



Norfolk Minerals and Waste Local Plan

Waste Management Capacity and Forecast Arisings update (2024)

1. Introduction

The submitted Norfolk Minerals and Waste Local Plan (NM&WLP) forecast the future waste arisings and calculated the existing waste management capacity in Norfolk using data from the Environment Agency's Waste Data Interrogator (WDI) from the years 2017 to 2020. Since the publication of the NM&WLP, data has been published by the Environment Agency for the years 2021 and 2022. The WDI for 2023 is expected to be published in autumn 2024. The information below on existing waste management capacity in Norfolk and forecast waste arisings over the Plan period to 2038 have been updated below to take into account the most recent available data.

2. Existing Waste Management Capacity

Norfolk's waste management capacity consists of:

2.1 The maximum existing waste management capacity of operational sites in Norfolk, which is calculated to be 3.755 million tonnes per annum in 2022. This is based on the maximum recorded throughputs at sites between 2017 and 2022 in the Environment Agency's Waste Data Interrogator; and these may not represent absolute maximums with many sites having higher maximum volumes set out in their Environmental Permits. This waste management capacity includes composting facilities, metal recycling, inert waste recycling sewage sludge treatment, waste transfer and waste treatment facilities

2.2 Permitted void space within two non-hazardous landfill sites at Feltwell and Blackborough End of 3.529 million m³ at the end of 2022; 1.304 million m³ for non-hazardous waste and 2.225 million m³ for inert waste. Feltwell landfill site has been inactive since 2012. The Environment Agency's data states that the remaining void capacity at Feltwell landfill is 1.204 million m³ and the remaining void capacity at Blackborough End is 2.325 million m³ at the end of 2022. However, 2.225 million m³ of this voidspace is expected to be used for inert waste only, leaving 0.1 million m³ voidspace for non-hazardous waste. Therefore, the total landfill voidspace for non-hazardous waste disposal in Norfolk is 1.304 million m³ at the end of 2022. The position at the end of 2023 is that Feltwell landfill is required to be restored by 2041 and Blackborough End landfill is required to be restored by the end of 2026.

2.3 Permitted void space at mineral extraction sites which will be restored using imported inert material was calculated to be at least 3.5 million m³ at the end of 2022, with a further 0.97 million m³ permitted in 2023 (at Carbrooke and Watlington) and a further 2.225 million m³ available at Blackborough End landfill site as detailed above. In addition, a few of the mineral extraction sites proposed to be allocated through this local plan are proposed to be restored using inert waste materials, although the amounts needed have not been quantified for all sites. Together these sites will meet the capacity requirements for the inert waste arisings that are unsuitable for recycling, over the Plan period.

Mineral extraction site	Remaining void capacity at end 2022 ('000 cubic metres)
East Winch	488
Spixworth	148
Mayton Wood	900
Wymondham	98
Crimplesham	667
Longham/Bittering	unknown
Morningthorpe	25
Holt	unknown
Mangreen	520
Punch Farm	240
Castle Acre	503
Total	3,589

New planning permissions were granted during 2023 for facilities with a total throughput of over 0.2 million tonnes waste management capacity per annum.

2.4 This existing waste management capacity information is set out below:

Waste management facility type (Using Environment Agency Waste Data Interrogator site categories and facility types)	Highest throughput over 6 years from 2017-2022 ('000 tonnes)
Metal recycling sites (including car breaker, metal recycling and vehicle depollution facilities)	251
Household waste recycling centre	63
Inert waste transfer / treatment	92
Non-hazardous waste transfer / treatment	666
Hazardous waste transfer / treatment	246
Clinical waste transfer treatment	4
Composting and anaerobic digestion	130
Treatment (includes biological treatment, chemical treatment, material recycling facility, physical treatment, physical-chemical treatment, WEEE treatment facility)	788
Anglian Water Ltd sewage sludge treatment (at Thetford, King's Lynn and Whitlingham Water Recycling Centres)	975
Paper and pulp reprocessing	540
Total existing capacity from EA WDI data	3,755

Permitted non-hazardous landfill voidspace at 31.12.2022 = 1.304 million m³

Permitted inert void space (landfill and quarry restoration) at 31.12.2022 = 5.725 million m³

3. Forecast waste arisings

3.1 Hazardous waste

National guidance states that data returns for hazardous waste should be considered robust due to the need for facilities dealing with this waste to have an environmental permit and therefore submit waste returns to the Environment Agency. National guidance states that time series data should be used to forecast quantities of hazardous waste for the plan period. Analysis of the Environment Agency's Waste Data Interrogator data shows that hazardous waste in Norfolk has been relatively stable in recent years, and it is considered that the hazardous waste arisings are therefore likely to remain stable through the Plan period.

Policy WP1 plans for hazardous waste arisings of 90,000 tonnes per annum for each year of the Plan period. The Environment Agency's WDI recorded 81,273 tonnes of hazardous waste arising in Norfolk 2021 and 74,547 tonnes in 2022. The Environment Agency's Hazardous Waste Data Interrogator recorded 70,451t of hazardous waste arising in Norfolk in 2021 and 71,669 tonnes in 2022. Therefore, the annual forecast figure of 90,000 tpa is slightly above the most recent recorded waste arisings and remains an appropriate amount to plan for in Policy WP1.

3.2 Inert waste

National guidance advises that Waste Planning Authorities should start from the basis that net arisings of construction and demolition waste will remain constant over time as there is likely to be a reduced evidence base on which forward projections can be based for C&D waste. Therefore, this plan has taken the inert waste arisings in Norfolk from the Environment Agency's Waste Data Interrogator 2022 and assumed that the arisings will remain constant in each year of the Plan period. Any C&D waste arisings that are not inert will already be included within the figures for Commercial and Industrial waste arisings and forecasts for this waste stream over the Plan period, which assume an increase in waste arisings.

Policy WP1 plans for inert waste arisings of 1.1 million tonnes per annum for each year of the Plan period. The Environment Agency's WDI data for 2022 recorded 1.054 million tonnes of inert/construction and demolition waste arisings in Norfolk. Therefore, the annual forecast figure of 1.1 million tpa is slightly above the most recent recorded waste arisings and remains an appropriate amount to plan for in Policy WP1.

3.3 Local Authority Collected Waste (LACW)

The data on arisings is considered to be robust and national guidance suggests that forecasts for population growth and household formation should be used as a basis for the waste arisings forecasts. Norfolk County Council produced a LACW forecast for this plan using a growth scenario where the current arisings of waste per household (approximately 1 tonne per year) are multiplied by the number of new homes planned for in the Local Planning Authorities' Local Plans. The Local Plan targets are generally based on the NPPF standard housing needs methodology, but some authorities are planning for a higher rate of housing delivery. Therefore, LACW is forecast to grow in line with the expected growth in households. The housing growth figures used to forecast the LACW have been reviewed based on the figures in the adopted Greater Norwich Local Plan, Breckland Local Plan and Great Yarmouth Local Plan Part 2, the most recent data available for the submitted North Norfolk Local Plan and King's Lynn and West Norfolk Local Plan (which are both currently being examined by the Planning Inspectorate) and taking into account housing completions. Together these Local Plans plan for an average of 4780 additional homes per year.

Policy WP1 plans for LACW arisings to grow from 408,000 tpa in 2019/20 up to 502,000 tpa in 2037/38. Actual LACW arisings in 2020/21 and 2021/22 were higher than forecast in policy WP1

(424,725 tonnes in 2020/21 and 440,457 tonnes in 2021/22), however this is likely to be due to the impacts of the covid-19 pandemic which increased working from home and therefore affected the quantity of waste arising from dwellings. LACW arisings in 2022/23 were lower than the forecast arisings, at 410,808 tonnes compared to the forecast 424,000 tonnes.

Waste arisings per household were 0.93 tonnes in 2022/23 and therefore planning for 1 tonne of LACW arisings per annum per household remains an appropriate approach.

Using the 2022/23 LACW arisings of 410,808 tonnes and increasing that figure by 4,780 tonnes per annum (in line with the planned annual housing growth in Local Plans) leads to a maximum total LACW arisings of 482,500 tonnes in 2037/38. This is lower than the 502,000 tonnes arisings currently forecast for 2037/38. However, as the difference between the two figures is less than 20,000 tonnes (4%) by the end of Plan period, it is considered that the existing figures for LACW in Policy WP1 remain an appropriate forecast.

3.4 Commercial and Industrial (C&I) Waste

Forecasting future arisings for commercial and industrial waste is recognised as being less robust due to the lack of data on quantities of waste arisings. The forecast figures for C&I waste arisings in Policy WP1 were calculated by taking the WDI data on the quantities of household, industrial and commercial (HCI) waste arising in Norfolk and subtracting the quantity of LACW arisings in Norfolk from the total. Therefore, all remaining HCI waste was, for the purpose of this Plan, considered to be C&I waste (although it is recognised that it will also include some construction and demolition and agricultural waste). A growth forecast for C&I waste arisings during the Plan period was calculated by taking the business sectors used in previous Defra estimates of national C&I waste arisings and equated these to the Gross Value Added (GVA) growth forecasts for equivalent business sectors within the East of England Economic Forecasting Model (EEFM). This method produced a growth forecast for C&I waste for the Plan period of an annual growth rate of 1.35% in line with economic growth.

The EEFM has not been updated since the C&I forecasts were calculated for Policy WP1. Therefore, the existing forecast figures for C&I waste arisings in Policy WP1 remain an appropriate forecast.

4. Conclusion

The submitted NM&WLP calculated a total existing waste management capacity of 3.534 million tonnes per annum plus 4.863 million m³ of inert landfill and quarry restoration capacity and 1.422 million m³ of non-hazardous landfill void capacity at the end of 2020.

Using more recent data from 2022, it has been calculated that there is total existing waste management capacity of 3.755 million tonnes per annum, plus 5.725 million m³ of inert landfill and quarry restoration capacity and 1.304 million m³ of non-hazardous landfill void capacity at the end of 2022. Therefore, existing waste management capacity has increased and further permissions for additional waste management capacity have been granted in 2023.

The forecast waste management arisings over the Plan period to 2038 as set out in the submitted NM&WLP are concluded to continue to be appropriate, based on the most recently available data. Therefore, the existing waste management capacity remains sufficient to manage the forecast waste arisings over the Plan period.