Nottinghamshire and Nottingham
WASTE LOCAL PLAN

February 2020

Preliminary Waste Needs Assessment

Nottinghamshire County Council
Nottingham City Council
Executive Summary

Purpose

Nottinghamshire County Council and Nottingham City Council (the Waste Planning Authorities) are preparing a new Waste Local Plan to meet our expected future need for waste management facilities. This will replace our existing Waste Core Strategy (December 2013) and saved policies from the Waste Local Plan (January 2002).

The Waste Local Plan will need to make provision for the sustainable management of waste including:

- Local authority collected waste
- Commercial and industrial waste
- Construction, demolition and excavation waste
- Hazardous waste
- Agricultural waste
- Low level radioactive waste
- Waste water

In order to ensure there is enough waste management capacity to meet likely future needs, the plan will need to make assumptions about how much waste is likely to be generated over the plan period. This will need to take account of planned housing and economic growth over the next 20 years, but also consider wider social and environmental efforts to cut waste. The purpose of this report is therefore to set out the available evidence on current waste arisings within the plan area; existing waste management capacity; and the amount of waste likely to be generated over the plan period.

At this stage, alternative scenarios for future waste arisings are presented based on a range of different socio-economic outcomes and consider the most appropriate method of forecasting the amounts of waste to be managed during the plan period. This report sets initial baseline and considers options for forecasting. This will evolve over time and is only a starting point.
1. Introduction

1.1 The new Waste Local Plan will be prepared against the background of wider policy and legislation that influences how waste should be managed by those who produce the waste, the operation of the waste industry, and the way in which local authorities should plan for a range of suitable waste management facilities.

1.2 This section sets out a brief summary of relevant legislation, guidance and targets for waste management in the UK. Although the UK left the EU in January 2020, the Government has stated that there are unlikely to be any immediate changes to UK waste policy and targets, but this will be kept under review.

Current Policy


1.3 The Waste Framework Directive (2008/98/EC) (as amended) provides the legislative framework for the collection, transport, recovery and disposal of waste. The Waste Management Plan for England (December 2013) sets out the Government’s ambition for a more sustainable approach to resource use and management. The revised Waste Framework Directive (WFD) includes the requirement for Member States to have plans in place that promote sustainable management of waste through application of the waste hierarchy.

1.4 The waste hierarchy promotes the prevention of waste and, where this is not possible, requires that waste materials should be reused, recycled or recovered where possible. Disposal to landfill or using incineration without energy recovery is regarded as the option of last resort.

1.5 The Directive sets targets for the reuse, recycling and recovery of certain waste streams. For household waste and construction and demolition waste these are as follows:

- By 2020, reuse or recycle 50% of all household waste produced;
- By 2020, reuse, recycle or recover 70% of construction and demolition waste (not including waste resulting from excavation).

1.6 The Waste Framework Directive is transposed into UK legislation by the Waste (England and Wales) Regulations 2011. The Waste (England and Wales) Regulations 2011 (as amended) also requires the waste management hierarchy to be complied with.
Landfill Directive (1999/31/EC)

1.7 The Environmental Permitting (England and Waste) Regulations 2010 (as amended) implement the requirements of the Landfill Directive (1999/31/EC). These set standards for the location, design, construction and operation of landfills. The regulations also set targets for the diversion of Biodegradable Municipal Waste (BMW) from landfill.

Circular Economy Action Plan

1.8 In 2016 the European Commission adopted the Circular Economy Action Plan, which includes revised legislative proposals on waste to stimulate Europe’s transition towards a circular economy. Key targets in the revised Circular Economy Package include:
- Target for recycling 65% of municipal waste by 2030;
- Target for recycling 75% of packaging waste by 2030.
- Target to reduce landfill to maximum of 10% of municipal waste by 2030;

National Planning Policy for Waste (NPPW)

1.9 The NPPW sits alongside the National Planning Policy Framework and sets out detailed waste planning policies. Paragraph 3 of the National Planning Policy for Waste (NPPW) states that “in preparing Local Plans, waste planning authorities should… in particular, identify the tonnages and percentages of municipal, and commercial and industrial waste requiring different types of management in their area over the period of the plan”.

National Planning Practice Guidance

1.10 The national Planning Practice Guidance (nPPG) states that assessment of the need for additional waste management infrastructure should be made with reference to forecasts for future waste arisings based on a baseline value. In addition, to assess waste management needs for Local Plan making this is likely to involve:
- Understanding waste arisings from within the planning authority area, including imports and exports
- Identifying the waste management capacity gaps in total and by particular waste streams
- Forecasting the waste arisings both at the end of the period that is being planned for and interim dates
- Assessing the waste management capacity required to deal with forecast arisings at the interim dates and end of the plan period.
Waste Prevention Plan for England

1.11 The Defra Report ‘Prevention is better than cure: the role of waste prevention in moving to a more resource efficient economy’ (2013) sets out the Government’s intended actions to reduce the amount of waste produced. This report targets construction wastes as a key focus for waste prevention.

Courtauld Agreement

1.12 The Courtauld Commitment 2025 is a voluntary agreement to reduce food waste. The targets are calculated per head of population and include a 20% reduction in food & drink waste arising in the UK.

Industrial Strategy

1.13 The Industrial Strategy, ‘Building a Britain fit for the future’, sets out the government’s commitment to moving towards a more circular economy. This includes by “raising productivity by sing resources more efficiently, to increasing resilience by contributing to a healthier environment, and to supporting long-term growth by regenerating … natural capital”. The aims of the Industrial Strategy include:

- Raising the resource productivity of businesses, including through the promotion of recycling;
- Supporting the Courtauld Commitment to deliver a 20 per cent per capita reduction in food waste by 2025; and
- Strengthening policies in line with national ambitions of zero avoidable waste and a doubling of resource productivity by 2050.

National Resources & waste strategy

1.14 In December 2018, the Government published a new waste strategy for England. This strategy is particularly concerned with ensuring that society’s approach to waste aligns with circular economy principles i.e. keeping resources in use as long as possible in order to extract maximum value from them. The strategy has several strategic ambitions including the doubling of resource productivity and eliminating avoidable waste of all kinds by 2050. The strategy includes other targets as follows:

- 50% recycling of household waste by 2020
- 65% recycling of municipal waste by 2035 (in line with EU CE package)
- 10% (or less) of municipal waste to landfill by 2035 (in line with EU CE package)
- Eliminate all food waste to landfill by 2030
- All plastic packaging to be recyclable, reusable or compostable by 2025
- 75% recycling of packaging by 2030.
2. Current Waste Arisings

2.1 This section sets out the information that is currently available on how much waste is produced each year by waste type.

Local Authority Collected Waste

2.2 Local Authority Collected Waste (LACW) is the waste collected by local authorities from households or that is taken by householders to local authority recycling centres. This also includes some business waste where the local authority offers a trade waste collection service. This waste was previously referred to as municipal waste.

2.3 Information on how much LACW is collected, and how this is managed, is reported annually by local authorities through a national system called ‘WasteDataFlow’. These figures are audited by the Environment Agency and the results are published by Defra on their website.1

2.4 Figure 1 below shows the amount of LACW produced within the Plan area over the last 10 years.

Figure 1: Local Authority Collected Waste 2009 – 2018 (tonnes per annum)

Source: Defra/WasteDataFlow

2.5 The total amount of LACW produced in Nottinghamshire and Nottingham has fluctuated over the last 10 years, ranging between 540,000 and 580,000 tonnes per annum.

Commercial and Industrial Waste

2.6 Commercial and industrial waste comes from businesses, manufacturing and utilities. This waste is collected and managed by private sector waste management companies.

2.7 As this waste is not managed by local authorities, estimates of how much commercial and industrial waste is produced within the Plan area have been made using information from the Environment Agency’s Waste Data Interrogator. This records movements of waste between registered waste management facilities across England and is compiled from the annual returns made by individual site operators.

2.8 The Waste Data Interrogator has been published annually by the Environment Agency since 2006 and provides information on the origin of the waste at WPA level, and the location and type of waste management facility to which it was sent. Although this only records waste that passes through a registered facility and is not a survey of all waste produced, this is the most reliable source of data available from which to estimate the amount of waste originating in each WPA area.

2.9 At the national level, data from the Waste Data Interrogator is used by Defra to produce national estimates of waste arisings. The Councils have therefore followed a similar approach (adapted to a local level) to produce the estimates for Nottinghamshire and Nottingham. This also reflects the approach taken by other WPAs in the absence of any other more reliable data.

2.10 The method used by the Councils is as follows:

   a) Identify the total amount of waste received at EA permitted facilities that originated from Nottinghamshire and Nottingham using ‘waste received’ tab;
   b) Exclude waste transfer facilities to avoid double counting waste that passes through several facilities;
   c) Exclude hazardous ‘basic waste category’ as hazardous waste is being counted separately as part of this assessment;
   d) Remove EWC codes - Chapter 1 (mining waste), Chapter 2 (agricultural waste), Chapter 17 (construction demolition and excavation waste) to isolate likely C&I waste
   e) Deduct known LACW tonnage

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2 Some waste may be re-used on site e.g. construction and demolition waste that is crushed up and used as hardcore. As this waste is not transferred to a registered waste facility it will not be recorded within the Waste Data Interrogator.

3 This is known as the ‘reconcile’ method.
2.11 Table 1 below illustrates this approach, showing the EWC codes (and associated tonnages) that have been isolated and removed to give the estimated total of commercial and industrial waste.

Table 1: Estimate of Commercial and Industrial waste arisings using the Environment Agency Waste Data Interrogator 2018

<table>
<thead>
<tr>
<th>Waste Stream</th>
<th>Tonnage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total waste movements arising in Nottinghamshire and Nottingham (using 'waste received' tab)</td>
<td>2,171,855</td>
</tr>
<tr>
<td>Hazardous Waste</td>
<td>84,595</td>
</tr>
<tr>
<td>Mining Waste (Chapter 1)</td>
<td>678</td>
</tr>
<tr>
<td>Agricultural wastes (Chapter 2)</td>
<td>79,052</td>
</tr>
<tr>
<td>Construction, Demolition and Excavation Wastes (Chapter 17)</td>
<td>894,506</td>
</tr>
<tr>
<td>Local Authority Collected Waste</td>
<td>583,602</td>
</tr>
<tr>
<td>Remaining Tonnage</td>
<td>529,421</td>
</tr>
</tbody>
</table>

2.12 This method has been repeated for the last 10 years, where the data is available, with the results shown in figure 2 below.

Figure 2: Estimates of Commercial and Industrial Waste 2009-2018 (tonnes per annum)

Source: Environment Agency Waste Data Interrogator

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4 Data from the 2013 Waste Data Interrogator has not been analysed due to an ongoing software problem. The Councils are working with the Environment Agency to obtain the data in another format and this will be included in subsequent updates to this Waste Needs Assessment.
2.13 Compared to previous estimates of commercial and industrial waste for Nottinghamshire and Nottingham, which were based on extrapolating national survey results, this method has produced a lower estimate of the total amount of commercial and industrial waste produced in the Plan area.

**Construction, Demolition and Excavation Waste**

2.14 Construction, demolition and excavation (CDE) wastes come from building sites, road schemes and other infrastructure projects. As with commercial and industrial waste, it is managed privately by contractors and waste management firms.

2.15 The Councils have used the information available in the Environment Agency’s Waste Data Interrogator to estimate the amount of CDE waste generated within the Plan area.

2.16 The estimated tonnage of CDE waste was obtained by isolating all Chapter 17 (Construction, Demolition and Excavation wastes) that originated within Nottinghamshire and Nottingham\(^5\). Waste passing through waste transfer facilities and hazardous waste were again excluded. In 2018 an estimated 894,506 tonnes of CDE waste was produced within Nottinghamshire and Nottingham.

2.17 As with commercial and industrial waste, this was again repeated for the last 10 years with the results shown in Figure 3 below\(^6\).

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\(^5\) There are other EWC codes that could include CDE wastes but no waste was recorded against any of these codes in Nottinghamshire and Nottingham in any of the years assessed.

\(^6\) Data for 2013 cannot currently be analysed.
2.18 Compared to previous estimates of CDE waste for Nottinghamshire and Nottingham, which were again based on extrapolating national survey results, this method has produced a lower estimate of arisings – particularly between the years 2009 and 2012. This may partly be explained by the fact that the earlier site returns made by waste operators did not always record the waste origin/destination down to individual WPA level. A significant proportion of waste could therefore only be counted at the regional, rather than local level.

**Hazardous Waste**

2.19 Hazardous waste can come from any source but is considered separately as part of this assessment because of the need to manage hazardous waste separately, often at specialist facilities. Hazardous waste can include oils, chemicals and solvents, clinical waste and residues from other waste treatment processes.

2.20 The Environment Agency’s Waste Data Interrogator uses three basic categories of waste – inert, non-hazardous, and hazardous. This makes it possible to isolate hazardous waste from each of the different waste streams (e.g. LACW, commercial and industrial). The total hazardous waste that originated within Nottinghamshire and Nottingham in 2018 was 84,595 tonnes. Figure 4 below shows the results for the last 10 years.
2.21 The estimates of hazardous waste arisings fluctuate significantly over the ten years shown.

**Other Types of Waste**

2.22 The Planning Practice Guidance which accompanies the NPPF advises that WPAs should also plan for low level radioactive waste, agricultural waste, mining waste, and waste water. With the exception of waste water, these wastes are typically produced in relatively small quantities.

2.23 Low level radioactive waste is produced at hospitals, universities and research establishments. Data on the quantities produced is available from the Environment Agency’s annual Waste Pollution Inventory. This shows the amount of waste produced at different establishments (where this is above the reporting threshold) but does not record where the waste was ultimately managed. The latest data available shows that 1,767.25 GBq and 7,499.647 MBq were produced in 2017.

2.24 Agricultural waste is typically made up of non-natural waste such as chemicals, animal health products, plastics (containers, bags and sheeting) tyres, batteries old machinery and oil - and natural wastes such as slurries and manure. In 2018, just under 80,000 tonnes of agricultural waste was produced within the Plan area.

2.25 Mining waste comes from mineral extraction and processing activities, but this does not produce significant quantities of waste within the Plan area. Less
than 1,000 tonnes of mining waste were recorded as originating in Nottinghamshire and Nottingham in 2018.

2.26 Managing waste water from homes and businesses is the responsibility of the water utility companies. These companies plan for necessary infrastructure and asset maintenance on a five-yearly basis. The Councils will continue to liaise with Severn Trent Ltd to ensure that future requirements for the safe collection, treatment and disposal of waste water can be met and that appropriate planning policies are included within the new Plan.
3. Forecasting Future Waste Arisings

3.1 To understand the level of waste management provision that may be required, the Councils need to establish a suitable range of forecasts as to the type, and amount, of waste likely to be generated in the Plan area over the next 15-20 years. This will need to take account of wider influences such as expected growth in housing and population, economic growth and infrastructure development. It will also need to take account of the possible impacts of future efforts to avoid or minimise waste. For certain wastes, Government guidance recommends the approach that WPAS should take to forecasting future waste arisings, but this does not cover all waste types.

Local Authority Collected Waste (LACW)

Guidance on calculating arisings

3.2 The national Planning Practice Guidance advises that WPAs should prepare a ‘growth profile’ based on expected housing or population growth and waste arisings per household or per person. This should consider a range of different scenarios such as constant growth rates or a progressive reduction in growth due to waste minimisation initiatives for example.

Methodology

3.3 The Councils have based their estimates on the projected number of households and the amount of waste produced per household. The number of households across the Plan area has been calculated for each District/Borough (except Newark and Sherwood), and for the City of Nottingham, using the Standard Method as required by the National Planning Policy Framework. As a figure is not currently available for Newark and Sherwood, the most recent Local Plan figure has been used. The total number of projected households per annum are shown in Table 5 below.

### Table 5: Household Projections

<table>
<thead>
<tr>
<th>Local Authority</th>
<th>No. Dwellings per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashfield</td>
<td>519</td>
</tr>
<tr>
<td>Bassetlaw</td>
<td>306</td>
</tr>
<tr>
<td>Broxtowe</td>
<td>360</td>
</tr>
<tr>
<td>Gedling</td>
<td>468</td>
</tr>
<tr>
<td>Mansfield</td>
<td>325</td>
</tr>
<tr>
<td>Newark and Sherwood</td>
<td>454</td>
</tr>
<tr>
<td>Rushcliffe</td>
<td>600</td>
</tr>
<tr>
<td>Nottingham</td>
<td>1010</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,042</strong></td>
</tr>
</tbody>
</table>
Step 1 – calculating waste arisings per household

3.4 The average amount of waste generated per household can be estimated by dividing the total amount of waste collected from households by the number of households.

3.5 The total waste generated from Nottinghamshire households in 2018/19 was 374,830 tonnes. Dividing this by the number of households (363,250) gives an average of 1.03 tonnes per household. The total waste collected from households in Nottingham was 113,498 tonnes. Dividing this by the number of households (135,890) gives an average of 0.84 tonnes per household.

Step 2 – calculating different growth scenarios

3.6 As there is good quality data for LACW arisings, the Councils have taken the amount of waste collected from households in 2018/19 as the baseline from which to project different growth scenarios. Four different scenarios have been modelled as summarised below:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Growth Rate</th>
<th>Rationale/Evidence</th>
<th>% change in waste per household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario A</td>
<td>Decline</td>
<td>Takes account of projected growth in the number of households but also reflects a reduction in the amount of waste produced per household due to greater social awareness of waste issues and the impact of future waste minimisation measures.</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Scenario B</td>
<td>No change</td>
<td>Takes account of projected household growth but assumes the amount of waste produced per household will remain stable at current levels.</td>
<td>0%</td>
</tr>
<tr>
<td>Scenario C</td>
<td>Low</td>
<td>This assumes an increase in both the total number of households and amount of waste produced per household. This is intended to reflect the possible effects of economic growth and increased household consumption. Waste minimisation and environmental awareness would help to limit the</td>
<td>0.5%</td>
</tr>
<tr>
<td>Scenario</td>
<td>Amount of growth but would not offset the effects of greater consumption.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario D</td>
<td>Medium</td>
<td>This is intended to reflect higher rates of household consumption with waste minimisation measures having less impact than above.</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

**Results**

3.7 Four different scenarios have been modelled to reflect differing rates of possible future waste growth or decline. This has produced a range of outcomes which would see the household component of LAW increase to between 514,000 and 693,000 tonnes per annum by 2038.

3.8 It should be noted that these calculations do not include the trade waste component of LACW as this is not considered to be linked to the rate of household growth. The Councils will continue to seek views on how to account for trade waste.

**Commercial and Industrial Waste**

**Guidance on calculating arisings**

3.9 The national Planning Practice Guidance advises that WPAs can also prepare growth profiles for commercial and industrial waste. Whilst these can be used to consider a range of possible outcomes, WPAs should assume a certain level of growth in waste arisings unless there is clear evidence to demonstrate otherwise.

**Methodology**

3.10 Where available, WPAs can use Local Economic Forecasts, prepared by the Local Economic Partnership for their area, to help establish a growth profile. The Nottinghamshire/Derbyshire Local Economic Partnership (D2N2) is currently preparing a Local Industrial Strategy which will be taken into account once published.

**Step 1 – calculating commercial and industrial waste arisings**

3.11 Data on the amount of commercial and industrial waste generated is not available at the same level of detail as for local authority wastes. The Councils have therefore used information from the Waste Data Interrogator to estimate commercial and industrial waste arisings within the Plan area as
described in paragraphs 2.7 – 2.13. As this data may be less robust, an average of the last 5 years estimated arisings has been taken as the baseline from which to project different growth scenarios.

Step 2 – calculating different growth scenarios

3.12 In the absence of specific growth forecasts, the Councils modelled three alternative scenarios based on differing rates of growth. At present there is no evidence to suggest there is a need to consider a no change or declining growth scenario.

<table>
<thead>
<tr>
<th>Growth Rate</th>
<th>Rationale/Evidence</th>
<th>% change in waste arisings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario A</td>
<td>Low</td>
<td>This reflects a lower level of economic growth across the plan area and/or the successful implementation of wider waste minimisation measures.</td>
</tr>
<tr>
<td>Scenario B</td>
<td>Medium</td>
<td>This reflects a higher rate of economic growth across the plan area.</td>
</tr>
<tr>
<td>Scenario C</td>
<td>High</td>
<td>This reflects the current rate of growth in GVA (Gross Value Added) across the East Midlands.</td>
</tr>
</tbody>
</table>

Results

3.13 The three scenarios all assume varying levels of growth in the amount of commercial and industrial waste. This has produced a range of outcomes that would see commercial and industrial waste arisings increase to between 740,000 and 1.2 million tonnes per annum by 2038.

Construction, Demolition and Excavation Waste

Guidance on calculating arisings

3.14 Government advice is to assume that WPAs should start from the basis that arisings of construction, demolition and excavation wastes will remain constant over time as there is likely to be less evidence available on which to base future projections. However, there may be a need to factor in any significant planned regeneration or major infrastructure projects over the life of the Plan.
Step 1 – calculating construction, demolition and excavation waste arisings

3.15 As data on the amount of construction, demolition and excavation waste generated is less detailed, the Councils have used information from the Waste Data Interrogator to estimate construction, demolition and excavation waste arisings as described in paragraphs 2.14 – 2.18. As this data may be less robust, an average of the last 5 years estimated arisings has been taken as the baseline from which to project different growth scenarios.

Step 2 – calculating different growth scenarios

3.16 The Councils have modelled three alternative scenarios for construction, demolition and excavation waste. As recommended in the national Planning Practice Guidance these start from an assumption of no change in the level of waste arisings, but also consider different rates of waste growth linked to planned infrastructure and development and higher economic growth.

<table>
<thead>
<tr>
<th>Growth Rate</th>
<th>Rationale/Evidence</th>
<th>% change in waste arisings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario A</td>
<td>No change</td>
<td>This is the default option which assumes the amount of waste would remain stable throughout the life of the plan due to existing high levels of prevention and re-use.</td>
</tr>
<tr>
<td>Scenario B</td>
<td>Low</td>
<td>This is intended to reflect additional construction activity as a result of HS2 and planned redevelopment in Nottingham city centre.</td>
</tr>
<tr>
<td>Scenario C</td>
<td>Medium/High</td>
<td>This allows for existing planned development but also takes account of potentially higher economic growth linked to local aspirations.</td>
</tr>
</tbody>
</table>

Results

3.17 The three scenarios modelled have produced a range of outcomes for construction, demolition and excavation waste between 1.15 million tonnes and 1.6 million tonnes per annum by 2038.
Hazardous Waste

Guidance on calculating arisings

3.18 Government advice is to plan for hazardous waste on the basis of a simple timeline projection.

Methodology

3.19 The Councils have followed Government advice for projecting hazardous waste arisings and extrapolated a single timeline forward to 2038. Given the significant fluctuation in annual hazardous waste arisings, the Councils have used data from the last 10 years as the basis for this projection.

Figure 6: Estimated Hazardous Waste Arisings to 2038 (tonnes per annum)

Results

3.20 This method of projecting future hazardous waste arisings gives a figure of just under 95,000 tonnes per annum by 2038.
4. Existing Waste Management Capacity

4.1 Understanding the amount of existing waste management capacity, of different types, is an important of the evidence base for the new Waste Local Plan. Information on existing operational and permitted capacity, and any significant new planning permissions, is collated annually by both Councils.

4.2 Table 6 below sets out the estimated operational and permitted waste treatment and disposal capacity within the Plan area as the end of 2018.

Table 6: Existing Waste Management Capacity as at 2018

<table>
<thead>
<tr>
<th>Waste Treatment Facilities (’000 tonnes per annum)</th>
<th>Facility Type</th>
<th>Operating</th>
<th>Not Operating</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling</td>
<td></td>
<td>2,995</td>
<td>145</td>
<td>3,140</td>
</tr>
<tr>
<td>Composting/Anaerobic Digestion</td>
<td></td>
<td>170</td>
<td>75</td>
<td>245</td>
</tr>
<tr>
<td>Energy recovery</td>
<td></td>
<td>215</td>
<td>540</td>
<td>765</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3,380</td>
<td>760</td>
<td>4,150</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Waste Disposal Facilities (’000m³)</th>
<th>Type</th>
<th>Operating</th>
<th>Not Operating</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-hazardous</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Inert</td>
<td>3,193</td>
<td>0</td>
<td>3,193</td>
<td></td>
</tr>
<tr>
<td>Restricted-user</td>
<td>3,446</td>
<td>0</td>
<td>3,446</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6,739</td>
<td>0</td>
<td>6,739</td>
<td></td>
</tr>
</tbody>
</table>

4.3 Within the Plan area there is currently operational waste management capacity to treat (recycle, compost or recover) approximately 3.4 million tonnes of waste per annum. There is also a further 760,000 tonnes per annum of permitted capacity that has either not been developed or is not currently operating.

4.4 Although most of the permitted recycling capacity has been developed, a significant tonnage of permitted composting/anaerobic digestion and energy recovery capacity has not come forward.

4.5 Disposal capacity for non-hazardous waste is very limited with only one remaining landfill site, near Newark, which is expected to close this year. The volume of permitted disposal capacity available for inert wastes is much higher, but this is concentrated in a small number of sites with restrictions on the amount which can be deposited annually.
4.6 The restricted-user capacity shown in Table 6 reflects sites for power station ash disposal. These sites are not licensed or engineered to accept any other forms of waste and cannot therefore be used to make up any shortfall in other types of disposal capacity.

4.7 The information on existing waste management capacity will continue to be updated throughout the plan-making process. This will then be used to consider whether additional capacity is likely to be required to meet future needs. How much additional capacity may be needed, and the types of facilities required, will depend on the growth assumptions and waste forecasts that are chosen following consultation, and on any future waste management targets for recycling, recovery or disposal.
5. Estimating Future Waste Management Needs

5.1 This preliminary assessment sets out the baseline for considering whether there are likely to be shortfalls in future waste management capacity within the Plan area. At this stage, we are still consulting on what are the most appropriate assumptions/forecasts and the proportions of recycling, recovery and disposal that are likely to be achieved and inviting further information on existing waste management capacity to improve the underlying evidence base.

5.2 Once the most appropriate growth assumptions and forecasts for the Plan have been established, and there is a better understanding of future Government targets for waste, a more detailed assessment can then be made. This will identify possible gaps in the amount of available capacity to manage the amount and types of waste envisaged over the next 15-20 years.

5.3 As this work is ongoing and will be informed by current and future consultation responses, this Waste Needs Assessment will be updated at relevant stages of the plan-making process.