 2003 -2012 (Data used in Figure 13)

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
S & R Aggregate Sales (Tonnes)	475,985	678,521	*	*	1,294,636	956,283	548,004	903,211	678,405	774,607
*Source: Aggregate Monitoring Survey. *Survey not conducted*										

Table 25 - Management Routes for MSW 2001-2011 (tonnes) (Data used in Figure 17)

Year	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Landfill	595,444	603,509	593,449	585,619	553,656	430,750	424,000	343,491	220,683	210,784	154,539
Recycled	125,269	141,111	160,043	174,143	185,719	208,984	225,635	228,352	232,787	228,934	226,720
Composting	35,284	45,494	54,873	66,441	73,455	90,848	85,528	88,392	85,501	94,999	104,488
Energy Recovery	0	0	0	0	0	90,848	63,759	99,257	197,680	203,818	229,512
Source: KCC Waste Management Unit											

Appendix B: Minerals and Waste Planning Applications

Kent County Council usually determines between 50 and 100 minerals or waste related planning applications every year. In 2012/13 KCC granted 51 minerals and waste permissions. Those listed here are only those that result, or could result, in increased in permitted mineral reserves/mineral importation or production capacity/waste management capacity, changes in the permitted 'life' of sites or the areas of land to be worked.

Changes to permitted mineral reserves:

None in monitoring period.

Other significant mineral applications:

Table 26 - Other significant mineral applications permitted during the monitoring period

District	Application No.	Location	Description of application
Tonbridge & Malling	TM/12/2586	Celcon Blocks Limited, The Ightham Sandpits, Borough Green Road, Ightham, Sevenoaks, Kent TN15 9JB	Installation of an additional slurry tank for the storage of PFA slurry.
Tonbridge & Malling	TM/12/983	Tarmac Limited, Ham Hill Quarry, Snodland, Kent ME6 5LA	Aggregate Recycling Facility and a Concrete Batching Plant together with amendments to the currently approved quarry restoration plans.
Shepway	SH/12/1032	Unit 1, Park Farm Close, Park Farm Industrial Estate, Folkestone, Kent CT19 5DU	Retrospective change of use from a vehicle crash repair site to a metal recycling facility and parking of two skip hire delivery lorries.

Sevenoaks	SE/12/1516	Cowden Exploration Site, Field No. 0002 Claydene Farm, Off Hartfield Road, Cowden, Edenbridge, Kent	Application to vary condition (29) and (30) of permission SE/98/234 to retain the Cowden Exploration Site, access and wellhead valve assembly for a further period of one year to allow time for the borehole abandonment and complete the site restoration.
Tunbridge Wells	TW/10/33	Bidborough Well Site, Judd Wood Farm, Gate Farm Road, Bidborough, Kent	Construct a temporary drilling site with temporary road access. Drill well bores to evaluate hydrocarbon potential. Conduct well test to establish performance. At termination the site will be returned to agricultural use.

Changes to permitted waste management capacity:

Table 27 - Planning applications involving changes to permitted waste management capacity during the monitoring period

District	Application No.	Location	Description of application
Shepway	SH/12/1032	Unit 1, Park Farm Close, Park Farm Industrial Estate, Folkestone, Kent CT19 5DU	Retrospective change of use from a vehicle crash repair site to a metal recycling facility and parking of two skip hire delivery lorries.
Ashford	AS/12/991	Former Wavin Plastics Site, Brunswick Road, Ashford, Kent	Temporary change of use of land to a household waste recycling centre and transfer site.
Ashford	AS/12/930	Knightingales, Wittersham Road, Stone, Tenterden, Kent TN30 7HA	Use of land and engineering operations to infill depressed areas to south and east of existing lake.

Swale	SW/12/927	Unit 17, Ridham Dock, Iwade, Sittingbourne, Kent ME9 8SR	Change of use of wood storage building to wood shredding and wood storage in external yard.
Tonbridge & Malling	TM/12/1066	Any Waste Solutions Ltd, The Brook, Mid Kent Business Park, Sortmill Road, Snodland, Kent ME6 5UA	Extension of time to implement planning permission reference TM/08/2654. Change of use of land to use as a skip hire waste transfer and recycling station along with the construction of a weighbridge, diesel and oil storage tanks, portacabin offices and industrial building.
Dartford	DA/12/89	Lees Yard, Rochester Way, Dartford, Kent DA1 3QU	Revised application for change of use of part of yard from open storage to waste separation using a trommel with a covered waste sorting facility, and the provision of netting on top of the existing rear wall.
Swale	SW/12/167	SEP Ridham Dock Facility, Ridham Dock, Ridham, Sittingbourne, Kent ME9 8SR	Refurbishment and use of existing rail sidings and site infrastructure for the importation and transfer in containers of waste to the proposed Kemsley Mill Sustainable Energy Plant for use as a fuel.
Dartford	DA/12/50	Ace Car Breakers, Manor Way Business Park, Swanscombe, Kent DA10 0PP	Use of land and buildings in association with car breakers business.
Swale	SW/11/1227	SWEEEP Kuusakoski Ltd, Gas Road, Sittingbourne, Kent ME10 2QB	Change of use of land to undertake Waste Electrical and Electronic Equipment (WEEE) recycling activities, construction of storage facilities and the variation to previously submitted hours to allow for an extended period of time in which waste transporting vehicles can enter/leave the site.

Ashford	AS/11/981	KCC Household Waste Recycling Centre, Brunswick Road, Cobbs Wood Industrial Estate, Ashford, Kent TN23 1EL	Redevelopment of existing waste management recycling centre to provide enhanced facilities and revised internal layout; construction of administrative building and construction of new waste transfer station with independent vehicular access and weighbridge.
Dover	DO/11/570	Former Corporation Yard, Western Road, Deal, Kent CT14 6PJ	Erection of light industrial building for the storage and sorting of non ferrous metals.
Swale	SW/10/774	Ridham Dock, Iwade, Nr Sittingbourne, Kent ME9 8SR	The construction and operation of a Biomass Combined Heat and Power Plant including external and covered waste wood storage, associated weighbridge, parking and underground pipework to pumping station on Ridham Dock.
Swale	SW/11/1291	Land to the north of the DS Smith Paper Mill, Kemsley, Sittingbourne, Kent	Proposed Anaerobic Digestion Plant and associated equipment including gas powered electrical generators for the treatment of waste water effluent generated from the adjacent Kemsley Paper Mill.
Tonbridge & Malling	TM/11/2275	Land at Sanderson Way, Tonbridge, Kent TN9 1SU	Development of a recycled aggregate and topsoil production facility incorporating a primary aggregate, recycled aggregate and topsoil depot.

Other applications determined:

There were a further 39 minerals and waste planning applications permitted during 2012/13 which did not alter capacity or reserves. Many of these involved minor amendments to infrastructure or conditions.

Appendix C: Minerals and Waste Sites

Minerals and Waste Sites

C.1 All of the sites listed here are displayed on maps in Appendix D.

C.2 *Note: All sites in Italics are inactive sites with planning permission.*

Table 28 - Construction Aggregate Sites (See Figure 21)

C.3 Sand and Gravel Sites

Ref	Site Name	Operator	District	NGR
Building Sand				
23	Charing Quarry	Brett Aggregates Ltd	Ashford	TQ 937 489
15	Lenham Quarry (Shepherds Farm)	Brett Aggregates Ltd	Maidstone	TQ 916 504
30	Sevenoaks Quarry (Greatness)	Tarmac Ltd	Sevenoaks	TQ 535 574
62	*Squerryes' Sandpit*	*Monier*	*Sevenoaks*	*TQ 434 541*
75	*Winterbourne Quarry West*	*Fern Surfacing Ltd*	*Swale*	*TR 065 575*
155	*Aylesford Quarry*	*CEMEX UK*	*Tonbridge & Malling*	*TQ 723 597*
210	*Ham Hill Quarry*	*Tarmac Ltd*	*Tonbridge & Malling*	TQ 693 609
53	Ightham Sand Pit	H&H (Celcon) Ltd	Tonbridge & Malling	TQ 601 579
21	Nepicar Sand Pit	J Clubb Ltd	Tonbridge & Malling	TQ 625 580
94	Addington Sand Pit (Wrotham Quarry)	Hanson Aggregates	Tonbridge & Malling	TQ 653 594
34	Borough Green Sand Pit	Borough Green Sandpits Ltd	Tonbridge & Malling	TQ 617 576
Sand and Gravel				
131	Conningbrook Quarry	Brett Aggregates Ltd	Ashford	TR 032 436

Ref	Site Name	Operator	District	NGR
106	*Highstead Quarry*	*Brett Aggregates Ltd*	*Canterbury*	*TR 211 665*
50	*Joyce Green Quarry*	*Hanson Aggregates*	*Dartford*	*TQ 538 760*
126	*Allens Bank*	*Brett Aggregates Ltd*	*Shepway*	*TR 044 217*
133	Scotney Court Quarry (Lydd Quarry)(1)	Brett Aggregates Ltd	Shepway	TR 024 204
143	Denge Quarry	CEMEX UK	Shepway	TR 084 198
100	Faversham Quarry	Brett Aggregates Ltd	Swale	TR 012 624
81	East Peckham Quarry	J Clubb Ltd	Tonbridge & Malling	TQ 680 493
55	*Stonecastle Farm*	*Lafarge Aggregates Ltd*	*Tonbridge & Malling*	*TQ 637 467*
Sand and Gravel (Specialist)				
Currently no operational sites				

1. Extraction of sand and gravel has moved into East Sussex.

C.4 Crushed Rock Sites

Ref	Site Name	Operator	District	NGR
163	Blaise Farm Quarry	Hanson Aggregates	Tonbridge & Malling	TQ 660 561
36	Hermitage Quarry	Gallagher Aggregates Ltd	Tonbridge & Malling	TQ 722 561

Table 29 - Secondary and Recycled Aggregates (See Figure 22)

C.5 Secondary Aggregate Sites

Ref	Site Name	Operator	District	NGR
586	East Quay Whitstable	Brett Aggregates Ltd	Canterbury	TR 109 671
575	Denton Wharf (Denton Marine Terminal)	J Clubb Ltd	Gravesham	TQ 667 742
259	Ridham Dock	Ballast Phoenix	Swale	TQ 920 682
584	Ramsgate New Port	Brett Aggregates Ltd	Thanet	TR 379 640

C.6 Recycled Aggregate Sites

Ref	Site Name	Operator	District	NGR
Quarry				
131	Conningbrook Quarry	Brett Aggregates Ltd	Ashford	TR 031 439
114	Shelford Landfill	Viridor Waste Management	Canterbury	TR 162 602
32	Pinden Quarry	Pinden Ltd	Dartford	TQ 559 169
42	*Greatness Integrated Waste Management Facility*	*Cory Environmental*	*Sevenoaks*	*TQ 536 578*
100	Faversham Quarry	Brett Aggregates Ltd	Swale	TR 014 626
81	East Peckham Quarry	J Clubb Ltd	Tonbridge & Malling	TQ 680 489
80	Ham Hill Quarry	Tarmac Ltd	Tonbridge & Malling	TQ 693 610
159	Borough Green Sandpit	Borough Green Sand Pits Ltd	Tonbridge & Malling	TQ 617 576

Ref	Site Name	Operator	District	NGR
43	*Borough Green Landfill*	*CEMEX UK*	*Tonbridge & Malling*	*TQ 606 579*
36	Hermitage Quarry	Gallagher Aggregates Ltd	Tonbridge & Malling	TQ 722 559
81	East Peckham Quarry	J Clubb Ltd	Tonbridge & Malling	TQ 679 492
Other				
230	*Sevington Rail Depot*	*Brett Aggregates Ltd*	*Ashford*	*TR 035 402*
357	*Hothfield Works*	*Tarmac Ltd*	*Ashford*	*TQ 980 464*
566	East Quay Whitstable	Brett Aggregates Ltd	Canterbury	TR 109 671
359	Manor Way[46]	Lancebox Ltd	Dartford	TQ 606 749
355	FM Conway Works	F M Conway Ltd	Dartford	TQ 512 737
245	Tilmanstone Works	R H Ovenden	Dover	TR 290 507
604	Richborough Hall	Thanet Waste Services	Dover	TR 333 610
88	Allington Depot	Hanson Aggregates	Maidstone	TQ 745 579
130	Ridham Dock	Brett Aggregates Ltd	Swale	TQ 921 681
259	Ridham Dock	Ballast Phoenix	Swale	TQ 920 682

Ref	Site Name	Operator	District	NGR
864	Unit 34, Klondyke Industrial Estate(1)	Sheerness Recycling Ltd	Swale	TQ 908 719
581	Ridham Dock	Tarmac Ltd	Swale	TQ 919 687
584	Ramsgate New Port	Brett Aggregates Ltd	Thanet	TR 379 640
495	Stonelees Golf Course	Ovenden Earth Moving Company	Thanet	TR 337 633
865	Land at Sanderson Way	Sheerness Recycling Ltd	Tonbridge & Malling	TQ 601 463

1. Certificate of Lawful of Use or Development applied for 2012

Table 30 - Wharves and Rail Depots (See Figure 23)

C.7 Wharves

Ref	Site Name	Operator	District	NGR
Crushed Rock				
586	East Quay Whitstable	Brett Aggregates Ltd	Canterbury	TR 109 671
579	Robins Wharf	Aggregates Industries Ltd	Gravesham	TQ 618 750
499	Red Lion Wharf	Stema Shipping (UK) Ltd	Gravesham	TQ 631 744
619	Sheerness Wharf	Aggregate Industries Ltd	Swale	TQ 908 756
582	Ridham Dock	Brett Aggregates Ltd	Swale	TQ 921 685
584	Ramsgate New Port	Brett Aggregates Ltd	Thanet	TR 380 639

Ref	Site Name	Operator	District	NGR
Marine Dredged Sand and Gravel				
580	Johnsons Wharf	Lafarge Aggregates Ltd	Dartford	TQ 582 753
583	Dunkirk Jetty Dover Harbour	Brett Hall Ltd	Dover	TR 320 404
577	Northfleet Wharf Botany Marshes	CEMEX UK	Gravesham	TQ 611 760
578	Robins Wharf	Brett Aggregates Ltd	Gravesham	TQ 617 751
575	Denton Wharf (Denton Marine Terminal)	J Clubb Ltd	Gravesham	TQ 669 741
582	Ridham Dock	Brett Aggregates Ltd	Swale	TQ 921 685
619	*Sheerness Wharf*[1]	*Aggregate Industries Ltd*	*Swale*	*TQ 908 756*
581	Ridham Dock	Tarmac Ltd	Swale	TQ 919 687
Cement				
585	42 Wharf	Lafarge Cement UK	Gravesham	TQ 623 747

1. (Closed in August 2012)

C.8 Rail Depots

Ref	Site Name	Operator	District	NGR
357	Hothfield	Tarmac Ltd	Ashford	TQ 980 463

Ref	Site Name	Operator	District	NGR
230	*Sevington*	*Brett Aggregates Ltd*	*Ashford*	*TR 035 402*
131	*Conningbrook Depot*	*Brett Aggregates Ltd*	*Ashford*	*TR 031 439*
88	Allington Rail Sidings	Hanson Aggregates	Maidstone	TQ 747 577
81	East Peckham Quarry	J Clubb Ltd	Tonbridge & Malling	TQ 680 490

Table 31 - Other Minerals (See Figure 24)

C.9 Non Aggregate Mineral Quarries

Ref	Site Name	Operator	District	NGR
Brickearth				
182	Claxfield Farm	Weinberger Ltd	Swale	TQ 946 620
209	Hempstead House	Ibstock Building Products	Swale	TQ 933 627

Ref	Site Name	Operator	District	NGR
Chalk Cement				
191	*Holborough Quarry and Cement Works*	*Lafarge Cement UK*	*Tonbridge & Malling*	*TQ 691 635*

Ref	Site Name	Operator	District	NGR
Chalk Other				
7	Crundale Limeworks	C Peach	Ashford	TR 074 494

Ref	Site Name	Operator	District	NGR
194	Hegdale Quarry	R H Ovenden Ltd	Ashford	TR 010 526
196	Beacon Hill Quarry	John Bourne & Co Ltd	Ashford	TQ 969 490
203	Darenth Road Quarry	J Clubb Ltd	Dartford	TQ 554 722
32	Pinden Quarry	Pinden Ltd	Dartford	TQ 595 696
198	Rowling Chalk Pit	R H Ovenden Ltd	Dover	TR 283 551
193	Detling Quarry	John Bourne & Co Ltd	Maidstone	TQ 791 588

Ref	Site Name	Operator	District	NGR
Clay Brick/Tile				
211	Babylon Tileworks	Havenworld (KPT) Ltd	Maidstone	TQ 802 462

Ref	Site Name	Operator	District	NGR
Clay Other				
112	Norwood Quarry	FCC Environment (UK) Ltd	Swale	TQ 969 716

Ref	Site Name	Operator	District	NGR
Industrial Sand				
21	Nepicar Sand Pit	J Clubb Ltd	Tonbridge & Malling	TQ 625 580
94	Addington Sand Pit (Wrotham Quarry)	Hanson Aggregates	Tonbridge & Malling	TQ 653 594

Ref	Site Name	Operator	District	NGR
155	*Aylesford Quarry*	*CEMEX UK*	*Tonbridge & Malling*	*TQ 723 597*

Table 32 - Wastewater (See Figure 25)

C.10 Wastewater Treatment Sites

Ref	Site Name	Operator	District	NGR
429	Ashford Wastewater Treatment Works & Sludge Treatment Centre	Southern Water	Ashford	TR 021 433
402	Tenterden WWTW	Southern Water	Ashford	TQ 866 325
401	Reading Street WWTW	Southern Water	Ashford	TQ 922 304
454	Biddenden WTW, Biddenden	Southern Water	Ashford	TQ 848 388
474	Small Hythe Place	Southern Water	Ashford	TQ 895 300
456	Whittersham WWTW	Southern Water	Ashford	TQ 889 263
548	Appledore WWTW	Southern Water	Ashford	TQ 958 298
542	Egerton WWTW	Southern Water	Ashford	TQ 906 471
541	Charing WWTW	Southern Water	Ashford	TQ 954 485
533	Brook WWTW	Southern Water	Ashford	TR 059 443

Ref	Site Name	Operator	District	NGR
532	Wye WWTW	Southern Water	Ashford	TR 049 466
568	Newenden WWTW	Southern Water	Ashford	TQ 841 275
569	Rolvenden WWTW	Southern Water	Ashford	TQ 853 297
571	Stone Green WWTW	Southern Water	Ashford	TQ 942 276
545	Hamstreet WWTW	Southern Water	Ashford	TQ 999 335
543	Westwell WWTW	Southern Water	Ashford	TQ 991 467
547	Bilsington WWTW	Southern Water	Ashford	TR 032 337
528	Chilham WWTW	Southern Water	Ashford	TR 074 531
549	Woodchurch WWTW	Southern Water	Ashford	TQ 949 340
546	Warehorne WWTW	Southern Water	Ashford	TQ 978 326
550	High Halden WWTW	Southern Water	Ashford	TQ 889 377
552	Smarden WWTW	Southern Water	Ashford	TQ 877 423
551	Bethersden WWTW	Southern Water	Ashford	TQ 924 403

Ref	Site Name	Operator	District	NGR
437	Canterbury W WTW	Southern Water	Canterbury	TR 168 598
457	Swalecliffe WWTW	Southern Water	Canterbury	TR 134 674
525	Herne Bay Old Works WWTW	Southern Water	Canterbury	TR 211 674
524	Newnham Valley WWTW	Southern Water	Canterbury	TR 235 611
520	Westbeare WWTW	Southern Water	Canterbury	TR 200 613
530	Chartham WWTW	Southern Water	Canterbury	TR 118 554
529	Chartham WWTW	Southern Water	Canterbury	TR 111 551
455	Long Reach WWTW	Thames Water	Dartford	TQ 554 767
458	Broomfield Bank	Southern Water	Dover	TR 285 401
407	Felderland Lane	Southern Water	Dover	TR 319 554
521	Dambridge WWTW	Southern Water	Dover	TR 253 574
531	Betteshanger WWTW	Southern Water	Dover	TR 338 532
573	Pfizer WWTW Stonar	Pfizer Global Research	Dover	TR 334 606

Ref	Site Name	Operator	District	NGR
362	Gravesend WWTW	Southern Water	Gravesham	TQ 667 740
361	Northfleet WWTW	Southern Water	Gravesham	TQ 618 736
460	Coxheath WWTW	Southern Water	Maidstone	TQ 480 521
556	Sutton Valence WWTW	Southern Water	Maidstone	TQ 810 482
558	Linton WWTW	Southern Water	Maidstone	TQ 752 490
538	Leeds WWTW	Southern Water	Maidstone	TQ 823 536
539	Harrietsham WWTW	Southern Water	Maidstone	TQ 868 520
540	Lenham WWTW	Southern Water	Maidstone	TQ 904 509
554	Staplehurst WWTW	Southern Water	Maidstone	TQ 789 445
557	Ulcombe WWTW	Southern Water	Maidstone	TQ 846 484
555	Headcorn WWTW	Southern Water	Maidstone	TQ 818 443
443	Edenbridge Waste Water Treatment Works	Southern Water	Sevenoaks	TQ 453 471
590	Chiddingstone Hoath WWTW	Southern Water	Sevenoaks	TQ 500 425

Ref	Site Name	Operator	District	NGR
602	Penshurst WWTW	Southern Water	Sevenoaks	TQ 532 439
451	Sellindge Wastewater Treatment Works	Southern Water	Shepway	TR 087 382
462	West Hythe WWTW	Southern Water	Shepway	TR 127 331
452	New Romney Water Treatment Works	Southern Water	Shepway	TR 073 240
440	Dymchurch WWTW	Southern Water	Shepway	TR 116 319
572	Ivychurch WWTW	Southern Water	Shepway	TR 026 278
570	Hartfield WWTW	Southern Water	Shepway	TQ 987 261
544	Lydd WWTW	Southern Water	Shepway	TR 030 204
434	Queenborough Waste Water Treatment Works	Southern Water	Swale	TQ 909 704
436	Sittingbourne Sewage Treatment Works	Southern Water	Swale	TQ 913 649
534	Teynham WWTW	Southern Water	Swale	TQ 956 634
535	Eastchurch WWTW	Southern Water	Swale	TQ 978 693
527	Boughton WWTW	Southern Water	Swale	TR 053 599

Ref	Site Name	Operator	District	NGR
526	Faversham WWTW	Southern Water	Swale	TR 028 623
463	Weatherlees Hill WWTW	Southern Water	Thanet	TQ 330 628
517	Margate WWTW	Southern Water	Thanet	TR 384 716
519	Minster WWTW	Southern Water	Thanet	TR 309 631
518	Broadstairs	Southern Water	Thanet	TR 401 698
444	Tonbridge Sewage Treatment Works	Southern Water	Tonbridge & Malling	TQ 601 462
396	Aylesford Wastewater Treatment Works	Southern Water	Tonbridge & Malling	TQ 720 596
399	Ham Hill Sewage Treatment Works	Southern Water	Tonbridge & Malling	TQ 706 609
464	Blackmans WWTW	Southern Water	Tonbridge & Malling	TQ 631 491
559	East Peckham WWTW	Southern Water	Tonbridge & Malling	TQ 680 491
536	Wouldham WWTW	Southern Water	Tonbridge & Malling	TQ 712 649
537	Ditton WWTW	Southern Water	Tonbridge & Malling	TQ 710 589
444	Tonbridge WWTW	Southern Water	Tonbridge & Malling	TQ 998 462

Ref	Site Name	Operator	District	NGR
560	Paddock Wood WWTW	Southern Water	Tunbridge Wells	TQ 679 453
465	Smiths Lane WWTW	Southern Water	Tunbridge Wells	TQ 733 382
466	Sissinghurst WWTW	Southern Water	Tunbridge Wells	TQ 797 378
461	Bidborough WWTW	Southern Water	Tunbridge Wells	TQ 561 425
467	Tunbridge Wells North WWTW	Southern Water	Tunbridge Wells	TQ 602 424
591	Brenchley WTW	Southern Water	Tunbridge Wells	TQ 685 410
468	Lamberhurst WWTW	Southern Water	Tunbridge Wells	TQ 678 360
469	Kilndown WWTW	Southern Water	Tunbridge Wells	TQ 705 351
476	Horsmonden WWTW	Southern Water	Tunbridge Wells	TQ 721 406
562	Underhill WWTW	Southern Water	Tunbridge Wells	TQ 722 372
563	Cherry Gardens WWTW	Southern Water	Tunbridge Wells	TQ 751 402
564	Tunbridge Wells South WWTW	Southern Water	Tunbridge Wells	TQ 545 380
565	Hawkhurst South WWTW	Southern Water	Tunbridge Wells	TQ 769 294

Ref	Site Name	Operator	District	NGR
566	Hawkhurst North WWTW	Southern Water	Tunbridge Wells	TQ 768 312
553	Frittenden WWTW	Southern Water	Tunbridge Wells	TQ 814 416
470	Pembury WWTW	Southern Water	Tunbridge Wells	TQ 643 426
561	Cranbrook WWTW	Southern Water	Tunbridge Wells	TQ 783 362
567	Sandhurst WWTW	Southern Water	Tunbridge Wells	TQ 810 289

Table 33 - Waste Incineration and Landfill (See Figure 26)

C.11 Incineration

Ref	Site Name	Operator	District	NGR
481	Ashford Clinical Incinerator	SRCL Limited	Ashford	TR 041 423
599	Dungeness A Power Station	Dungeness A Power Station	Shepway	TR 082 169

C.12 Incineration: Energy from Waste

Ref	Site Name	Operator	District	NGR
492	Sandwich Hazardous Waste Incinerator	Pfizer Global Research and Development	Dover	TR 338 598
88	Allington EfW plant	Kent Enviropower Ltd	Maidstone	TQ 738 578
389	Kemsley Mill CHP Phase II extension	Powergen CHP Ltd	Swale	TQ 919 663

Ref	Site Name	Operator	District	NGR
493	*Biomass Plant Ridham Dock*	*Countrystyle Recycling Ltd*	*Swale*	*TQ 921 675*
855	Sustainable Energy Plant Kemsley Mill	DS Smith & EON Energy from Waste Ltd	Swale	TQ 919 670
871	Biomass Plant, adj. Thamesteel, Ridham Dock, Iwade	Biomass Power Plant Ridham Ltd	Swale	TQ 921 682
399	Ham Hill WWTW CHP Plant Brook Lane	Southern Water	Tonbridge & Malling	TQ 706 609
871	Land adjacent to Thamesteel	MW Environment Ltd	Swale	TQ 919 681

C.13 Inert Landfill

Ref	Site Name	Operator	District	NGR
194	*Hegdale Quarry*	*R H Ovenden Ltd*	*Ashford*	*TR 010 526*
201	Bramling Lime Works	R H Ovenden Ltd	Canterbury	TR 211 553
187	Stone Pit 2	Stone Pit Restoration Limited	Dartford	TQ 572 735
199	Hammill Clay Quarry	R H Ovenden Ltd	Dover	TR 288 564
15	*Lenham Quarry (Shepherds Farm)*	*Robert Brett & Sons Ltd*	*Maidstone*	*TQ 915 503*
636	Coombe Farm, Chipstead	Matthews (Sussex) Ltd	Sevenoaks	TQ 493 567
126	*Allens Bank*	*Brett Aggregates Ltd*	*Shepway*	*TR 044 217*

Ref	Site Name	Operator	District	NGR
271	West Hythe Quarry	Hydrock	Shepway	TR 130 330
100	Ham Farm	Brett Aggregates Limited	Swale	TR 016 625
494	*Stonelees Golf Course (Inert Landfill)*	*Ovenden Earthmoving Co Ltd*	*Thanet*	*TR 338 632*
36	Hermitage Quarry	Gallagher Materials Limited	Tonbridge & Malling	TQ 723 563
43	Borough Green Landfill	Cemex UK Operations Ltd	Tonbridge & Malling	TQ 607 580
34	Borough Green Sandpit	Borough Green Sandpits Ltd	Tonbridge & Malling	TQ 614 579
159	Borough Green Sandpit (Platt)	Borough Green Sandpits Ltd	Tonbridge & Malling	TQ 617 576
81	East Peckham Quarry	J Clubb Limited	Tonbridge & Malling	TQ 681 493
873	Knightingales	Mr J Knight	Ashford	TQ 921 127
874	Oldridge Wood Lagoons	Starnes Ltd	Canterbury	TR 193 584
878	Stangate Landfill	Infinis Plc	Tonbridge & Malling	TQ 603 562

C.14 Non-Hazardous Landfill

Ref	Site Name	Operator	District	NGR
114	Shelford Landfill Site	Viridor Waste (Kent) Limited	Canterbury	TR 158 601

Ref	Site Name	Operator	District	NGR
42	Greatness Quarry Landfill	Cory Environmental	Sevenoaks	TQ 535 578

C.15 Hazardous Landfill

Ref	Site Name	Operator	District	NGR
32	Pinden Quarry Hazardous landfill, Longfield	Pinden Ltd	Dartford	TQ 596 677
112	Norwood Farm, Isle of Sheppey	FCC Environment (UK) Ltd	Swale	TQ 967 714
192	Margett's Pit, Burham	Aylesford Newsprint Services Limited	Tonbridge & Malling	TQ 720 626

C.16 Dredgings

Ref	Site Name	Operator	District	NGR
453	*Rushenden Marshes Dredgings Disposal Site*	*Peel Ports Limited*	*Swale*	*TQ 900 709*

Table 34 - Recycling Sites and Household Waste Recycling Centres (HWRC) (See Figure 27)

C.17 Recycling Sites[47]

Ref.	Site Name	Operator	District	NGR
372	Hersden MRF, Canterbury Industrial Park, Hersden	Viridor Waste (Kent) Limited	Canterbury	TR 211 620
624	Lakesview Business Park, Hersden	Ling UK Holdings Ltd	Canterbury	TR 212 621

47 Note that Construction and Demolition Waste Recycling sites are listed in Section C.5 as Recycled Aggregates

Ref.	Site Name	Operator	District	NGR
425	Riverdale Industrial Estate	Ling UK Holdings Ltd	Canterbury	TR 158 591
32	Pinden Quarry MRF, Longfield	Pinden Ltd	Dartford	TQ 596 697
385	Lee's Yard, Old Rochester Way	Easy Load Limited	Dartford	TQ 511 737
381	Unit 9 Swanton Farm, Lydden	Envirocycle	Dover	TR 244 447
605	Richborough Hall Waste Transfer And Recycling Centre	Thanet Waste Services Ltd	Dover	TR 333 610
652	Temp. Wood Storage & Shredding Red Lion Wharf	G I Hadfield & Son Ltd	Gravesham	TQ 631 744
647	Countrystyle Depot, Lenham	Countrystyle Recycling Ltd	Maidstone	TQ 906 521
645	Teardrop Centre,Swanley	Ideal Waste Paper Company Ltd.	Sevenoaks	TQ 530 677
379	Ross Depot, Shornecliffe	Shepway District Council	Shepway	TR 201 360
860	Callington Court Farm	Moores Turf & Topsoil Ltd	Shepway	TR 012 265
651	*Otterpool Quarry*	*Countrystyle Recycling Ltd*	*Shepway*	*TR 113 366*
493	Ridham Dock MRF	Countrystyle Recycling Ltd	Swale	TQ 921 674
382	Gas Road, Sittingbourne	Sweeep Ltd	Swale	TQ 907 645

Ref.	Site Name	Operator	District	NGR
862	Unit 15A Ridham Dock Industrial Estate	SITA UK	Swale	TQ 920 686
863	Unit 15B Ridham Dock Industrial Estate	SITA UK	Swale	TQ 920 686
486	Dane Valley Road Industrial Estate	J C Skips	Thanet	TR 378 691
646	Westwood Industrial Estate	M P L Waste Management	Thanet	TR 362 683
405	Royal British Legion Industrial Estate, Aylesford	MDJ Light Brothers	Tonbridge & Malling	TQ 728 583
88	Allington EfW plant MRF	Kent Enviropower Ltd	Tonbridge & Malling	TQ 739 578
865	Land at Sanderson Way	Sheerness Recycling	Tonbridge & Malling	TQ 598 463

C.18 Household Waste Recycling Centres (HWRC)

Ref	Site Name	Operator	District	NGR
501	Chart Leacon HWRC	Kent County Council Waste Management	Ashford	TQ 996 427
867	Brunswick Road HWRC, Ashford	Viridor	Ashford	TR 003 426
504	Vauxhall Road, Canterbury HWRC	Kent County Council Waste Management	Canterbury	TR 164 597
8	Studd Hill, Herne Bay HWRC	Kent County Council Waste Management	Canterbury	TR 155 671
500	Pepperhill HWRC	Waste Recycling Ltd	Dartford	TQ 620 722

Ref	Site Name	Operator	District	NGR
286	Dartford Heath HWRC	Kent County Council Waste Management	Dartford	TQ 512 737
252	Richborough HWRC	Kent County Council Waste Management	Dover	TR 332 609
6	Southall Road, Deal HWRC	Kent County Council Waste Management	Dover	TR 367 530
507	Whitfield HWRC	Viridor Waste (Kent) Limited	Dover	TR 303 446
511	Tovil HWRC	Kent County Council Waste Management	Maidstone	TQ 752 543
512	Dunbrik HWRC	S I T A Environment Limited	Sevenoaks	TQ 494 559
496	Pedham Place, Swanley HWRC	Kent County Council Waste Management	Sevenoaks	TQ 530 676
508	Shornecliffe HWRC	Kent County Council Waste Management	Shepway	TR 202 359
232	Hawkinge HWRC	Viridor Waste (Kent) Limited	Shepway	TR 223 409
592	Lydd HWRC	Kent County Council Waste Management	Shepway	TR 049 215
623	New Romney HWRC	Kent County Council Waste Management	Shepway	TR 071 243
503	Church Marshes HWRC	Kent County Council Waste Management	Swale	TQ 915 651
502	Stoneyard HWRC	Kent County Council Waste Management	Swale	TQ 917 749

Ref	Site Name	Operator	District	NGR
9	Preston Forge HWRC	Kent County Council Waste Management	Swale	TR 017 311
5	Manston Road, Margate HWRC	Kent County Council Waste Management	Thanet	TQ 350 690
251	North Farm HWRC	Kent County Council Waste Management	Tunbridge Wells	TQ 600 423
501	Ashford HWRC	Kent County Council Waste Management	Ashford	TQ 995 428

Table 35 - Transfer Stations and Treatment Sites (See Figure 28)

C.19 Transfer Stations

Ref	Site Name	Operator	District	NGR
373	Unit 1 Ashford Industrial Centre	Ashford Recycling Centre Ltd	Ashford	TR 001 426
375	Austen House, Kingsnorth Industrial Estate	P H S Group Plc	Ashford	TR 006 410
374	Ashford Transfer Station Brunswick Road,	Viridor Waste Kent Limited	Ashford	TR 003 420
398	Units 1&2 Willesborough Industrial Estate	Cannon Hygiene Limited	Ashford	TR 033 422
653	Leacon Road Fairwood Industrial Est	P. H. S. Group Plc	Ashford	TR 001 425
230	*Sevington Waste Transfer station*	*Robert Brett & Sons Ltd*	*Ashford*	*TR 036 402*
368	Hersden Waste Transfer Station	Viridor Waste (Kent) Ltd	Canterbury	TR 211 619

Ref	Site Name	Operator	District	NGR
369	Kingsmead Depot	Serco Ltd	Canterbury	TR 154 585
601	Kemberland, Fox Hill Herne Bay Road	W M G Environmental (Weemix Group)	Canterbury	TR 175 623
366	Priory Works (Closed in Summer 2012)	Rentokil Initial UK Limited	Dartford	TQ 536 753
500	Pepperhill WTS	Waste Recycling Ltd	Dartford	TQ 620 722
384	Manor Way Business Park	Crossways Recycling Ltd	Dartford	TQ 605 750
386	Winchester W TS 2 -8 Little Queen Street	A Winchester & Sons	Dartford	TQ 548 740
478	Littlebrook Oil Management Unit	National Grid Electricity Transmission Plc	Dartford	TQ 562 758
404	*Maronvale Yard, Rochester Way*	*A Selby*	*Dartford*	*TQ 511 737*
605	Richborough Hall Waste Transfer And Recycling Centre	Thanet Waste Services Ltd	Dover	TR 333 611
248	Aylesham Industrial Estate	Clearers (South East) Ltd	Dover	TR 233 518
487	Shipyard Port Site, Sandwich	Half Skips	Dover	TR 335 612
440	Camp Site Back Lane, West Hougham	Taylors Skips Ltd	Dover	TR 266 405
507	Whitfield WTS	Viridor Waste (Kent) Limited	Dover	TR 304 446

Ref	Site Name	Operator	District	NGR
245	Pike Road Industrial Estate, Eythorne	R H Ovenden Ltd	Dover	TR 290 507
509	Richborough HWRC Dover Bulking Station	Dover District Council	Dover	TR 333 608
387	Waste Transfer Station, Wharf Road, Off Mark Lane, Denton	Gurbinder Sall	Gravesham	TQ 663 743
650	Apex Business Park	R.S. Skips	Gravesham	TQ 695 736
430	11 Heronden Rd, Parkwood Industrial Estate	Rentokil Initial Services Ltd	Maidstone	TQ 789 517
400	Unit 6 Detling Aerodrome Industrial Estate	D&D Waste Recycling Ltd	Maidstone	TQ 815 600
637	Bircholt Road Parkwood Industrial Estate	E D F Energy Networks Ltd	Maidstone	TQ 792 522
258	*Aylesford Waste Management Centre St Michaels Close*	*Viridor Waste Kent Ltd*	*Maidstone*	*TQ 745 591*
393	Land At United House, Goldsell Road, Swanley	United House Group Limited	Sevenoaks	TQ 515 682
512	Dunbrik Waste Transfer Station	S I T A Environment Limited	Sevenoaks	TQ 495 559
127	*Dunbrik Waste Management Facility*	*Darenth River Ballast Company Ltd*	*Sevenoaks*	*TQ 495 559*
573	Old Powder Mills, Nr. Leigh	Glaxo Smith Kline R&D Ltd	Sevenoaks	TQ 569 466
866	Heathen Street Markbeech	Southern Water	Sevenoaks	TQ 461 430

Ref	Site Name	Operator	District	NGR
232	Hawkinge WTS	Viridor Waste (Kent) Limited	Shepway	TR 223 409
403	Park Farm Close, Folkestone	Countrystyle Recycling Ltd	Shepway	TR 222 375
377	Unit Q, Newington Industrial Estate	T J Skips	Swale	TQ 848 649
388	Units 5 And 6, West Lane, Sittingbourne	S I T A Environment Limited	Swale	TQ 914 640
503	Church Marshes WTS	Kent County Council Waste Management	Swale	TQ 915 651
356	Preston Depot	Ringway Highway Services	Swale	TR 018 603
378	Manston Road Depot	Thanet District Council	Thanet	TR 350 690
391	The Lodge, Sacketts Hill, Broadstairs	W Brazil & Brothers	Thanet	TR 370 687
622	Land adjoining The Bungalow, Queensdown Road, Woodchurch, Birchington	Reclamet Limited	Thanet	TR 332 672
459	Unit 7, Larkfield Mill	SRCL Ltd	Tonbridge & Malling	TQ 711 592
446	Lake Road, Quarrywood Industrial Estate	Safetykleen UK Limited	Tonbridge & Malling	TQ 720 575
395	Mills Road,Quarry Wood Industrial Estate	Cleansing Service Group Limited	Tonbridge & Malling	TQ 721 574
364	Mid Kent Business Park	Any Waste Solutions Ltd	Tonbridge & Malling	TQ 706 614

Ref	Site Name	Operator	District	NGR
371	Sandhurst Road Tunbridge Wells	Southern Gas Networks Plc	Tunbridge Wells	TQ 593 412
251	North Farm W T S Dowding Way	S I T A Environment Limited	Tunbridge Wells	TQ 600 423
397	Site 'B' North Farm Lane	Weald Waste Ltd	Tunbridge Wells	TQ 604 426
875	Countrystyle Recycling Ltd	Countrystyle Recycling Ltd	Swale	TQ 919 682
868	Former Corporation Yard	EH Churley	Dover	TR 373 530

C.20 Treatment Sites[48]

Ref	Site Name	Operator	District	NGR
367	Unit 2 Joseph Wilson Ind. Estate, Whitstable	Stephen Betts & Sons Ltd	Canterbury	TR 122 652
485	Unit 7 Westbrook Industrial Estate, Herne Bay	Graham Smith Silver Services	Canterbury	TR 159 674
484	Unit 1, Joseph Wilson Industrial Estate, Whitstable	All Waste Matters Ltd	Canterbury	TR 122 652
406	Manor Way, Swanscombe	Veka Recycling Ltd	Dartford	TQ 600 750
638	Harringe Court Farm Biodiesel	Aeolus Partnership	Shepway	TR 094 370
271	West Hythe Soil treatment centre	Hydrock	Shepway	TR 130 330

48 Note that when treatment results in the production of an aggregate that the sites are listed in Section C.5 as Secondary Aggregates

Ref	Site Name	Operator	District	NGR
376	Shed 3 & 4, Ridham Dock	Gypsum Recycling International A/s	Swale	TQ 921 682
483	Rushenden Road, Queenborough	Sheppy Limited	Swale	TQ 909 720
392	The Oil Storage Installation	Anthony Jenkins Fuel Oil Limited	Thanet	TR 344 652
632	Ham Hill L W T	Viridor Waste Management	Tonbridge & Malling	TQ 705 607
459	Unit 7, Larkfield Mill	SRCL Ltd	Tonbridge & Malling	TQ 711 592
395	Mills Road, Aylesford	Cleansing Service Group Ltd	Tonbridge & Malling	TQ 720 574
876	Building 17 Ridham Dock	Countrystyle Recycling Ltd	Swale	TQ 920 674

Table 36 - Composting, Metal/ELV Recycling, Animal and Pet Crematoria (See Figure 29)

C.21 Composting and Anaerobic Digestion (AD)

Ref	Site Name	Operator	District	NGR
596	Former Naccolt Brickworks	Wyecycle Ltd	Ashford	TR 050 445
114	Composting Facility, Shelford Landfill Site	Shelford Composting Limited	Canterbury	TR 164 603
604	Richborough AD	Thanet Waste Services Ltd	Dover	TR 334 617
868	Former Corporation Yard, Western Road, Deal	EH Churley	Dover	TR 373 531

Ref	Site Name	Operator	District	NGR
287	Dunbrik Composting	Waste Recycling Group (Central) Limited	Sevenoaks	TQ 496 560
42	Greatness Quarry composting	Cory Environmental	Sevenoaks	TQ 536 577
206	Hope Farm, Folkestone	J Taylor & Son	Shepway	TR 235 386
651	*Otterpool Quarry AD*	*Countrystyle Recycling Ltd*	*Shepway*	*TR 113 366*
493	Ridham Dock composting	Countrystyle Recycling Ltd	Swale	TQ 922 674
869	DS Smith Paper Ltd	DS Smith Paper Ltd	Swale	TQ 920 668
163	Blaise Farm Quarry, West Malling.	New Earth Solutions	Tonbridge & Malling	TQ 662 563
238	Conghurst Farm, Hawkhurst	Piper Farms	Tunbridge Wells	TQ 771 283
869	Kemsley Paper Mill AD	DS Smith Paper Ltd	Swale	TQ 920 671

C.22 Metal/ELV Recycling

Ref	Site Name	Operator	District	NGR
416	Kilndown, Marten Lane, High Halden	Ashford Vauxhall Spares	Ashford	TQ 922 380
417	Bridge End Farm, Little Chart	BMW Spares	Ashford	TQ 949 467
480	Henwood Industrial Estate, Ashford	Alpha Fry Ltd	Ashford	TR 020 431

Ref	Site Name	Operator	District	NGR
411	Rowling Street, Bilsington	H Ripley & Co	Ashford	TR 026 371
409	Laurenden, Cranbrook Road, Tenterden	Paul Chapman	Ashford	TQ 856 352
410	Ellingham Farm Industrial Estate	H Ripley & Co	Ashford	TR 003 405
450	The Potteries, Further Quarter, High Halden	G M Woodgate & Son	Ashford	TQ 893 390
619	ELV Granary Court Road	JF & RE Tanner	Ashford	TR 090 401
648	Unit 18 Henwood Ind Est Ashford	Auto Economics Ltd	Ashford	TR 018 431
425	Riverdale Industrial Estate, Canterbury	Ling UK Holdings Ltd Ltd	Canterbury	TR 158 591
426	Canterbury Industrial Park, Hersden	Brown Commercials	Canterbury	TR 212 620
624	*Plots D and E, Lakesview Business Park, Hersden*	*Ling UK Holdings Ltd*	*Canterbury*	*TR 212 621*
479	Plot 16 Manorway Business Park, Manor Way, Swanscombe	Ace Car Breakers	Dartford	TQ 605 750
418	78 Dartford Road, Dartford	Erith Commercials	Dartford	TQ 529 744
431	Oakdene, Watling Street, Bean	Bean Breakers	Dartford	TQ 590 729
432	Hawley Road, Dartford	J C Autobreakers	Dartford	TQ 552 712

Ref	Site Name	Operator	District	NGR
489	Ramsgate Road, Sandwich	Copart Limited	Dover	TR 332 604
439	Richborough Castle Road, Sandwich	Zen Car Factors	Dover	TR 323 591
441	Ellens Road, Walmer, Deal	The D I Y Motorist	Dover	TR 358 506
433	Denton Industrial Estate, Gravesend	Gravesend Metals And Recycling Limited	Gravesham	TQ 664 742
412	Bentletts Yard, Claygate Road, Laddingford	Commercial Motor Services	Maidstone	TQ 703 471
419	The Scrap Yard, Old Tovil Road, Maidstone	James Hunt (Maidstone) Limited	Maidstone	TQ 763 549
448	Units 8,9 &10, Detling Aerodrome	Detling Autobreakers	Maidstone	TQ 812 602
394	Hartley Bottom, Hartley	Hartley Bottom Car Breakers	Sevenoaks	TQ 615 659
421	Aerodrome Industrial Complex, Hawkinge	Hawkinge Vehicle Services	Shepway	TR 208 397
482	Dengemarsh Rd, Lydd	Lydd Car Breakers	Shepway	TR 043 199
422	Units D9 & D9(3), Eurolink Industrial Estate, Sittingbourne	London & Kent Metals	Swale	TQ 914 644
370	Sheppey Way, Bobbing	Bobbing Car Breakers	Swale	TQ 898 665
413	Unit 1, Sheppey Plant Estate, Queenborough	Queenborough Car Breakers	Swale	TQ 912 718

Ref	Site Name	Operator	District	NGR
414	Gas Road, Milton Regis	Kent Auto Salvage	Swale	TQ 911 647
427	Halfway Rd, Sheerness	Monkey Farm Car Breakers	Swale	TQ 926 741
380	Rushenden Rd, Queenborough	Sheppey Motor Salvage	Swale	TQ 913 718
435	Ridham Dock	Mayer Parry Recycling Limited	Swale	TQ 922 684
423	Woodchurch Road, Woodchurch	Reclamet Limited	Thanet	TR 327 672
424	Unit 4-10 Dane Valley Industrial Estate, Broadstairs	B.G.Motors	Thanet	TR 378 691
420	67 Hereson Road, Ramsgate	Ford-it-spares	Thanet	TQ 387 656
442	Upper Dumpton Park	Christopher Parker	Thanet	TR 381 655
622	The Recycling Centre, Woodchurch Rd, Birchington	Reclamet Recycling Ltd	Thanet	TR 332 672
449	Fre-mell Farm, Comp Lane, Offham	Steven Green & Steven Williams	Tonbridge & Malling	TQ 651 566
447	Mill Hall Yard, Aylesford	Aylesford Metal Company (1984) Limited	Tonbridge & Malling	TQ 720 589
445	G P Petrol Station, London Road, Hildenborough	Alba Transport Services	Tonbridge & Malling	TQ 549 505
859	Former SCA Packaging Site New Hythe Lane Larkfield	Aylesford Metals Company	Tonbridge & Malling	TQ 714 599

Ref	Site Name	Operator	District	NGR
415	North Farm Industrial Estate, Tunbridge Wells	Mid Kent Car Breakers	Tunbridge Wells	TQ 603 427
472	Oast House Farm, Brenchley	J R Car Spares	Tunbridge Wells	TQ 698 441
428	Ledger Works, Paddock Wood	Commercial Motor Services (Kent) Ltd	Tunbridge Wells	TQ 684 446
408	Willow Lane, Paddock Wood	Charles Trent Ltd	Tunbridge Wells	TQ 692 442
471	Longfield Farm Brenchley	Charles Trent Ltd	Tunbridge Wells	TQ 698 441
877	Unit 1 Park Farm Close	Johnson's Recycling Ltd	Shepway	TR 222 375

C.23 Animal and Pet Crematoria

Ref	Operator	Site Name	District	NGR
600	Cherry Tree Farm, High Halden	David Funnell's Casualty Services	Ashford	TQ 900 393
490	Howletts Wild Animal Park	Howletts & Port Lympne Estates Ltd	Canterbury	TR 204 571
438	Pets County Crematorium Long Lane Farm, Shepherdswell	Jeremy Stattersfield	Dover	TR 260 489
475	Port Lympne Wild Animal Park	Howletts & Port Lympne Estates Ltd	Shepway	TR 110 351
635	Great Bayhall Farm, Pembury	Bowman Brothers	Tunbridge Wells	TQ 624 393

C.24 Pet Cemetery

Ref.	Site Name	Operator	District	NGR
473	Badsell Park Farm, Matfield	Orchard Pet Cemetery Ltd	Tunbridge Wells	TQ 651 436

C.25 Mobile Plant (not mapped)

Ref	Site Name	Operator	District	NGR
N/A	Building 711, Kent Science Park, Sittingbourne	Ecologia Environmental Solutions Limited	Swale	N/A

Table 37 - Site Closed: Mineral Reserves Available and/or Waste Permission Exists (See Figure 30)

Ref	Site Name	Operator	District	NGR
197	*Brabourne Limeworks*	*Brabourne Limeworks*	*Ashford*	*TR 103 424*
598	*Maltmans Hill Smarden*	*Mr S J Buss*	*Ashford*	*TQ 900 434*
111	*Pluckley Brickworks*[1]	*Korex Ltd*	*Ashford*	*TQ 913 435*
208	*Naccolt Brickworks*	*CEMEX UK*	*Ashford*	*TR 047 447*
	Tilmanstone Brickworks	*Hanson*	*Dover*	
199	*Hammill Brick Works*	*Hammill Brick Ltd*	*Dover*	*TR 287 564*
218	*Staplehurst Brickworks*	*P Burke (Kent) Ltd*	*Maidstone*	*TQ 787 445*
205	*Chiddingstone Brickyard*	*Redleaf Estate Trust*	*Sevenoaks*	*TQ 511 471*
138	*Allens Bank Quarry (Reserves but not operational)*	*Brett Aggregates Ltd*	*Shepway*	*TR 044 218*
629	*Quinton Road Bobbing*		*Swale*	*TQ 889 647*
76	*Winterbourne Quarry East*	*Ferns Surfacing Ltd*	*Swale*	*TR 068 575*

Ref	Site Name	Operator	District	NGR
59	*Postern Park Quarry (Closed but reserves not exhausted)*	*CEMEX UK*	*Tonbridge & Malling*	*TQ 610 470*
513	*Holborough Quarry & Cement Works* (Reserves but not operational)	*Lafarge Cement UK*	*Tonbridge & Malling*	*TQ 689 630*
39	*Park Farm Quarry*	*CEMEX UK*	*Tonbridge & Malling*	*TQ 620 580*
222	*Frittenden Brickworks*		*Tunbridge Wells*	*TQ 806*

1. Planning permission expired in December 2012.

Table 38 - Site Closed: Mineral Reserves Exhausted and/or Alternative Development Permitted (See Figure 31)

Ref	Site Name	Operator	District	NGR
114	*Shelford Quarry (Waste management remains operational)*	*Viridor Waste (Kent) Ltd*	*Canterbury*	*TR 160 604*
115	*Milton Manor Quarry (No reserves in restoration)*	*Brett Aggregates Ltd*	*Canterbury*	*TR 116 555*
1	*Chartham Quarry (No reserves in restoration)*	*Brett Aggregates Ltd*	*Canterbury*	*TR 097 553*
152	*Trenley Park Wood*	Brett Aggregates Ltd	Canterbury	*TR 190 591*
201	*Bramling Quarry (Final restoration in progress)*	*R H Ovenden Ltd*	*Canterbury*	*TR 211 553*
188	*Eastern Quarry*	*Lafarge Cement UK*	*Dartford*	*TQ 587 733*
365	*150a Lower Hythe Street, Dartford*	*James Gannon*	*Dartford*	*TQ 542 747*
498	*Imperial Wharf*		*Gravesham*	*TQ 639 745*
261	*Northfleet Cement Works*	*Lafarge Cement UK*	*Gravesham*	*TQ 623 746*
587	*Richborough Harbour*	*Brett Aggregates Ltd*	*Dover*	*TR 337 617*

Ref	Site Name	Operator	District	NGR
10	*Chilston Quarry*	*Borough Green Sand Pits Ltd*	*Maidstone*	*TQ 882 514*
2	*Folkestone Harbour*	*Brett Aggregates Ltd*	*Shepway*	*TR 235 359*
588	*Ospringe Brickworks*	*Cremer & Whiting Ltd*	*Swale*	*TQ 995 613*
155	*Aylesford Sand Pit (Clay)*	*CEMEX UK*	*Tonbridge & Malling*	*TQ 729 597*
215	*Workhouse Quarry, Ryarsh (Restored)*	*Gallagher Materials Ltd*	*Tonbridge & Malling*	*TQ 666 599*

Appendix D: Maps of Minerals and Waste Sites

Figure 23 - Construction Aggregates

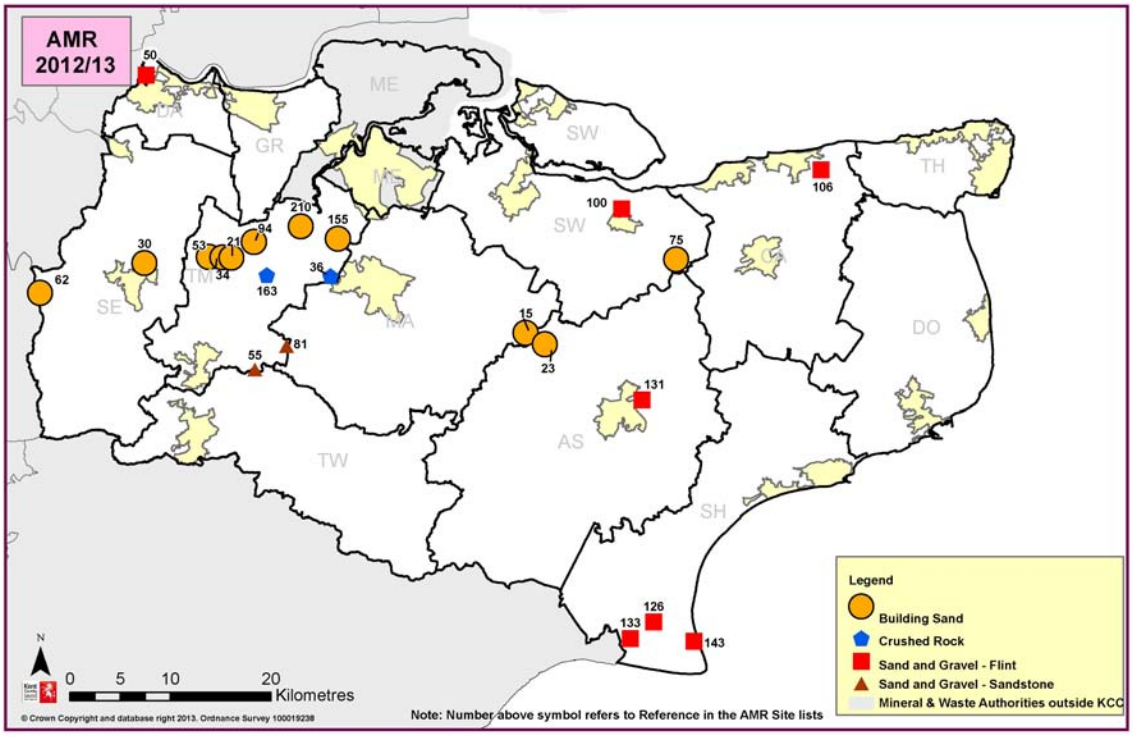


Figure 24 - Secondary and Recycled Aggregates

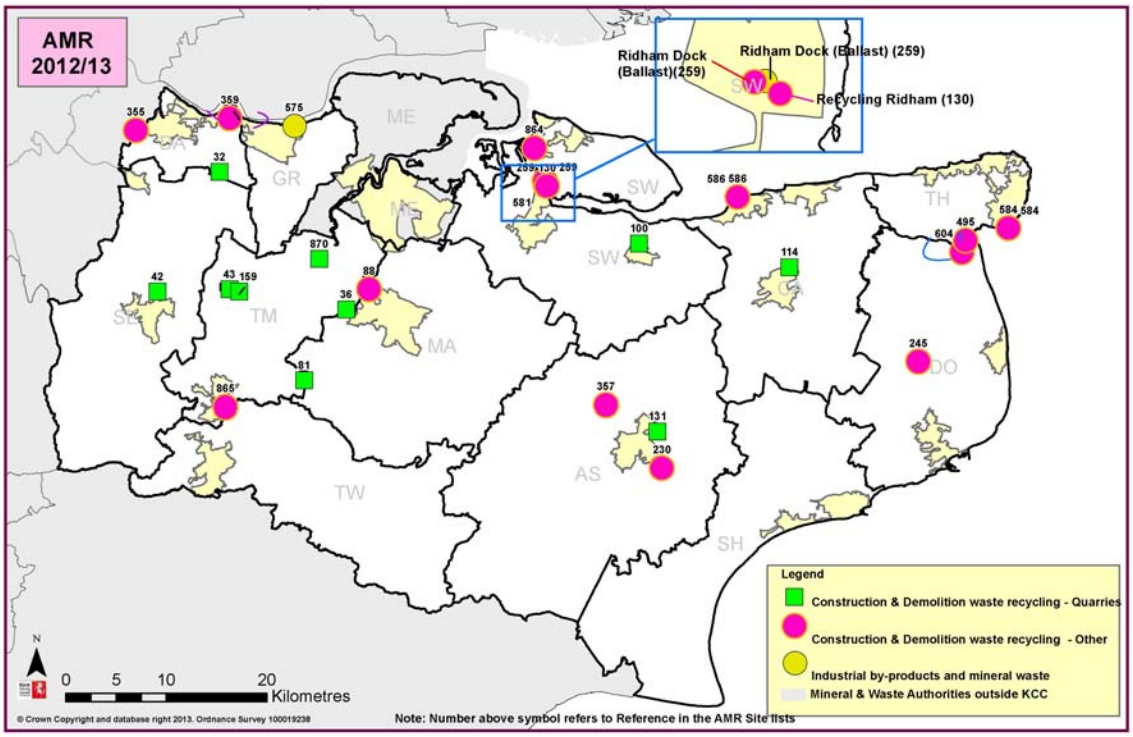


Figure 25 - Wharves and Rail Depots

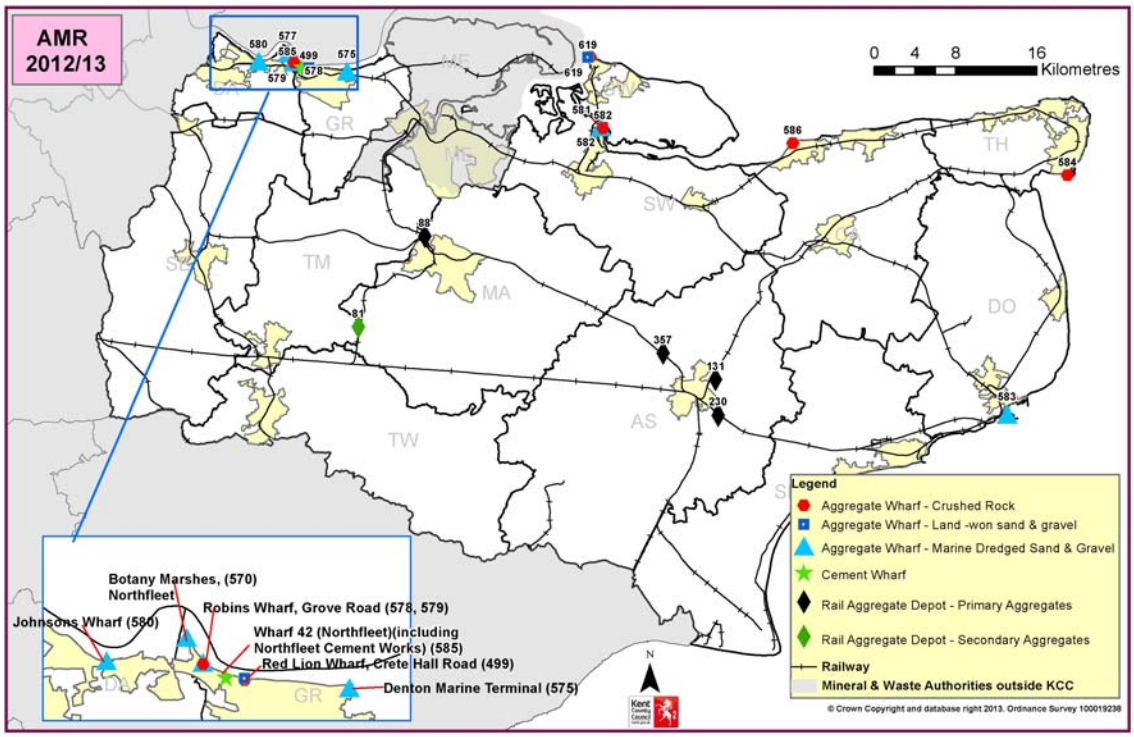


Figure 26 - Other Minerals

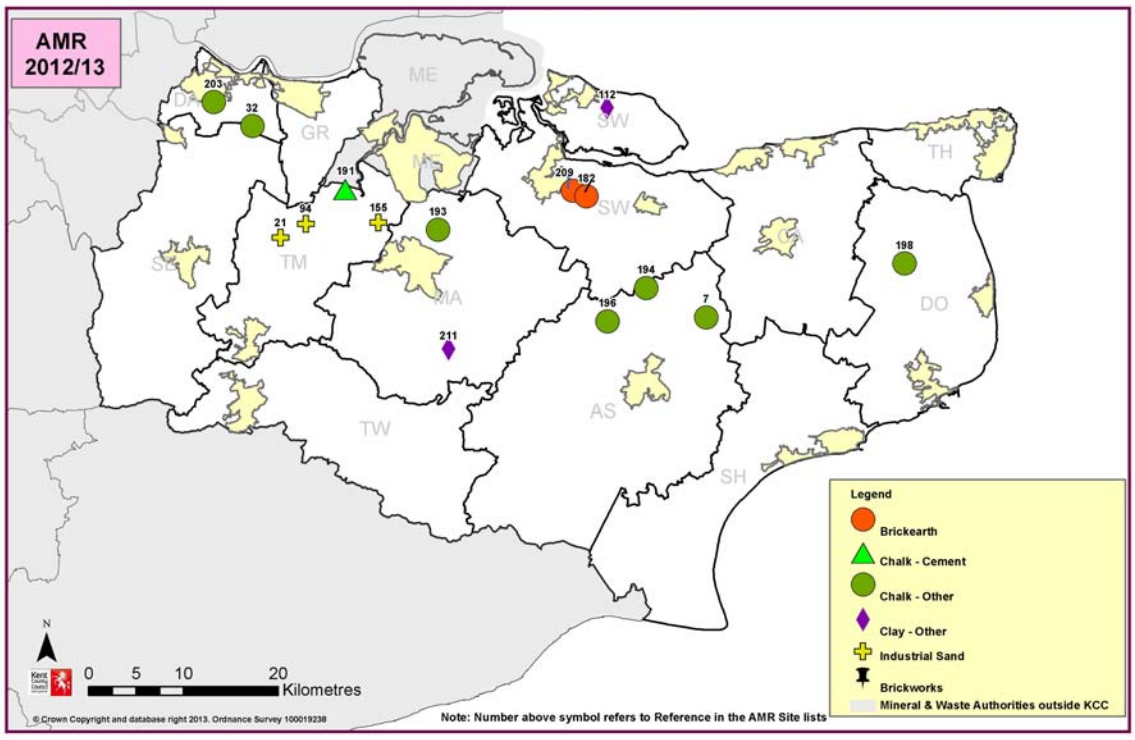


Figure 27 - Wastewater Treatment Works

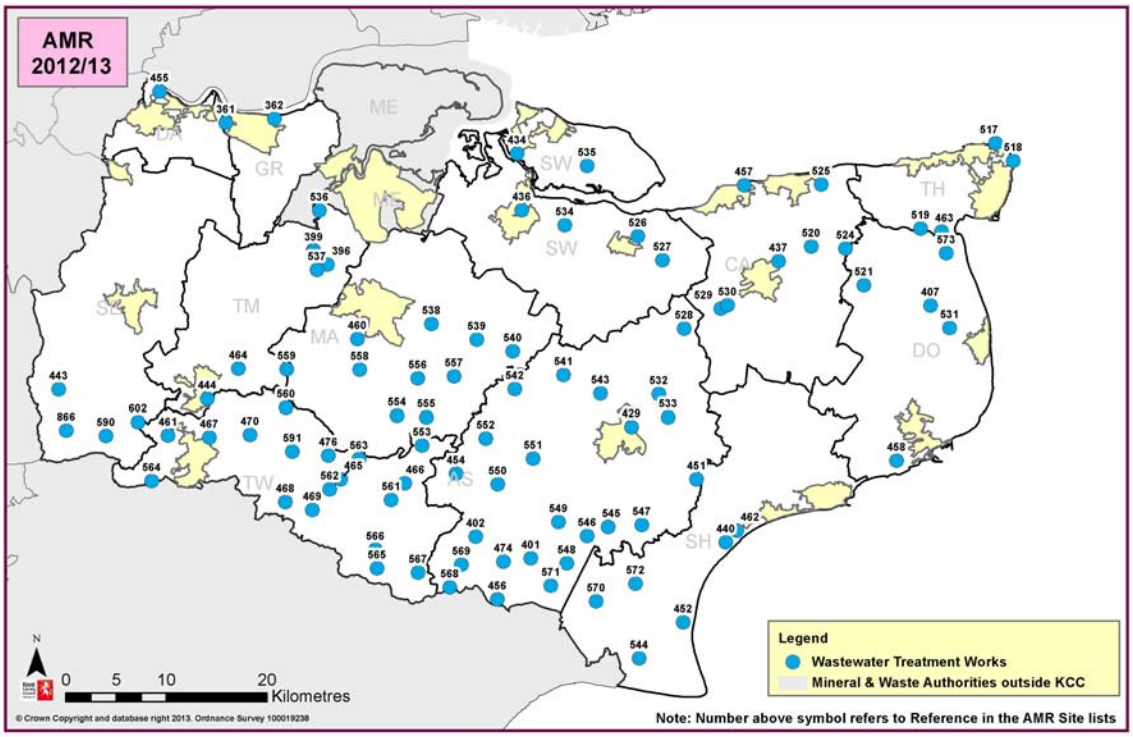


Figure 28 - Waste Incineration and Landfill

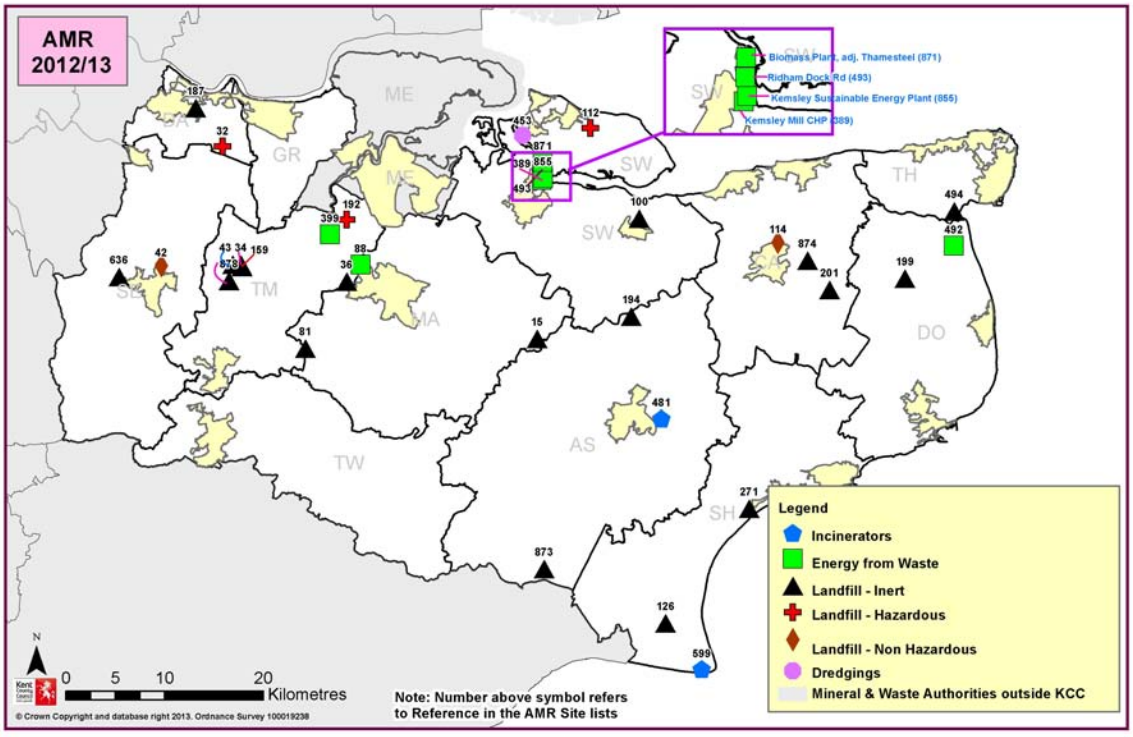


Figure 29 - Recycling Sites and Household Waste Recycling Centres (HWRC)

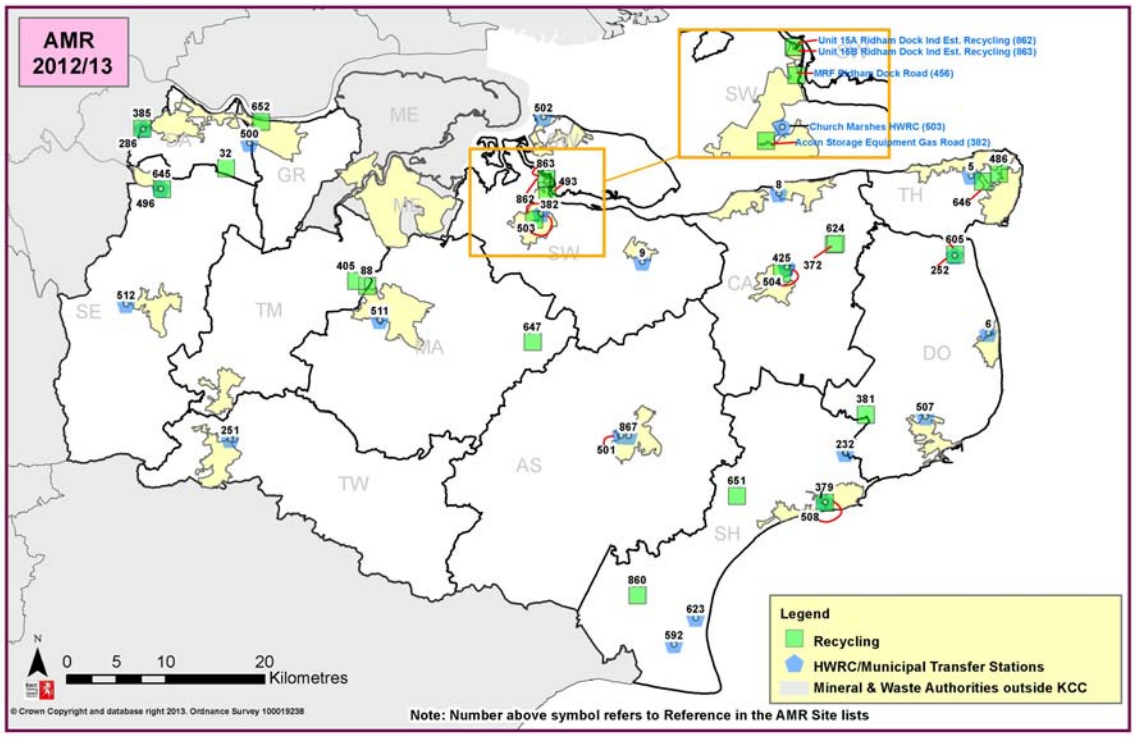


Figure 30 - Transfer Stations and Treatment

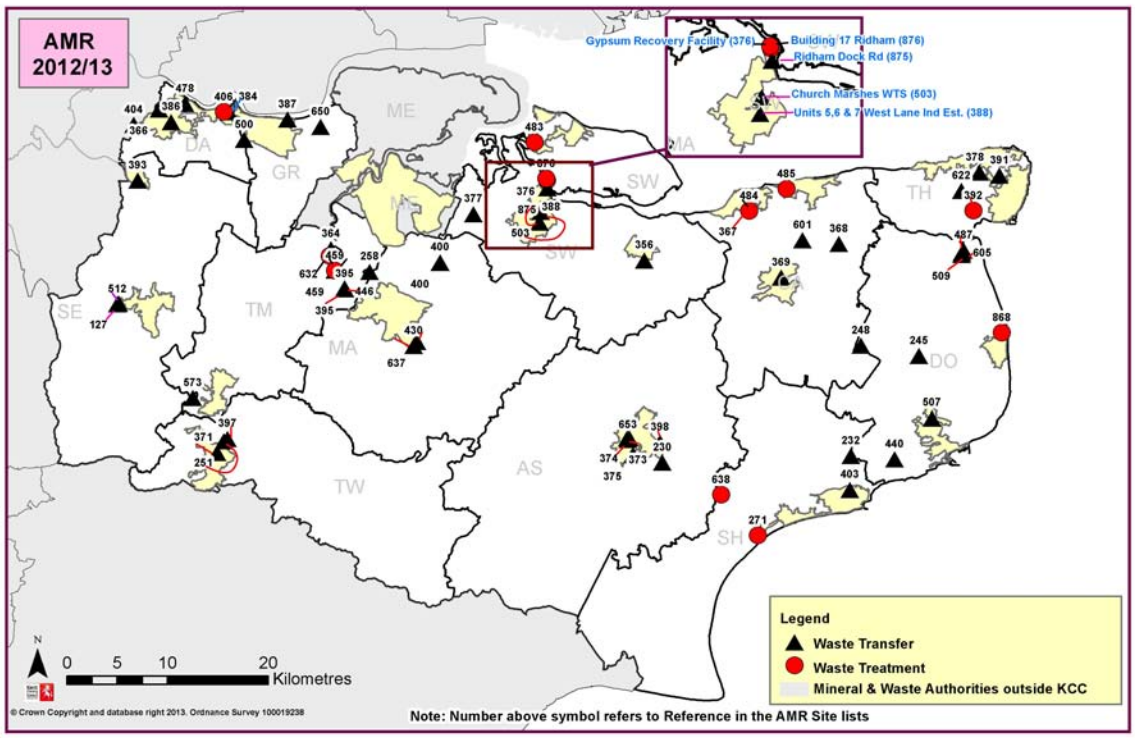


Figure 31 - Composting, Metal/ELV Recycling, Animal and Pet Crematoria

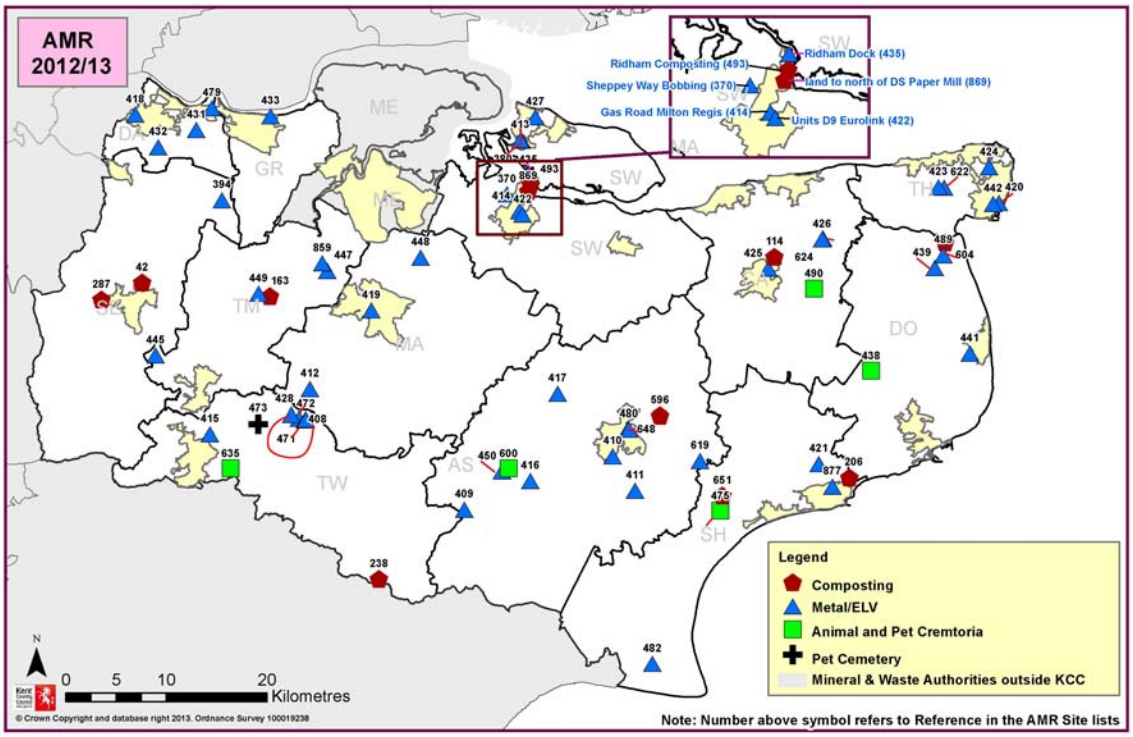


Figure 32 - Site Closed: Mineral Reserves Available and/or Waste Permission exists

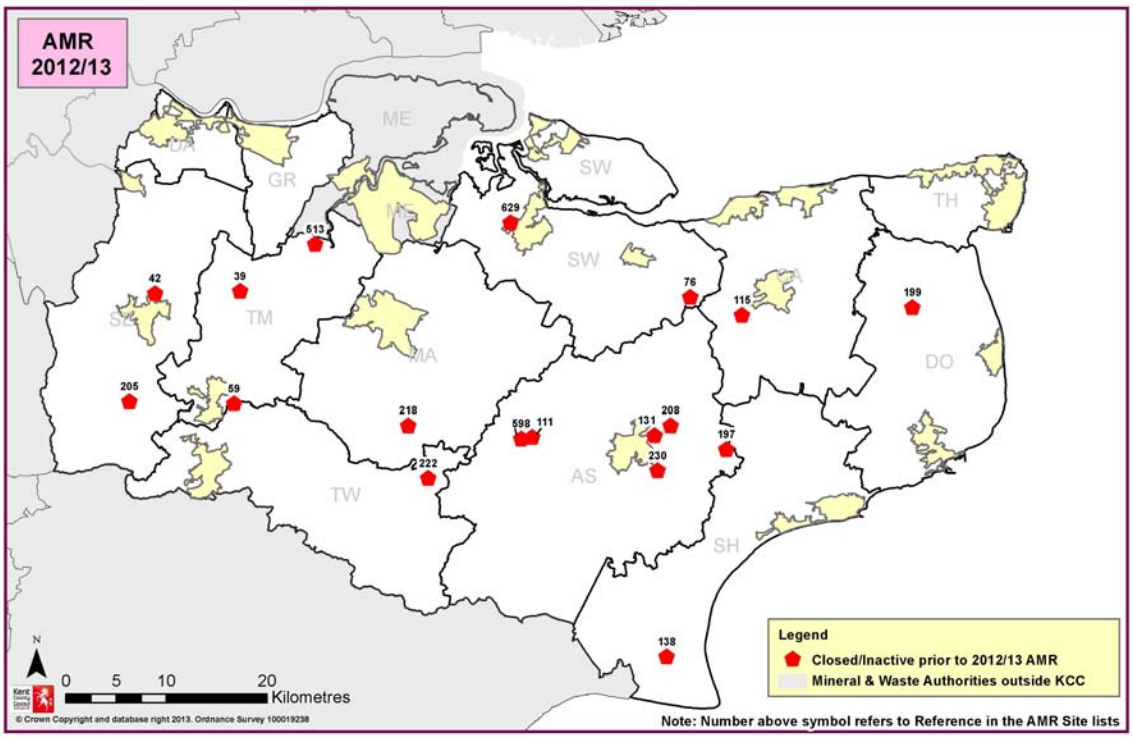
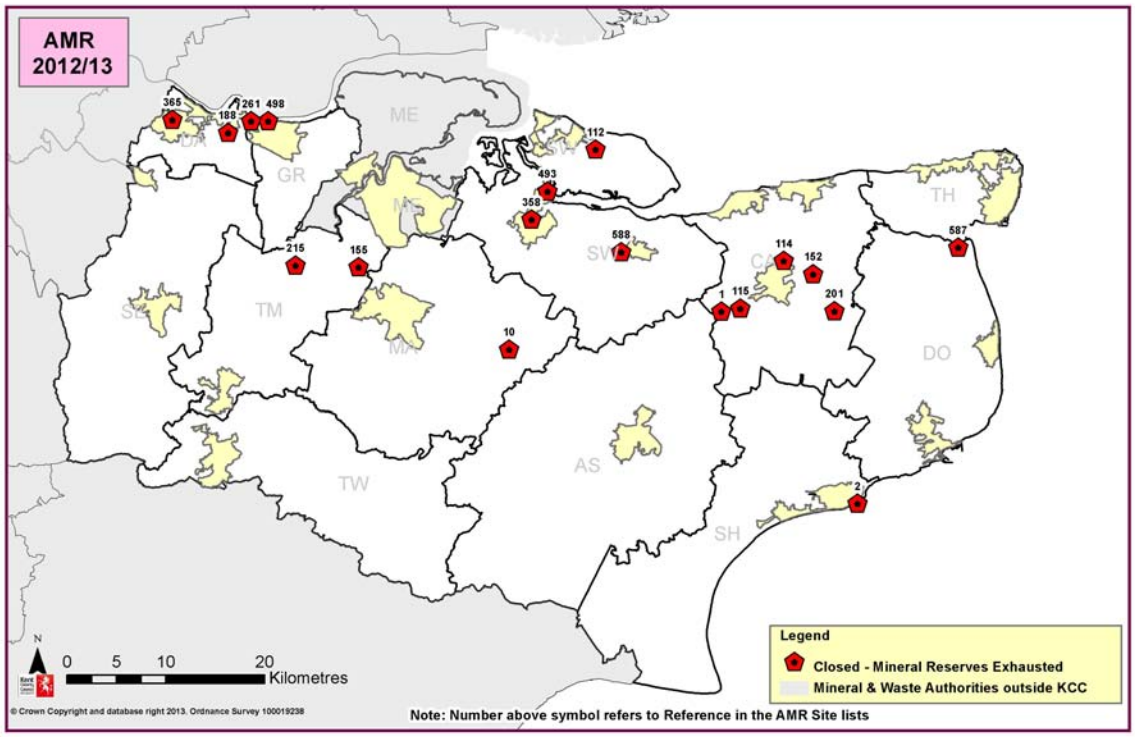


Figure 33 - Site Closed: Minerals Reserves Exhausted and/or Alternative Development Permitted



Appendix E: Duty to Co-operate

E.1 The Minerals and Waste Local Plan (MWLP) team have also held meetings with the prescribed bodies under the Localism Act. The following tables show the individual meetings County Council have held over the past year as part of our duty to co-operate:

Co-operation with Neighbouring Planning Authorities

Authority	Date of Meeting/ Correspondence	Key points of discussion
Medway Council	Meeting: 26/04/2012	Discussion covering: • Joint imports study with Medway Council. • Minerals and Waste apportionment. • Discuss minerals and waste issues that will need to work collaboratively on.
Essex County Council	Email/Meeting: 26/04/2012	Advice on drop in sessions for Kent MWLP.
Surrey County Council Medway Council	Meeting: 12/06/2012	Discussion covering: • Waste Sites Plan Preferred Options Document. • Mineral Sites Plan Preferred Options Document. • Draft Local Aggregate Assessment (May 2012). • Other Evidence Based Topic Papers. • Sustainability Appraisal and Habitat Regulations Appraisal. • Strategic Flood Risk Assessments. • Safeguarding Minerals Update.

Authority	Date of Meeting/ Correspondence	Key points of discussion
East Sussex County Council Medway Council Surrey County Council Tandridge DC (Surrey)	Stakeholder Meeting: 12/07/2012	Representatives were present at the Kent MWLP Preferred Options for Minerals Sites Plan and Waste Sites Plan consultation: • Update on Kent MWLP 2013-2030. • Summary of current consultation. • Safeguarding minerals. • Questions and Answers.
Medway Council	Meeting: 13/07/2012	Representatives from Medway Council were present at KPOG Planning Policy Forum meeting- Minerals and Waste DF Core Strategy consulting on the progress of site allocations.
East Sussex County Council	Email: 20/07/2012	Response to Kent Minerals and Waste Sites- 'Preferred Options' and 'Supplementary Options' consultations: • Acknowledgement of the continuation of co-operation between ESCC and KCC on aggregate production for Lydd Quarry. • Provision from ESCC of suggestions of safeguarding existing and potential sites.
Essex County Council	Meeting: 22/08/2012	Discussion on land banking.
East Sussex County Council	Email: 04/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation- ESCC expressed no objections.

Inter-County Co-operation

Authority	Date of Meeting/Correspondence	Points of Discussion
Ashford BC	Meeting:	MWDF Core Strategy- discussion on:

Authority	Date of Meeting/Correspondence	Points of Discussion
Dartford BC Dover DC Gravesham BC Maidstone BC Sevenoaks DC Swale BC Thanet DC Tonbridge & Malling BC Tunbridge Wells BC	04/05/2012	• Update of MWDF Core Strategy Consultation. • Holding stakeholder events and 'drop in' sessions throughout the consultation period. • Questions and Answers.
Ashford BC Dartford BC Dover DC Gravesham BC Shepway DC Swale BC Tonbridge & Malling BC	Meeting: 12/06/12	Discussion covering: • Waste Sites Plan Preferred Options Document. • Mineral Sites Plan Preferred Options Document. • Draft Local Aggregate Assessment (May 2012). • Other Evidence Based Topic Papers. • Sustainability Appraisal and Habitat Regulations Appraisal. • Strategic Flood Risk Assessments. • Safeguarding Minerals Update.
Dartford BC Dover DC	Stakeholder Meeting/Workshop:	Discussion on the Preferred Options for Minerals Sites Plan and Waste Sites Plan.

Authority	Date of Meeting/Correspondence	Points of Discussion
Shepway DC Swale BC Tonbridge & Malling BC	12/07/2012	
Ashford BC Canterbury CC Dartford BC Dover DC Gravesham BC Maidstone BC Sevenoaks DC Shepway DC Swale BC Thanet DC Tonbridge & Malling BC Tunbridge Wells BC	Meeting: 13/07/2012	KPOG Planning Policy Forum meeting comprising discussions on: • Community Infrastructure Levy/ Duty to Co-operate/ MWDF Core Strategy. • The progress of the current site allocations consultation. • Site specific safeguarding concerns from district perspective.
Gravesham BC	Meeting: 14/08/12	Meeting to discuss Wharf Safeguarding in the borough of Gravesham. It was agreed to have ongoing co-operation and discussions.
Shepway DC	Meeting: 18/10/2012	Dicussion on both the Kent MWLP Draft Nuclear Waste Policy & Associated Evidence Base Report on Nuclear Waste.

Authority	Date of Meeting/Correspondence	Points of Discussion
Ashford BC Dartford BC Dover DC Gravesham BC Maidstone BC Sevenoaks DC Shepway DC Swale BC Tonbridge & Malling BC	Meeting: 18/01/2013	KPOG Planning Policy Forum meeting comprising discussions on: • Industrial Estates Topic Paper. • Presumption in favour of waste management facilities providing they are fully enclosed. • Open communication with all districts.
Ashford BC Canterbury CC Dartford BC Dover DC Gravesham BC Maidstone BC Sevenoaks DC Shepway DC Swale BC Thanet DC	Email: 04/02/2013	Provision of an update on all initial issues and concerns raised with regards to Industrial Estates Topic Paper.

Authority	Date of Meeting/Correspondence	Points of Discussion
Tonbridge & Malling BC Tunbridge Wells BC		
Dartford BC	Email: 08/02/2013	Discussion on Waste Arising Figures presented in Jacobs Report 2011.
Ashford BC	Email: 17/02/2013	Discussion on Preferred Options Consultation- Industrial Estates Survey for waste uses: • Site 77: previous dismissal at appeal. • Site 37 & 88 (Waste Sites Plan).
Dartford BC	Email: 26/02/2013	Discussion on building stone near Greenhithe.
Swale BC	Email: 02/03/2013	Response to consultation on site DPDs- alternative sites.
Tonbridge & Malling BC Tunbridge Wells BC	Email: 07/03/2013	Response on Proposed Mineral Safeguarding Areas Consultation.
Ashford BC Dartford BC Dover DC Gravesham BC	Meeting: 08/03/2013	KPOG Planning Policy Forum meeting comprising discussion on: • Landscape Character Assessment in Kent. • Review of the Kent AONB Management Plan and Boundary.

Authority	Date of Meeting/Correspondence	Points of Discussion
Maidstone BC Sevenoaks DC Shepway DC Swale BC Thanet DC Tonbridge & Malling BC Tunbridge Wells BC		• Minerals and Waste Local Plan update. • Duty to Co-operate.
Swale BC	Email: 14/03/2013 Letter: 28/03/2013	Response on Proposed Mineral Safeguarding Areas Consultation. Discussion on Kent MWLP Mineral Safeguarding
Ashford BC	Letter: 31/03/2013	Response to consultation on site DPDs-alternative sites.

Co-operation within KCC

Kent County Council Teams	Points of co-operation
Historic Environment	Advice on heritage protection and pin point any identified archaeology that would need safeguarding at minerals sites with buffer zones. Reviewed the development management policies on heritage and archaeology and suggested amendments. The team has responded to the consultation *Kent MWLP Proposed Mineral Safeguarding Areas Document* (13/03/2013).

Kent County Council Teams	Points of co-operation
Strategy	Updates on district LDFs. Support regarding legislation and other planning documents. Help with producing evidence topic papers. 13/09/2012- Meeting with Economic Strategy Manager to discussing Local Enterprise Partnership and its involvement in minerals and waste plan making. Representatives from Business Support and Strategy attended meeting on Kent MWLP Industrial Estates Topic Paper (18/01/2013).
Equalities	Support and advice when producing the Equality Impact Assessment which will be on going.
Highways	Discussed issues regarding road widths, visibility and future developments which may impact on road capacity. Representatives from Highways and Transport attended meeting on Kent MWLP Industrial Estates Topic Paper (18/01/2013). Representative/s also attended meeting at Charing Parish Council discussing the Parish's concerns and general issues with regards to the Kent MWLP; Burleigh Farm, Site 71 in particular (13/11/2012).
Planning Applications	Ongoing updates on possible planning applications/permissions. Have also offered advice on wording of policies and commented on site options.
Biodiversity	Discussion on the comments made by the team regarding proposed site allocations and ways of mitigating any potential threats. Advice offered on SA/HRA results and jointly produced documents shown in section 3. The team has commented on the Kent MWDF Sustainability Appraisal Scoping Report commenting on the notion strategic environmental assessment. Provision of comments of Draft Kent MWLP 2013-2030 along with amendments and suggested additions to the text. Attendance at a meeting along with representatives from district councils, statutory stakeholders and other external bodies:

Kent County Council Teams	Points of co-operation
	• Discussion covering Kent MWLP 'Preferred Options Stage' (13/09/2012).
Public Rights of Way (PROW)	We sent documents to the district representatives of PROW for comments on any sites which may affect rights of way.
Waste Management Unit (WMU)	On going meetings with WMU to exchange updates. WMU provided update spreadsheets of contracts which the MWLP team used to update the evidence papers. WMU team also offered advice on wording of policy. Data provided by WMU used through Minerals and Waste Local Plan supporting documents. Recent meeting (11/07/2012): • Provision of update from KCC on Preferred Options documents (municipal solid waste specifically). • Update from WMU regarding household waste recycling centres in Kent.
Flood Risk & Natural Environment	Sought advice when producing the Strategic Flood Risk Assessment (SFRA) also had ongoing advice when discussing comments received regarding Flood Zones and Groundwater Source Protection Zones. The team has responded to the consultation *Kent MWLP Proposed Mineral Safeguarding Areas Document* (25/02/2013).
Gypsy and Traveller Unit	The Gypsy and Traveller Unit were given copies of the documents to see whether any of the proposed sites were near any Gypsy and Traveller sites and whether they would have any impact on them. Recent correspondence (15/03/2013): • Consultation regarding Kent MWLP 'Preferred Options Site Allocations."
Kent Downs AONB	Advice on how allocated sites could mitigate against any adverse affects on the Kent Downs Area of Outstanding Natural Beauty. The MWLP team have had on going meetings with KDAONB to discuss the plans.

Kent County Council Teams	Points of co-operation
	KDAONB were present at a recent meeting (26/03/2013): • Provision of update on Minerals and Waste plan making. • Update on Evidence Base Strategic Landscape Report. • Discussion concerning safeguarding wharves.
Informal Members Group	Substantial co-operation with the Informal Members Group covering: • Updates on the preparation of Draft Kent MWLP 2013-2030. • Proposed modifications to adopted Statement of Community Involvement. • Updates on the supporting topic based reports (both minerals and waste papers). • Updates on various consultations throughout the plan making process. • Policy overviews. • Updates on the progress on written documents throughout the plan. Members have attended the following stakeholder meetings: • Kent MWLP Draft Nuclear Waste Policy & Associated Evidence Base Report on Nuclear Waste (18/10/2012). • Kent MWLP Preferred Options for the Minerals Sites Plan and Waste Sites Plan consultation (12/07/2012).

Working with Statutory Stakeholders and Non-Statutory Interest Groups

External Organisations	Points of Co-operation
The Coal Authority	The Coal Authority has supported draft policies in the core strategy regarding coal mining and has also corresponded with the MWLP regarding coalfield applications within the Kent County authority area. The Coal Authority has responded to the consultation on Kent MWLP Proposed Mineral Safeguarding Areas Document (26/02/2013).

External Organisations	Points of Co-operation
The Crown Estates	Meeting on 06/07/12 and on going correspondence to discuss mineral dredged aggregate reserves, safeguarding wharves and core strategy (Medway Council also present).
Department for Communities and Local Government (DCLG)	Correspondence by letter comprising: • Notification of current situation regarding Kent MWLP 2013-2030. • Provision of summary of Kent's existing waste plans. • Compliance with European Union Waste Framework Directive.
English Heritage	We have consulted with English Heritage and invited them to comment on our documents and attend our meetings.
Environment Agency	Meeting discussing properties of the *Preferred Options Stage* (20/09/2012).EA has responded to many consultations by email comprising: • Kent MWDF DPDs Supplementary Options October 2011 (12/12/2012) • Kent MWLP Proposed Minerals Safeguarding Areas Document- no comments made (20/02/2013). Representatives have attended the MWLP's numerous stakeholder meetings. EA have attended a stakeholder meeting on 12/07/2012.
Highways Agency	Highways Agency have commented during the consultation: • Kent MWLP Proposed Mineral Safeguarding Areas Document (01/03/2013). There has also been ongoing correspondence regarding specific sites that they have an interest in.
Kent Waste Partnership (KWP)	KWP has co-operated with the MWLP team on the Kent Joint Minerals and Waste Municipal Strategy (KJMWMS) document by contributing towards policy refresh from the beginning of the plan period up to the years 2020/21 (04/11/2012).

External Organisations	Points of Co-operation
Kent Wildlife Trust (KWT)	The MWLP team have had ongoing meetings with KWT to discuss site allocations and policy as well as written correspondence regarding specific sites. KWT attended a SA/HRA meeting (28-02-12) to discuss how sites would be assessed.
Marine Management Organisation (MMO)	MMO have commented during MWLP consultations.
National Grid	National Grid have commented during consultations and there has been on going correspondence regarding specific sites that they have an interest in.
Natural England	Email response regarding consultation on *Kent MWDF Proposed Mineral Safeguarding Areas* (01/03/2013). Representatives have attended the MWLP's numerous stakeholder meetings throughout the plan making process.
Port of London Authority	The MWLP team has corresponded with the Port of London Authority over Core Strategy Policy as well as updates on the selling of Wharves and Planning applications/permissions. The Port of London Authority has responded to the consultation *Kent MWLP Proposed Mineral Safeguarding Areas Document* (20/02/2013).
Protect Kent (CPRE)	Representatives have attended the MWLP's numerous stakeholder meetings and have also attended meetings at the councils offices with the MWLP team. Protect Kent have also responded to the consultation: • Kent MWLP Proposed Mineral Safeguarding Areas Document (04/03/2013).

Non-Statutory Organisations	Points of Co-operation
Charing Archaeological Group	A representative of the Charing Archaeological group has attended the MWLP stakeholder meetings and they have also sent the team consultation responses and corresponded regarding archaeological concerns.

Non-Statutory Organisations	Points of Co-operation
Dungeness Nuclear Power Station Site Stakeholder Group	24th May 2012- At this meeting KCC MWLP team asked for feed back on the nuclear waste disposal policy in the draft core strategy. 18th October 2012- Meeting comprising update on evidence base topic paper topic paper on Nuclear Waste (May 2011) and discussion on draft policy CSW15 in Core Strategy Consultation. 13th January 2013- Discussion concerning Draft Strategic Policy on Nuclear Waste contained within Core Strategy, May 2011; affecting waste policy.
English Nature	Representatives have attended a stakeholder meeting discussing the *Kent MWLP Preferred Options Stage* (13/09/2012).
Kent Ornithological Society	The society has attended stakeholder workshops and consulted with the MWLP team.
Mineral Management Organisation	The Mineral Management Organisation has responded to the consultation *Kent MWLP Proposed Mineral Safeguarding Areas Document* (04/03/2013).
The National Trust	The trust has consulted with the MWLP team.
Nature After Minerals	Representatives have attended the following stakeholder meeting: • Meeting on the Kent MWLP Preferred Options Stage (19/09/2012).
Nuclear Decommissioning Authority (NDA)	Representatives from NDA have attended the stakeholder meeting on *Kent MWLP Draft Nuclear Waste Policy & Associated Evidence Base Report on Nuclear Waste* (18/10/2012).
RSPB	The RSPB have attended stakeholder workshops, responded to the KCC MWLP consultations and corresponded with the team regarding the Habitat Regulation Assessments (HRA).

Non-Statutory Organisations	Points of Co-operation
The Shoreham Society	The society has consulted with the MWLP team.
South East England Aggregates Working Party (SEEAWP)	SEEAWP has met on the following recent occasions: 27/04/2012- Produced joint response to Hampshire MWLP submission. 18/07/2012- Industry stakeholder meeting; Questions and Answers on Kent MWLP. 19/03/2013- Discussed update on DCLG and role of SEEAWP, AMR 2011/12 and AMR 2012/13, Local Aggregate Assessments and marine aggreagates.
South East Waste Planning Advisory Group (SEWPAG)	Planning Officers from KCC have been actively involved with SEWPAG since its formation in 1999 (originally SERTAB), meeting with Planning Officers in other Waste Planning Authorities in the south east 3-4 times per year. Initially this was to help develop the evidence base for the regional waste strategy. Currently, there is a Standing Item on the SEWPAG agenda which provides a regular opportunity to discuss common issues arising from WDFs and major waste planning applications. SEWPAG is also working on: • A Memorandum of Understanding for the Duty to Co-operate to cover net self-sufficiency for counties and regular discussions between the WPAs in the south east. • Development of a common database of waste facilities and model for capacity planning. During the monitoring period SEWPAG meeting was on 05/06/2012.
Westerham Residents	Residents from Westerham, Sevenoaks have attended the stakeholder meeting on the consultation on preferred options for the mineral sites plan and waste sites plan (12/07/2012).

Co-operation with Minerals and Waste Planning Authorities and Industries: International Minerals Imports Stakeholders

Operator	Aggregate Type (Mineral Source)	Point of Co-operation
Aggregate Industries	Crushed Rock (Ireland & Norway)	Discussion concerning the duration of Kent's international mineral imports throughout the plan period and notification of any issues raised regarding the supply of such minerals. 15/03/2013
J.Clubb Ltd	Slag (Netherlands)	Discussion concerning the duration of Kent's international mineral imports throughout the plan period and notification of any issues raised regarding the supply of such minerals. 18/03/2013
Stema Shipping UK Ltd	Crushed Rock & Recycled Slag (Norway) Sand (Denmark)	Discussion concerning the duration of Kent's international mineral imports throughout the plan period and notification of any issues raised regarding the supply of such minerals. 20/03/2013
Lafarge Tarmac Ltd	Pulverised Flue Ash (Spain & Denmark)	Discussion concerning the duration of Kent's international mineral imports throughout the plan period and notification of any issues raised regarding the supply of such minerals. No difficulty sourcing cement from Europe during the plan period. No supply difficulty. 25/03/2013

Mineral Planning Authorities (Location of Origin Known to KCC)

Mineral Planning Authority	Aggregate Type	Point of Co-operation

Somerset Council	Crushed Rock: Limestone Washed Limestone Scalpings	Discussion of any known issues regarding Whatley Quarry, Mendips and Torr Works Quarry affecting imported mineral supplies into Kent throughout the plan period 2013-2030. 15/03/2013
Caerphilly County Borough Council (Wales)	Crushed Rock: Granite	Discussion of any known issues regarding Machen Quarry affecting imported mineral supplies into Kent throughout the plan period 2013-2030. 20/03/2013

Mineral Planning Authorities (Region of Origin Known to KCC)

Mineral Planning Authority	Aggregate Type	Point of Co-operation
Hampshire County Council	Construction Aggregates	Notification of an understanding of quantities of minerals imported into Kent from the county of Hampshire and confirmation that the current situation is unlikely to change for the duration of the plan period ending in 2030. 15/03/2013
Surrey County Council	Construction Aggregates	Notification of an understanding of quantities of minerals imported into Kent from the county of Surrey and confirmation that the current situation is unlikely to change for the duration of the plan period ending in 2030. 15/03/2013

Minerals Industry Stakeholder Correspondence

Minerals Industry Stakeholder Correspondence		
Stakeholder	**Form of Correspondence**	**Point of Co-operation**
Brachers LLP Brett Group Civitas Planning Crundale Limeworks Earth Enterprises Ltd ESG FCC Environment Graham Simpkin Planning Consultancy H & H UK Ltd J.Clubb Ltd Lafarge (UK South) Lafarge Cement Mineral Products Association Pinden Ltd Quarry Plan SEEAWP Stephen Bowley Planning Consultancy	Industry Stakeholder Workshop: 18/07/2012	Questions and Answers concerning Minerals and Waste Local Plan: • Consultation • Site consideration • Pinden Quarry • Policy • Safeguarding • Duty to Co-operate operations
John Yerburgh	Email: 11/02/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
Civitas	Email: 25/02/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.

Minerals Industry Stakeholder Correspondence		
Stakeholder	**Form of Correspondence**	**Point of Co-operation**
Appledore	Email: 27/02/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
David L Walker Ltd	Email: 27/02/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
Brett Aggregates	Email: 01/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
Gallagher Aggregates	Email: 01/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
Barratt Strategic	Email: 04/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
Bidwells Property Consultancy	Email: 04/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
John Heathfield	Email: 04/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
Lafarge Tarmac	Email: 07/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
Ibstock Brick Ltd	Email: 08/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.

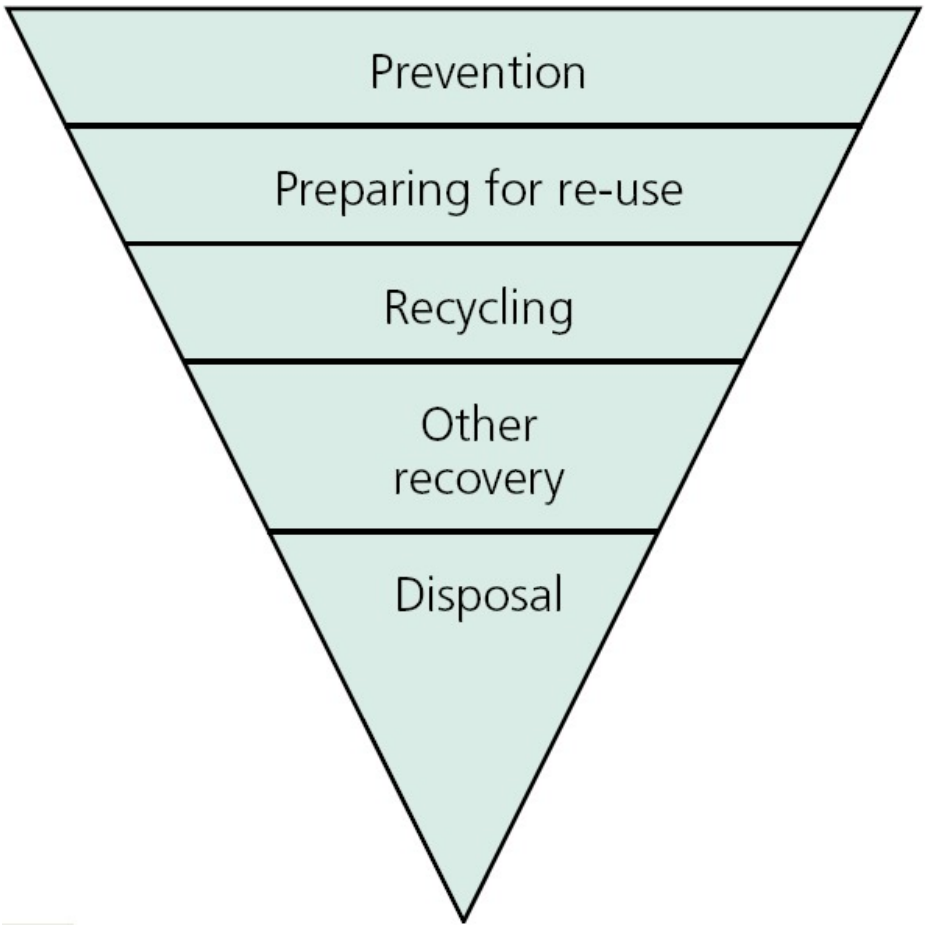
Minerals Industry Stakeholder Correspondence		
Stakeholder	**Form of Correspondence**	**Point of Co-operation**
JB Planning Associates	Email: 15/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.
Paul Sharp Associates	Email: 21/03/2013	Response to Kent MWLP Proposed Mineral Safeguarding Areas Document consultation.

Waste Industry Stakeholder Correspondence

Stakeholder	Form of Correspondence	Point of Co-operation
Countrystyle Group FCC Environment Ovenden Pinden Ltd Scrapo Metal Recycling	Industry Stakeholder Meeting: 18/07/2012	Questions and Answers concerning Kent MWLP: • Consultation. • Site consideration. • Pinden Quarry. • Minerals and waste policy. • Kemsley Paper Mill. • EfW capacity. • Safeguarding areas. • EiP • Duty to Co-operate (consulting with suppliers outside of the region).
Magnox Ltd EDF Energy Dungeness Power Station	Meeting: 18/10/2012	Representatives from Magnox Ltd and EDF Energy Dungeness Power Station were present at meeting discussing Kent MWLP Draft Nuclear Waste Policy & Associated Evidence Base Report on Nuclear Waste.

Appendix F: The Waste Hierarchy

Figure 34 - The Waste Hierarchy



- Prevention – the most effective environmental solution is often to reduce the generation of waste, including the re-use of products.
- Preparing for re-use – products that have become waste can be checked, cleaned or repaired so that they can be re-used.
- Recycling – waste materials can be reprocessed into products, materials, or substances. This includes composting if it meets quality protocols.
- Other recovery – waste can serve a useful purpose by replacing other materials that would otherwise have been used. Recovery includes: anaerobic digestion, incineration with energy recovery (energy from waste), gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste, and backfilling (e.g. the restoration of quarries with inert material that is not recyclable).
- Disposal (e.g. reduction in waste that is sent to landfill) – the least desirable solution where none of the above options is appropriate.

Appendix G: Glossary

A	
Aggregate	Inert particulate matter which is suitable for use (on its own or with the addition of cement or bituminous material) in construction as concrete, mortar, finishes, road stone, asphalt, or drainage course, or for use as constructional fill or railway ballast.
Aggregates/ soils recycling	Rubble, hardcore and soil from construction and demolition projects can often be re-used on-site. Alternatively, it can be taken to purpose built facilities for crushing, screening and re-sale. There are also temporary facilities at some quarries landfill sites where material can be recovered for re-sale or use on site.
Annual Monitoring Report (AMR)	Records progress in implementing the Local Development Scheme and the performance of adopted plan policies.
Appropriate Assessment	As assessment of whether a development proposal 'either alone or in combination with other proposed sites' would have a significant, adverse effect on the integrity of a European site against the site's conservation objectives.
B	
Biodiversity	The variety of all life on earth (such as mammals, birds, fish, invertebrates, plants).
C	
Commercial waste	Waste from premises used mainly for trade, business, sport, recreation or entertainment, as defined under section 5.75 (7) of the 1990 Environmental Protection Act. May include paper, card, plastic, glass timber, metal, paints, textiles, chemicals, oils and food waste.
Composting	The breakdown of plant matter by the action of micro-organisms and other organisms into usable end-products. It is an important method of processing organic waste because it reduces the amount of potentially polluting waste going to landfill or incineration.
Construction waste (also see demolition waste)	Waste arising from any development such as vegetation and soils from land clearance, remainder materials and off-cuts from building sites, road schemes and landscaping projects. Mostly consists of stone, concrete, rubble and soils but may include some timber, metal and glass.

D	
Demolition waste (also see construction waste)	Masonry and rubble wastes arising from the demolition or reconstruction of buildings or other civil engineering structures.
Development Framework	Portfolio of planning documents. Collective term for key Plans, the Local Development Scheme, the Statement of Community Involvement, Annual Monitoring Report and any supplementary planning documents.
E	
Energy from Waste (EfW)	Generation of heat and power from burning waste, the production of fuels from other forms of treatment, and the combustion of landfill gas and gas from anaerobic digestion to create electricity.
European Sites	The collective term for Special Areas of Conservation (SACs) and Special Protection Area (SPAs) designations that comprise the Natura 2000 pan-European network.
European Protected Species	Species listed in Annex IV of the EU Habitats Directive, transposed into UK law by The Conservation of Habitats and Species Regulations 2010.
Examination in Public (EiP)	All Plans will be subject to an independent examination before a planning inspector. The inspector's report is binding on the local authority.
F	
Flood Zones	The Environment Agency produces a flood map showing areas where there is the potential to flood. There are four different Flood Zones; Flood Zone 1, 2, 3a and 3b. These show the scale of the probability of flooding. Flood Zone 1 has a low probability of flooding (less than 1 in 1,000 annual probability of flooding) increasing up to Flood Zone 3b, which has a high probability (1 in 20 or greater annual probability of flooding).
G	
Groundwater Source Protection Zones	Groundwater source catchments designated by the Environment Agency to protect groundwater from contamination. Divided into Zones 1, 2, 3 and 4 depending on distance from the extraction point.

H	
Habitat Regulation Assessment (HRA)	Assessment required under European Legislation (Habitat Regulations, 1992) to determine whether a plan, either alone or in combination with other relevant projects and plans, is likely to result in a significant effect upon European sites. Where is significant effect cannot be ruled out in the initial stages of plan making, a subsequent stage of the HRA known as Appropriate Assessment will be required.
Hazardous waste	Controlled waste that is dangerous or difficult to treat, keep, store or dispose of, so that special provision is required for dealing with it. Hazardous wastes are the most dangerous wastes and include toxic wastes such as ; acids, alkaline solutions, asbestos, fluorescent tubes, batteries, oil, fly ash, industrial solvents, oily sludges, pesticides, pharmaceutical compounds, photographic chemicals, waste oils and wood preservatives. If improperly handled, treated or disposed of, a waste that, by virtue of its composition, carries the risk of death, injury or impairment of health, to humans or animals, the pollution of waters, or could have an unacceptable environmental impact.
I	
Industrial waste	Waste from any of the following premises: factory; provision of transport services (land, water and air); purpose of connection of the supply of gas, water, electricity, provision of sewerage services, provision of postal or telecommunication services.
Inert waste	Waste which will not biodegrade or decompose. Types of materials include uncontaminated topsoil, subsoil, clay, sand, brickwork, stone, silica and glass.
L	
Landfill	The deposition of waste onto hollow or void space in the land, usually below the level of the surrounding land or original ground level in such a way that pollution or harm to the environment is prevented. Former mineral workings have historically been used for this purpose.
Local Protected Species	Species designated in the 2007 Biodiversity Action Plan (BAP) list; birds designated as Red or Amber in the Birds of Conservation Concern 3 listing; species listed in the Kent Red Data Book.

M	
Mineral Resource	A concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such a form, quality and quantity that they are reasonable prospects for eventual economic extraction.
'Mothballed'	Sites that are currently inactive.
N	
National Nature Reserve (NNR)	Areas designated with the aim of securing protection and appropriate management of the most important areas of wildlife habitat, and to provide a resource for scientific research.These Reserves are a selection of the very best parts of England's Sites of Special Scientific Interest (SSSI) as designated by Natural England.
R	
Ramsar sites	Sites of international importance to birds which inhabit wetlands. Ramsar is the name of the place where the Wetlands Convention was signed.
Recycled aggregates	Aggregates produced from recycled construction waste such as crushed concrete and planings from road surfacing.
Recycling	The collection and separation of materials from waste and subsequent processing to produce new marketable products.
Restoration	Operations to return an area to an acceptable environmental state, whether for the resumption of the former land use or for a new use following mineral working.

S	
Safeguarding	Protecting sites that have potential for relevant development (waste and minerals) from other development.
Sharp Sand and Gravel	Naturally occurring mineral deposit in Kent. Once extracted it is mainly used in the production of concrete products.
Scheduled Ancient Monument (SAM)	Nationally important monuments and archaeological areas that are protected under the Ancient Monuments and Archaeological Areas Act.
Sites of Special Scientific Interest (SSSIs)	Sites designated by Natural England for their flora, fauna, geological or physiographical features of special interest under the Wildlife and Countryside Act 1981 (amended 1985).
Site Allocations	Sites which are generally well defined and where there is an implied presumption in favour of their being developed during the plan period
Strategic Environmental Assessment	An evaluation process for assessing the environmental impacts of plans and programmes as set out in the Environmental Assessment of Plans and Programmes Regulations 2004.
Strategic Site	A key site of importance for minerals or waste uses, potentially of county-wide significance.
Submission	A stage of the plan preparation process where the document is 'submitted' to the Secretary of State for independent examination by a planning inspector. The document is first published for public consultation prior to submission.
Sustainability Appraisal (SA)	An evaluation process that systematically identifies and evaluates the economic, social and environmental impacts of a plan. It incorporates the requirements of a Strategic Environmental Assessment.
Sustainability	A widely quoted definition of sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Sustainability seeks to balance social, economic and environment issues including the efficient use of natural resources.

U	
UK Protected Species	Animals and plants protected under the Protection of Badgers Act 1992 and the Wildlife and Countryside Act 1981.
W	
Waste	The Town and Country Planning Act 1990 has been amended so there is no dispute over whether 'waste', in terms of the planning regime, is defined in accordance with European law. It states that: "Waste" includes anything that is waste for the purposes of Directive 2006/12/EC of the European Parliament and of the Council on waste, and that is not excluded from the scope of that Directive by Article 2(1) of that Directive." Waste is therefore defined as any substance or object which the holder or the possessor either discards or intends or is required to discard[(49)].
Waste Planning Authority (WPA)	A Local Authority with responsibility for waste planning, including the determination of waste related planning applications. In areas with two tiers of local government (counties and districts), the County Councils are the WPAs. National Parks are also WPAs. Unitary Authorities, such as Medway Council, deal with waste planning and all other planning issues within their areas.
Waste Recovery	The collection, reclamation and separation of materials from the waste stream.
Waste transfer	Facilities which receive waste (normally from a local area), where the waste is bulked up and transported further afield in larger lorries (or in some cities by barges) for disposal or recovery. Some transfer stations sort out the recoverable wastes, such as construction waste and scrap metal prior to onward transportation for disposal or processing.

49 This definition is inserted into s.336(1) of the TCPA 1990, as part of the consequential amendments made by the Environmental Permitting (England and Wales) Regulations 2007 SI 2007/3528 (the "EPR 2007"), as from 6 April 2008. See Schedule 21, para 19 of the EPR 2007 (and its commencement - see reg.1)