



Essex County Council & Southend-on-Sea Council

Review of Waste Flows with London

Final Report

Issued: 30th September 2016

## BPP Consulting Document Control

**Project:** Essex & Southend on Sea Waste Local Plan Support

**Report:** Review of Waste Flows with London

**Version Description:** Final Report

**Version No.:** 1.1

**Date:** 30.09.16

Version No.	Version Description	Author	Date	Reviewed	Date
0.1	Draft for internal review	Alan Potter	28.09.16	Ian Blake	29.09.16
1.0	Draft for client review	Alan Potter	28.09.16	Ian Blake	
1.1	Final issue	Alan Potter	30.09.16	Ian Blake	

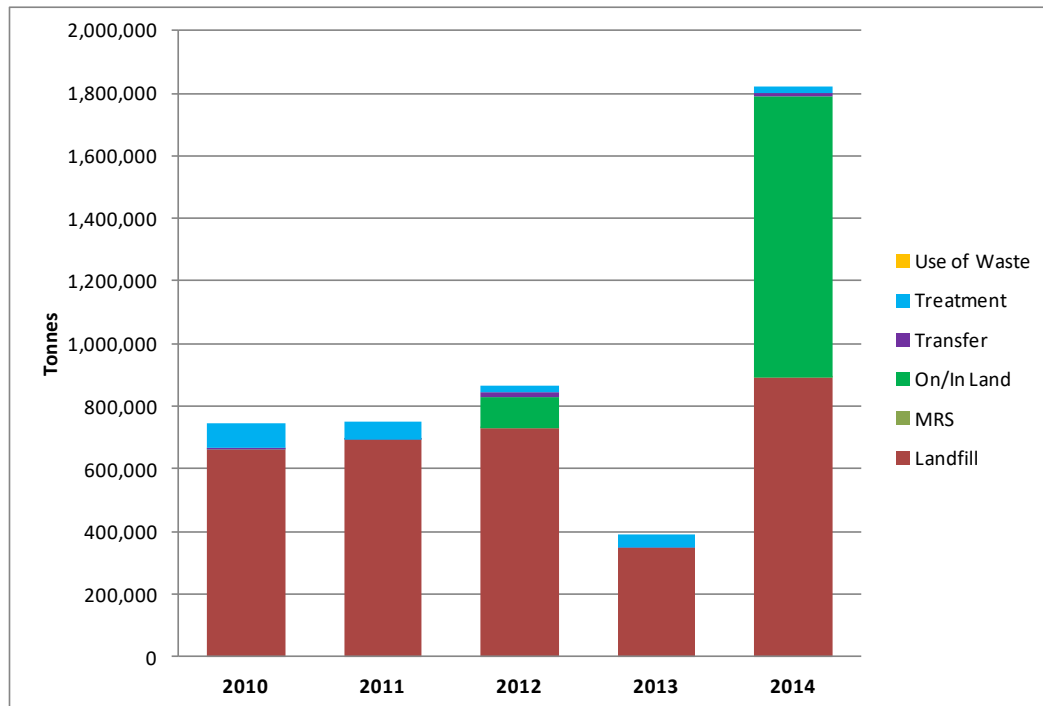
Assessments associated with the preparation of this report have involved an element of professional judgement. The conclusions presented rely upon information provided by third parties which have been used in good faith. While due care and diligence has been exercised in the research and production of this report, BPP Consulting LLP excludes to the fullest extent lawfully permitted, all liability for any loss or damage however arising from reliance on its contents.

# Table of Contents

<b>1. Imports into the Plan Area from London</b>	<b>1</b>
1.1 London inputs to Landfill	2
1.2 CDEW Imports from London	3
1.3 Imports of Non CDEW to Plan Area	5
1.4 Projected requirement for London's Non Inert Waste	6
1.5 Potential Non Hazardous Landfill Requirement	8
1.6 Plan Area Non Hazardous Landfill Capacity	9
1.7 Conclusion	10
<b>2 Exports of Waste from the Plan Area to London</b>	<b>11</b>
2.1 Exports and Imports of Waste between the Plan Area & North London	12
2.2 Conclusion	13

# 1. Imports into the Plan Area from London

Figure 1 plots the data for imports from London to the Plan Area from the Environment Agency WDI over 5 years.



**Figure 1: Imports from London to Essex & Southend on Sea 2010-2014** (Source: EA WDI)

Figure 1 illustrates:

1. how reported inputs to Plan Area facilities attributed to London are dominated by inputs to landfill,
2. the exceptional value for on/in land in 2014 is attributable to inputs to Wallasea Island from the Crossrail construction project. Since this is a 'one-off' value going to a specific project conceived to find a beneficial use for the spoil from the project, it would not be reasonable to include it in the ongoing annual imports from London. If this value is excluded the total tonnage managed at permitted sites in the Plan Area from London 2014 would fall to just less than 1 million tonnes. This is still a significantly higher tonnage than seen in the previous years and is largely attributable to a jump in the input of residues from mechanical treatment of waste at other waste management sites (EWC 19 12 12 ).

The trend is plotted in Figure2 after exclusion of the exceptional Wallasea value showing a flattening off which would justify a static growth rate.

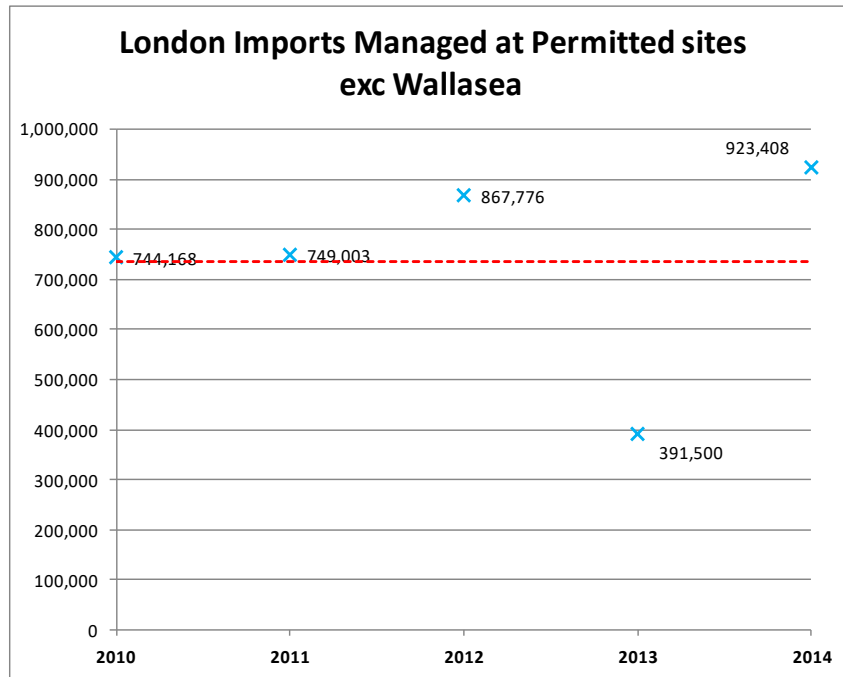


Figure 2: Trend for Imports from London to Essex & Southend on Sea 2010-2014 (Source: EA WDI)

### 1.1 London inputs to Landfill

Figure 3 shows inputs from London going to landfill in the Plan Area broken down between CDEW and other.

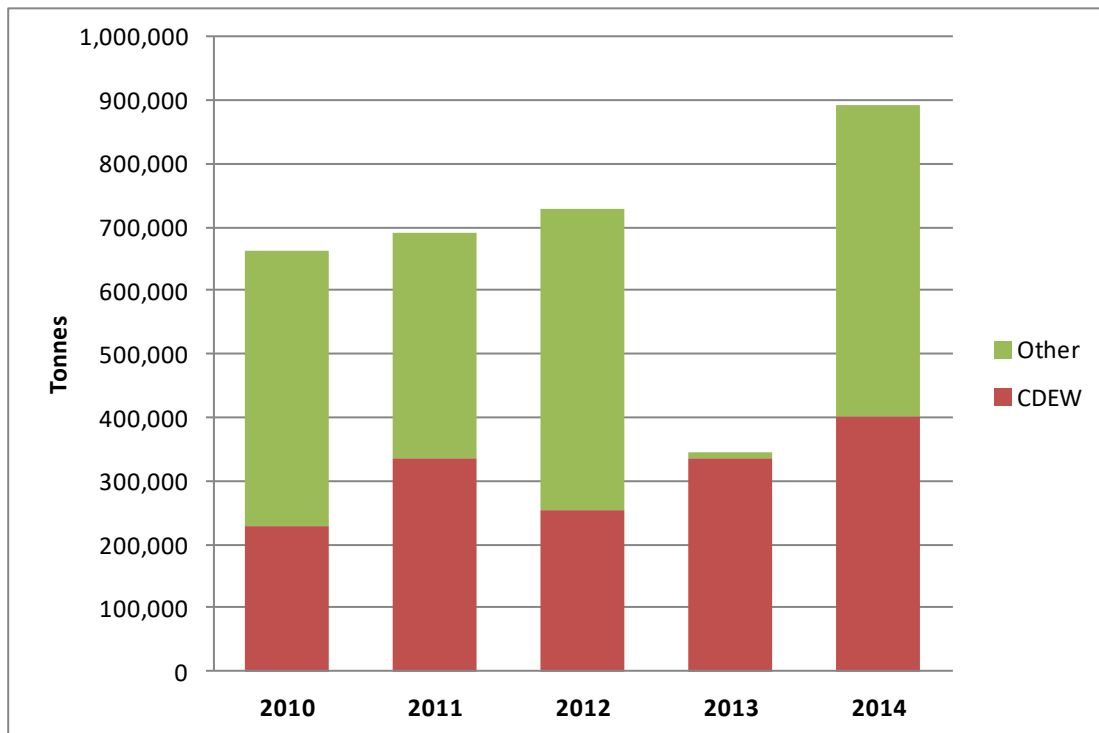


Figure 3: Imports from London to Landfill in Essex & Southend on Sea 2010-2014 (Source: EA WDI)

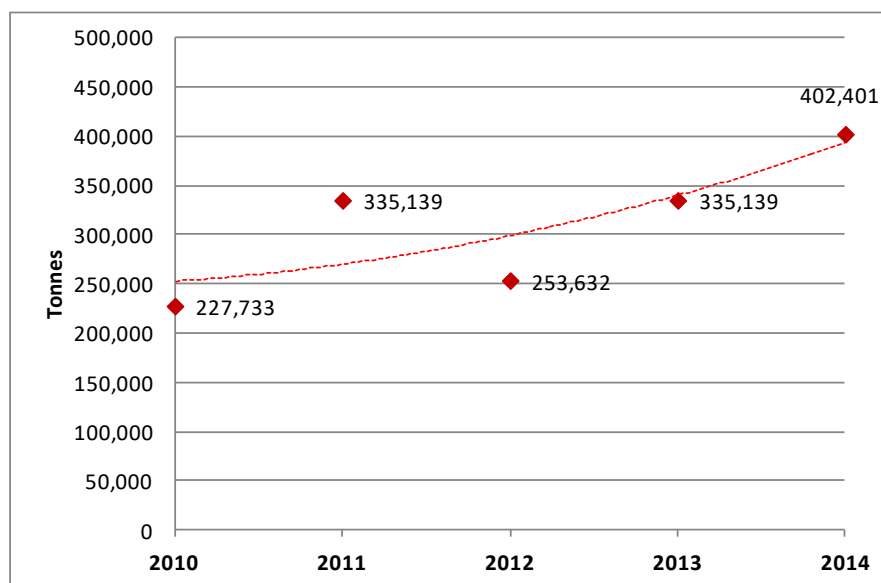
Figure 3 illustrates:

1. how reported inputs to Plan Area landfill attributed to London are split more or less equally between CDEW and other waste types except in 2013,
2. 2013 appears to be an exceptional year in that regard with very little non CDEW waste being received. Unless this is explained by a change in site operations - for example - early shift to restoration phase this anomaly may be due to a WDI data attribution error.
3. the predominant 'other waste' is input of residues from mechanical treatment of waste at other waste management sites within London (EWC 19 12 12 ). On the expectation that flows of non CDEW from London to the Plan Area will be addressed through the London Plan target of achieving net self sufficiency for household and commercial waste and zero biodegradable or recyclable waste being sent to landfill by 2026 for the capital as a whole<sup>1</sup>, focus should be placed on provision for 191212 coming from London to Plan Area landfill.

## 1.2 CDEW Imports from London

Data for input of CDEW to landfill is plotted in Figure 4 below. This shows a trendline with an upward curve which might suggest that provision ought to be made for an increasing amount of CDEW going to landfill.

However the London Plan does apply targets for the conversion of CDEW into recycled aggregate - with the aim of up to 95% being recycled or reused by 2020 so that should act as a continuing brake against sending such waste to landfill.



**Figure 4: Trend for Imports of CDEW from London to Essex & Southend on Sea 2010-2014 (Source: EA WDI)**

A five year average of the input data yields a value of 310,000 tonnes and this is the value used to indicate the provision that might be made for this waste stream from London within the capacity assessment. This is shown in Figures 16 & 18 of Topic Paper 1. To consider the effect of including this value within capacity assessment a revised Table 20 is produced below with the rows that inform the shortfall included.

<sup>1</sup> This means that, after 2026, while movement to landfills outside the capital may continue (provided that they are offset by incoming flows), such waste must be non-biodegradable and/or non-recyclable.

Row	Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
1	Plan Area Baseline Forecast	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311
2	Imports from London	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310
3	<b>To be provided for ktpa (row 1+ row 2)</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>	<b>3,621</b>
4	Plan Area Recycling Capacity	1,928	1,928	1,928	1,848	1,833	1,833	1,833	1,833	1,833	1,833	1,833	1,625	1,555	1,555	1,555	1,525	1,425	1,425	1,425	1,425	1,425
5	Plus Inert Landfill @ 250tpa	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244
6	Plus inert to Pitsea LF	232	227	222	218	214	211	208	205	202	200	198	0	0	0	0	0	0	0	0	0	0
7	Plan Area Capacity (row 4+row 5+ row6)	2,404	2,399	2,394	2,310	2,291	2,288	2,285	2,282	2,279	2,277	2,275	1,869	1,799	1,799	1,799	1,769	1,669	1,669	1,669	1,669	1,669
8	<b>Shortfall (Worst Case) (row 3 minus row 7)</b>	<b>1,217</b>	<b>1,222</b>	<b>1,227</b>	<b>1,311</b>	<b>1,330</b>	<b>1,333</b>	<b>1,336</b>	<b>1,339</b>	<b>1,342</b>	<b>1,344</b>	<b>1,346</b>	<b>1,752</b>	<b>1,822</b>	<b>1,822</b>	<b>1,822</b>	<b>1,852</b>	<b>1,952</b>	<b>1,952</b>	<b>1,952</b>	<b>1,952</b>	<b>1,952</b>

**Table 1: Projected Capacity Provision for Inert Waste including imports from London (Table 20)**

Taking account of the allocated capacity in the plan and potential capacity offered by restoration requirements of the 4 non-hazardous waste landfills in the Plan Area (excluding Pitsea) gives the outcome shown in Row 14 of Table 2 below.

Row	Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
8	<b>Shortfall (Worst Case) (row 3 minus row 7)</b>	<b>1,217</b>	<b>1,222</b>	<b>1,227</b>	<b>1,311</b>	<b>1,330</b>	<b>1,333</b>	<b>1,336</b>	<b>1,339</b>	<b>1,342</b>	<b>1,344</b>	<b>1,346</b>	<b>1,752</b>	<b>1,822</b>	<b>1,822</b>	<b>1,822</b>	<b>1,852</b>	<b>1,952</b>	<b>1,952</b>	<b>1,952</b>	<b>1,952</b>	<b>1,952</b>
9	Allocated Recycling Capacity (Appendix 3 CED 2)	0	0	155	305	370	370	370	370	490	490	490	490	340	340	340	340	340	340	340	340	340
10	Allocated Inert Landfill (Appendix 3 CED 2)	0	0	340	649	768	768	768	768	899	899	899	899	659	659	659	659	659	659	659	659	659
11	Additional Plan Area Capacity (row 9 plus row 10)	0	0	495	954	1,138	1,138	1,138	1,138	1,389	1,389	1,389	1,389	999	999	999	999	999	999	999	999	999
12	<b>Remaining capacity shortfall (Row 8 minus Row 11)</b>	<b>907</b>	<b>912</b>	<b>732</b>	<b>357</b>	<b>192</b>	<b>196</b>	<b>199</b>	<b>201</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>363</b>	<b>823</b>	<b>823</b>	<b>823</b>	<b>853</b>	<b>953</b>	<b>953</b>	<b>953</b>	<b>953</b>	<b>953</b>
13	Inert to Non Inert Landfill Restoration (10% @ 1.5 t/m3)	125	125	136	136	136	136	136	136	45	45	45	45	45	45	45	45	16	16	11	11	11
14	<b>Remaining Capacity Shortfall</b>	<b>782</b>	<b>787</b>	<b>595</b>	<b>221</b>	<b>56</b>	<b>59</b>	<b>62</b>	<b>65</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>318</b>	<b>778</b>	<b>778</b>	<b>778</b>	<b>808</b>	<b>937</b>	<b>937</b>	<b>942</b>	<b>942</b>	<b>942</b>

**Table 2: Projected Capacity Shortfall for Inert Waste including imports from London**

### 1.3 Imports of Non CDEW to Plan Area

Data for input of Non CDEW to landfill is plotted in Figure 5 below. Since the 2013 value is clearly anomalous it has been excluded. This shows a rising trendline which might suggest that provision ought to be made for an increasing amount of non-CDEW going to landfill. However the London Plan imposes targets for the cessation of export to landfill of waste that is either recyclable or biodegradable by 2026 so the expectation would be for landfilling to reduce over time.

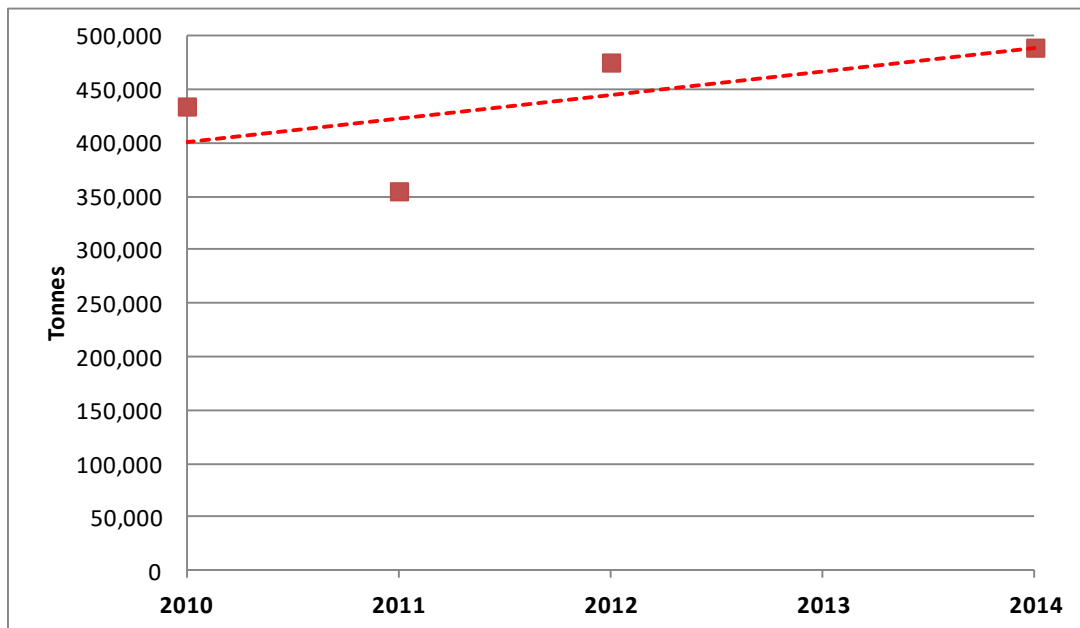


Figure 5: Trend for Imports of non-hazardous waste going to landfill from London to Essex & Southend on Sea 2010-2014 (Source: EA WDI)

In order to assess how the targets might impact future landfill requirement consideration is required of the nature of waste currently exported to landfill. An analysis of a breakdown on inputs for 2014 indicates that just under 420,000 tonnes of inputs (85% of current inputs) was of a type that might still be deemed acceptable to landfill post 2026. That is to say is neither recyclable or biodegradable. This is shown in Table A1 in Appendix 1.

The mean of the values for 2010-2014 (excluding 2013) gives a value of 439,000 tpa, which is some 10% lower than the 2014 landfill value. Therefore the 420,000 tpa value for remaining landfill has been moderated giving a value of circa 375,000 tpa for which provision might be made from London within the capacity assessment..

#### 1.3.1.1 Projected Imports from North London

The authorities producing the North London Waste Plan made representations during the pre-submission stages and proposed inclusion of a set of values for imports of C&I waste to landfill over the Plan period. these values were included in Table 12 of Topic Paper 1. Since the preparation of Topic Paper 1 the authorities have submitted revised estimates for this stream which increases their projected requirement by a further 70%. Comparison of the original values and revised values is presented in the Table below. The revised values were included the Table presented in the authorities' response on matter 3 (Q18).



	2016/17	2021/22	2026/27	2031/32
Original NLWP value	29,547	15,589	13,589	11,882
Revised NLWP value	48,416	26,755	23,183	20,267
Difference	18,869	11,166	9,594	8,385
% diff	64%	72%	71%	71%

**Table 3: NLWP Projected Capacity Requirement for C&I Waste (tpa)**

### 1.3.1.2 Implied Growth Rate

Notwithstanding the late change in requirement the implied annual 'growth' rate calculated for the revised number is shown in Table 4 below.

	2017-2022	2023-2027	2028-2032
<b>C&amp;I</b>	-8.9%	-2.7%	-2.5%

**Table 4: Implied Annual Growth Rate for NLWP Projected Capacity Requirement for C&I Waste**

## 1.4 Projected requirement for London's Non Inert Waste

It is understood these rates were derived from growth values in the London Plan and assumptions relating to capacity provision within London. Applying these rates to the London-wide value it yields the following demand for non-hazardous waste management capacity at the milestone years.

	Milestone Year			
	2017	2022	2027	2032
Non haz imports from London	341,500	213,500	186,500	164,500

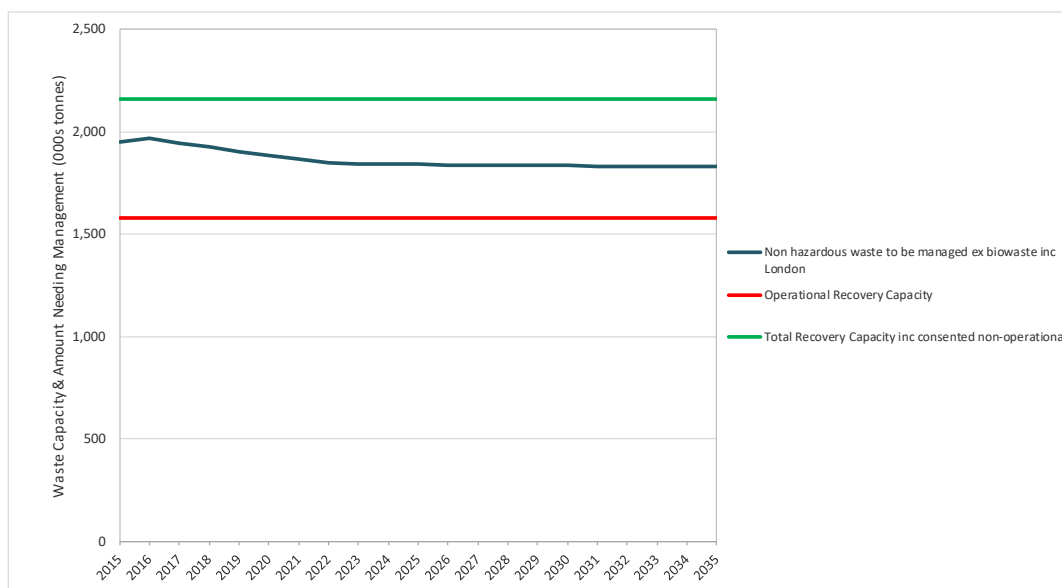
**Table 5: Projected Capacity Requirement for C&I Waste from London applying implied NLWP growth rates**

To consider the effect of including these value within capacity assessment a revised Table 12 is produced below with the rows that inform the shortfall included.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Non Haz Arising	1,997	2,016	2,030	2,040	2,048	2,054	2,060	2,065	2,069	2,073	2,077	2,082	2,086	2,089	2,094	2,099	2,104	2,108	2,113	2,117	2,122
Projected Biowaste Managed	420	423	425	427	428	429	431	431	432	433	434	435	436	437	438	439	439	440	441	442	443
Non haz imports from London	375	375	342	311	283	258	235	214	208	203	197	192	187	182	178	173	169	165	160	156	152
<b>Non hazardous waste to be managed ex biowaste inc London</b>	<b>1,951</b>	<b>1,967</b>	<b>1,946</b>	<b>1,924</b>	<b>1,902</b>	<b>1,883</b>	<b>1,864</b>	<b>1,847</b>	<b>1,845</b>	<b>1,843</b>	<b>1,840</b>	<b>1,839</b>	<b>1,836</b>	<b>1,835</b>	<b>1,834</b>	<b>1,833</b>	<b>1,833</b>	<b>1,832</b>	<b>1,831</b>	<b>1,831</b>	<b>1,831</b>

Table 6: Projected Capacity Provision for Non Hazardous Waste including imports from London (updated Table 12)

The values in the revised Table 12 above yields the following revised Figure 9 Projected Non-Hazardous Waste Capacity Gap below.



NB: Rivenhall consent has been renewed so the expiry line has been omitted on the above chart.

Figure 6: Projected Capacity Shortfall for Managing Non Hazardous Waste including imports from London (updated Figure 9)

This demonstrates that there is sufficient consented capacity within the Plan Area to manage the additional tonnage of non -hazardous waste from London.

## 1.5 Potential Non Hazardous Landfill Requirement

Were not all the material projected to be imported suitable for diversion to recovery - in particular for use as a feedstock to the consented energy from waste plant at Rivenhall - then a proportion may still require landfilling. It is considered reasonable to expect that

1. as all input will have undergone processing of some sort to qualify for landfill, upstream processing costs will be equivalent regardless of the fate,
2. the cost of landfill will remain high by comparison to other management routes; and
3. there is continued pressure from customers to maximise landfill diversion;

operators of the processing plant that will be the principal source of imports to the Plan Area will seek to minimise landfill. Therefore it would only be the material that is unsuitable for management through other routes that would require landfilling ultimately. Work undertaken by BPP Consulting for East Sussex County Council<sup>2</sup> in the preparation of its waste plan found that to be up to 97% of all waste inputs.

If one were to take a more conservative approach assume that up to 80% of the tonnage were suitable for diversion and apply a progression over the plan period as shown in the Table below then that would leave a potential landfill requirement as shown in the fourth row of the Table below:

	Milestone Year			
	2017	2022	2027	2032
Landfill Diversion Rate (reduction on 2014)	20%	40%	60%	80%
Landfill Requirement for non-haz imports from London (tpa)	273,000	128,000	75,000	33,000

**Table 7: Projected Landfill Requirement for Non Hazardous Waste imports from London**

---

<sup>2</sup> East Sussex County Council Waste Local Plan Support Investigation into Landfill of Waste in the Plan Area Final Report Issued: 19th September 2012

## 1.6 Plan Area Non Hazardous Landfill Capacity

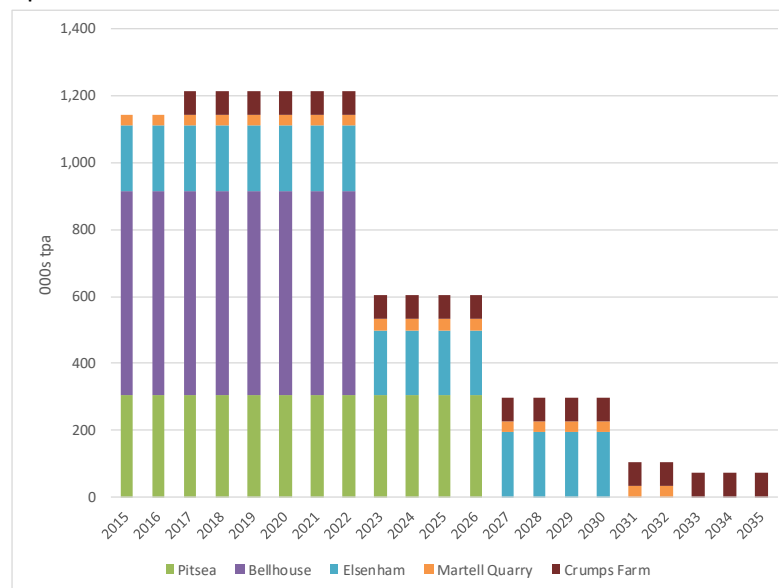
The following Table shows the remaining capacity of the Plan Area non-hazardous waste landfills

Row	Site	Capacity (m3)	End date	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
1	Pitsea	3,365,000	2026	306	306	306	306	306	306	306	306	306	306	306	306									
2	Bellhouse	4,882,171	2022	610	610	610	610	610	610	610	610													
3	Elsenham	3,098,597	2030	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194				
4	Martell Quarry	584,801	2032	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32			
5	<i>Operational Capacity Total</i>			1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	532	532	532	532	226	226	226	226	226	32	32		
6	Crumps Farm	1,300,000				72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
7	<b>Total Capacity</b>			<b>1,142</b>	<b>1,142</b>	<b>1,215</b>	<b>1,215</b>	<b>1,215</b>	<b>1,215</b>	<b>1,215</b>	<b>1,215</b>	<b>604</b>	<b>604</b>	<b>604</b>	<b>604</b>	<b>298</b>	<b>298</b>	<b>298</b>	<b>298</b>	<b>105</b>	<b>105</b>	<b>72</b>	<b>72</b>	<b>72</b>
8	Minus inert for restoration			114	114	121	121	121	121	121	121	60	60	60	60	30	30	30	30	30	10	10	7	7
9	<b>Non Haz Capacity tpa</b>			<b>1,028</b>	<b>1,028</b>	<b>1,093</b>	<b>1,093</b>	<b>1,093</b>	<b>1,093</b>	<b>1,093</b>	<b>1,093</b>	<b>544</b>	<b>544</b>	<b>544</b>	<b>544</b>	<b>269</b>	<b>269</b>	<b>269</b>	<b>269</b>	<b>94</b>	<b>94</b>	<b>65</b>	<b>65</b>	<b>65</b>

**Table 8: Projected Landfill Capacity for Non Hazardous Waste**

The remaining void has been divided equally across all the remaining years of each sites life based on the end date of the current planning consent.

The reduction of void availability over the Plan period is illustrated below.



**Figure 7: Projected Depletion of Landfill Capacity for Non Hazardous Waste**

If the projected London landfill demand is overlaid onto the void availability it yields the following results:

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Non Haz Capacity tpa</b>	493	493	558	558	558	558	558	558	508	508	508	508	495	495	495	495	220	220
<b>Landfill Requirement for non-haz imports from London (tpa)</b>	375	375	273	244	215	186	157	128	117	107	96	86	75	67	58	50	41	33
<b>Remaining Capacity</b>	<b>118</b>	<b>118</b>	<b>285</b>	<b>314</b>	<b>343</b>	<b>372</b>	<b>401</b>	<b>430</b>	<b>390</b>	<b>401</b>	<b>411</b>	<b>422</b>	<b>420</b>	<b>428</b>	<b>436</b>	<b>445</b>	<b>179</b>	<b>187</b>

**Table 9: Projected Landfill Void Availability for Non Hazardous Waste imported from London**

## 1.7 Conclusion

The Plan Area has sufficient capacity available to manage the projected management requirement for an appropriate proportion of London's waste.

Consideration might be given to a modification to confirm that explicit consideration has been given to the ability to accommodate the full amount of non-hazardous waste imports from London. This might take the form of the following wording"

### Section 4.21 Non Hazardous Waste

There has been and will continue to be cross boundary movements of waste. ~~It has been identified within~~ National planning practice guidance states that imports of waste Greater London to the Plan area requires specific consideration. The Vision & Strategic Objectives of this Plan recognises the need to continue to make provision for imports from London albeit at a reducing rate. It has been calculated that for non-hazardous waste this may be in the region of 375,000 tpa in the early years of the Plan reducing down to around 150,000 tpa at the end of the Plan period. After 2026 imports to landfill should only be of non-recyclable and non biodegradable wastes, while some provision may also be made for the management of residues suitable for energy recovery at consented plant. It is estimated that in total the net exports to the plan area from Greater London are estimated to be 1.92mtpa until 2026, with net importation from London having ceased by 2026 according to the adopted London Plan 2015.

## 2 Exports of Waste from the Plan Area to London

The following Table presents a breakdown of waste imported to and exported from the Plan Area in 2014 by authority grouping excluding imports to Wallasea Island as that is considered to be an exceptional event.

Sub Region	WPA	Import to PA	Export from PA	Difference
Central London	City of London	162		
	City of Westminster	7,019		
	Tower Hamlets WPA	77,537	24	
<b>Central London Total</b>		<b>84,719</b>	<b>24</b>	<b>84,695</b>
East London Waste Authority	Barking and Dagenham WPA	808,017	189,382	
	Havering WPA	28,658	141,980	
	Newham WPA	25,896	31,261	
	Redbridge WPA	1,470	48	
<b>East London Waste Authority Total</b>		<b>864,042</b>	<b>362,670</b>	<b>501,371</b>
North London Waste Authority	Barnet WPA	6,408	29,523	
	Camden	12,362		
	Enfield WPA	17,507	36,737	
	Hackney	8,961		
	Haringey	1,962		
	Islington WPA	363	109	
	Waltham Forest WPA	13,119	3,338	
<b>North London Waste Authority Total</b>		<b>60,682</b>	<b>69,707</b>	<b>-9,025</b>
South East London	Bexley WPA	3,488	38,890	
	Greenwich WPA	194,883	9,091	
	Southwark WPA	102,008	12	
<b>South East London Total</b>		<b>300,379</b>	<b>47,993</b>	<b>252,386</b>
South London	Croydon	120		
	Kingston Upon Thames	19		
	Merton WPA	19	3,586	
	Sutton	7		
<b>South London Total</b>		<b>166</b>	<b>3,586</b>	<b>-3,420</b>
West London Waste Authority	Brent WPA	7,407	690	
	Ealing WPA	2,303	4,358	
	Harrow WPA	416	1	
	Hillingdon WPA	54	436	
	Hounslow WPA	17	613	
	Richmond Upon Thames WPA	16		
<b>West London Waste Authority Total</b>		<b>10,212</b>	<b>6,097</b>	<b>4,115</b>
Western Riverside Waste Authority	Hammersmith and Fulham WPA	4,258	1	
	Kensington & Chelsea	6,207		
	Lambeth	1,493		
	Wandsworth	40		
<b>Western Riverside Waste Authority Total</b>		<b>11,998</b>	<b>1</b>	<b>11,997</b>
Non Aligned London	Bromley	36,362		
	Lewisham	111,280		
<b>Non Aligned London Total</b>		<b>147,642</b>		<b>147,642</b>
Unattributed London	WPA not codeable (Central London)	12,536		
	WPA Not Codeable (London)	76,584		
	WPA not codeable (South London)	66,771		
<b>Unattributed London Total</b>		<b>155,892</b>		<b>155,892</b>
<b>Grand Total</b>		<b>1,635,731</b>	<b>490,077</b>	<b>1,145,653</b>

**Table 10: Import/Export Balance of waste between Plan Area & London in 2014 (excluding Wallasea Island)**

(Environment Agency WDI 2014)

This reveals that the overall balance is a flow of 1.145 million tonnes in 2014 imported to Plan Area facilities. This shows the significant role that the Plan Area plays in the management of waste from London.

Of the nine area groupings, seven show net exports with only two showing a net import of waste from Essex: that of North London (circa 9,000 tonnes) and South London (circa 3,500 tonnes).

## 2.1 Exports and Imports of Waste between the Plan Area & North London

Since the North London plan making authorities have made representations, further detailed analysis of the flows of waste between the Plan Area and North London has been undertaken.

Table 11 shows the fate of the flows between the Plan Area (PA) and the North London authority area.

Import/Export	Landfill	MRS	Transfer	Treatment	Grand Total
Export from PA		1,414	65,251	3,041	69,707
Import to PA	58,814	14	406	1,448	60,682
Grand Total	58,814	1,428	65,658	4,489	130,388

**Table 11: Fate of Imports & Exports between Plan Area & North London in 2014**

(Environment Agency WDI 2014)

While the flow of waste to the Plan Area is primarily (97%) for Landfill, the primary flow from the Plan Area to North London (94%) is to Transfer facilities (aka transfer stations). This suggests that North London is more dependent on the Plan Area due to the scarcity of landfills by comparison to Transfer facilities.

Further analysis of the nature of the flow to North London sites, falling within the transfer category, has been undertaken in Table 12 below:

EWC Waste Desc	Site Identifier					Grand Total
	Biffa G S Environmental Ltd Edmonton (Atlas) MRF	Bywaters (1986) Ltd	G B N Services Ltd	Greater London Waste Disposal Ltd Jute Lane, Brimsdown	J O'Doherty Haulage Ltd Pegamoid	
150106 mixed packaging	16,711					16,711
200301 mixed municipal waste	9,967	889	3,484			14,340
170904 mixed construction & demolition wastes		520	8,560	790	4,364	14,234
170504 soil & stones from construction		37	7,280	121		7,437
170107 mixtures of concrete, bricks, tiles & ceramics			6,760	198		6,958
200138 wood from municipal sources			2,226			2,226
170407 mixed metals from construction			906			906
<b>Grand Total</b>	<b>26,679</b>	<b>1,445</b>	<b>29,216</b>	<b>1,109</b>	<b>4,364</b>	<b>62,813</b>

**Table 12: Principal Receiving Sites & Waste Types Exported from the Plan Area to North London in 2014** (Environment Agency WDI)

The table reveals that the principal waste streams, other than perhaps mixed municipal waste, delivered to transfer facilities are highly recyclable as so will in fact contribute towards the host authority(ies) meeting any recycling target it may set. This is in contrast to the waste sent to the Plan Area which mainly goes to landfill.

The outputs from the five principal receiving transfer facilities in North London have also been analysed to determine the ultimate fate of material. Table 13 below shows the tonnage of output

from the transfer facilities that was attributed to these five sites that was subsequently managed back in the Plan Area.

Operator	Destination WPA	Landfill	Recovery	Transfer	Grand Total
Biffa G S Environmental Limited	Essex		766		766
Bywaters (1986) Limited	Essex	17,948	1,827	16	19,790
G B N Services Ltd	Essex	28,168	44,497	7,023	79,688
Greater London Waste Disposal Ltd	Essex	13	5,514		5,527
J O'Doherty Haulage Ltd	Essex	6,600	39,340		45,940
<b>Grand Total</b>		<b>52,729</b>	<b>91,944</b>	<b>7,039</b>	<b>151,712</b>

**Table 13: Waste Sent to the Plan Area from the Principal Receiving Sites in North London in 2014** (Environment Agency WDI)

This demonstrates that much of the waste that was sent to these sites may actually have ended up being managed back in the Plan Area. It also demonstrates the dependency of those receiving North London transfer facilities on outlets provided by the Plan Area authorities.

A summary is presented below:

Operator	Input from Essex	Output to Essex	Net Import/Export Balance
Biffa G S Environmental Limited	26,679	766	25,912
Bywaters (1986) Limited	1,445	19,790	-18,345
G B N Services Ltd	29,216	79,688	-50,472
Greater London Waste Disposal Ltd	1,109	5,527	-4,418
J O'Doherty Haulage Ltd	4,364	45,940	-41,576
<b>Grand Total</b>	<b>62,813</b>	<b>151,712</b>	<b>-88,898</b>

Key: +ve figure in final column = net input from the Plan Area;  
-ve figure in final column = net export to the Plan Area;

**Table 14: Plan Area Import/Export balance for the Principal Receiving Sites in North London in 2014** (Environment Agency WDI)

## 2.2 Conclusion

The Plan Area makes a significant contribution to the management of London's waste. The replacement Waste Local Plan acknowledges that dependency and seeks to make continued provision for the management of London's waste for the duration of the plan period, albeit at a reducing rate as the London Plan landfill diversion targets take effect.

The latest available data indicates a substantial deficit in the import/export balance with only two of the nine London area groupings considered as having a net import balance. The net import balances are of relatively small magnitude compared with the overall balance.

Nevertheless it is recognised the North London plan making authorities wish to see the Memorandum of Understanding, currently under preparation, fully recognise the two way flow of waste between the two areas and the possible pressure placed on North London facilities by waste imported from the Plan Area.



Analysis of the data indicates that North London principally relies on the Plan Area to provide landfill capacity which it does not have, whereas the Plan Area makes use of transfer facilities in North London that may be substituted by similar facilities in other locations. Hence their current use may simply be reflecting market conditions in that particular year. Were a facility (or facilities) elsewhere to offer a better gate price then this may well result in a switch away from waste going to North London facilities. This suggests that the export of waste from the Plan Area to transfer facilities in North London should not be considered of such significance that warrants it being regarded as a strategic issue. Further, more detailed, analysis of the relationship actually reveals a dependency of those North London facilities which receive waste from the Plan Area, on facilities in the Plan Area that manage their residues. This emphasises how significant North London reliance is on the Plan Area waste management facilities.

## Appendix 1: Breakdown of Landfill inputs from London

Table A1: Breakdown of inputs from London to Plan Area Landfill 2014  
Source WDI 2014

Waste Type	CDEW	Post 2026 qualifying waste	Non post 2026 qualifying waste
Mineral excavation	72		
Animal Faeces & manure			1
Machining sludge			356
Absorbents & wiping cloths			126
Concrete	17,176		
Mixtures of concrete, brick& tiles	28,637		
Wood from construction	75		
Plastic from construction	1,106		
Soil & stones	352,008		
Mixed CDEW	3,365		
Clinical waste			18
Bottom ash & slag		17,575	
Off spec compost		1,595	
Screenings from waste water treatment		7	
Fluff from waste treatment		62	
Minerals (e.g. sand , stones)			
Post treatment of waste residues		399,919	
Biodegradable Kitchen & Canteen Waste			2
Soil & stones	34		
Mixed municipal waste			49,116
Street cleaning residues			67
Bulky waste			1,866
<b>Total</b>	<b>402,401</b>	<b>419,157</b>	<b>51,052</b>