

# Waste Management

## 1. Introduction

- 1.1. This paper considers household waste management services within South Gloucestershire, the key legislative and strategic drivers, delivery mechanism and current context.
- 1.2. Within South Gloucestershire, the waste service is crucial to the delivery of the South Gloucestershire Council Plan 2020-23 priorities:
  - Priority 3 – promoting sustainable communities, infrastructure and growth.
  - Priority 4 – realising the full potential of our people and delivering value for money.
- 1.3. The continued maintenance and growth of waste infrastructure helps to ensure new communities flourish and the provision of an efficient, effective and economically viable waste service, which makes best use of the public purse.
- 1.4. The Waste service is also a critical contributor to ensuring the proposed priorities & objectives of the new Local Plan are met by helping to ensure the environment is protected and new housing is supported by essential infrastructure.
- 1.5. The service is also a contributory factor in the delivery of the council's Climate Change Strategy 2018-2023 with a 10-year action plan in place, supported by appropriate and measurable targets, to support the achievement of the council's climate goals, including the overarching target of net zero by 2030. Climate change is significantly impacted by unsustainable consumption and waste disposal and consequently waste minimisation, recycling and reducing residual waste all have an important part to play in addressing the climate emergency and the service is working towards achieving the targets it has been set.
- 1.6. The South Gloucestershire: 'Resource & Waste Strategy 2020 and beyond' agreed at Cabinet in March 2020, sets out how the vision of the Waste service with ambitious targets to reduce consumption, particularly of single-use items, increase recycling to 70% by 2030 (from current 59.9%) and at the same time reducing waste going to landfill to 0% which takes the service on the required journey to net zero.

## 2. National Policy & Legislative context

- 2.1. South Gloucestershire Council as the waste authority has a duty to collect household waste under section 45 of the Environmental Protection Act 1990, as amended (EPA 1990).
- 2.2. UK Government policy and changing legislation will affect how the council provides waste services over the medium term. The Waste and Resources Strategy 2018, and waste prevention programme, 'Maximising Resources, Minimising Waste', sets out the government's priorities for managing resources and waste through minimising waste, promoting resource efficiency and moving towards a circular economy. The strategy also seeks to minimise damage caused to our natural environment by reducing and managing waste safely and carefully, and by tackling waste crime.
- 2.3. The Environment Act 2021 set a statutory target for the weight of residual waste (excluding mineral) per capita to be reduced by 50% by 2042 from 2019 levels. Additional interim targets specify that by 2028, residual waste should be reduced to no more than 437kg per capita, with a total tonnage of 25.5 million tonnes. A separate interim target of 333 kg per capita has been set for municipal residual waste, and individual targets for food waste, plastic, paper, card, metal and glass.
- 2.4. The Environment Act 2021 will introduce consistent collections for recycling of household and commercial waste, ensuring that a core level of recycling is provided to all households and businesses. This aims to overcome the confusion that can occur when local authorities offer different recycling services. It is anticipated the government will confirm implementation dates and materials in scope for consistent collections, by the end of 2023.
- 2.5. A Deposit Return Scheme (DRS) for drinks cans and plastic bottles is anticipated to come into effect in England in October 2025. Under the DRS a levy will be charged on single use drinks can and plastic bottles, which is refunded when the consumer returns the packaging for recycling. The DRS will reduce the amount of these waste streams being collected by the Council.

### **3. Delivery in South Gloucestershire**

- 3.0 The current waste service is delivered through a 25-year PFI (Public Finance Initiative) contract that expires in July 2025. The service is delivered through a Special Purpose Vehicle, 'Suez South Gloucestershire'. It is supported through DEFRA's Waste Infrastructure Delivery Programme (WIDP) including £3.1million grant per annum in PFI credits that will end in July 2025.
- 3.1. From 31 July 2025, SGC will move to a new waste service delivery model of an outsourced collections service and inhouse service delivery of household waste recycling centres (HWRCs), transfer stations and managing material brokerage in house with neighbouring local authorities.

- 3.2. The day-to-day waste collection, waste disposal and management service are funded predominantly via council tax receipts and central government funding with an annual budget of £18.8million in 2023/24. As part of the PFI contract arrangement the council receives a £3.1million annual grant from DEFRA which will cease at the end of the contract in July 2025 and the service will be required to fund its provision through additional income generation or savings.
- 3.3. The Waste Management Equalisation Reserve smooths the costs of the PFI across the 25 years of the contract. As at 31 March 2023 there was a balance of £8.1million in the reserve. This has been committed to support the unmet savings within Waste until the end of the PFI contract, to fund the Waste Transition project and to support the waste capital programme.
- 3.4. Capital expenditure is via the council's capital programme, as funding allows. Currently planned is a new vehicle depot adjacent to the Mangotsfield HWRC which is in the design phase and an additional vehicle depot and transfer station in the North Fringe, for which surveys are underway to inform the design phase. Funding has been established through developer contributions, capital receipts and from the Waste Management Equalisation Reserve.
- 3.5. The major capital expenditure for the core collection service, delivered by an external contractor, is for the vehicles and in 2023 this amounted to circa £12million, with a vehicle life span of around eight years. The vehicles are funded and owned by the council but specified and purchased by the contractor. The future outsourced collections service contract will include a mechanism to increase collection vehicles and crews to allow for increased housing growth (as is the case for the existing contract with Suez) with agreed trigger points (number of houses) within the contract. The costs of this are met through monthly payments to the contractor for which budget will need to be acquired.
- 3.6. The impact of additional housing on insourced arrangements are the costs of waste disposal of both the collected kerbside waste and that brought into the HWRC or directly by trade into the transfer stations as well as haulage and other brokerage costs such as gate fees. Each new property will need to be provided with a set of bins and recycling containers. Significant growth of housing will require the consideration of increasing the existing provision of HWRCs and transfer stations to manage the additional waste arisings. Developer contributions are likely to be needed to assist fund new capital requirements and household bins and containers.
- 3.7. Waste management services are high profile and provided to all residents in South Gloucestershire. The services include kerbside collections of materials for residual and recycling waste, a kerbside subscription only collection of garden waste,

provision of wheeled bins and boxes for storage, chargeable bulky waste and commercial collections and the operation of four Sort It Centres and two transfer stations.

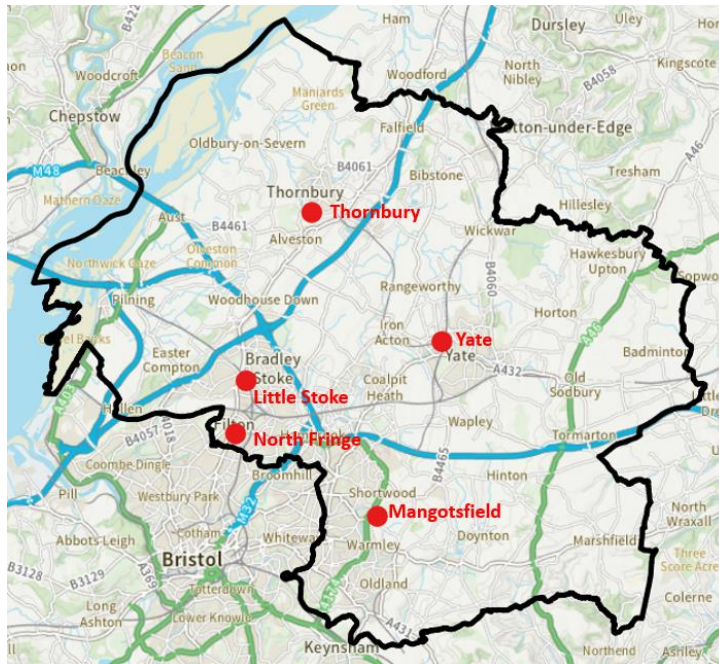
- 3.8. The recyclable materials collected weekly from the kerbside are cardboard, food, glass bottles and jars, mixed plastics and cans including empty aerosol cans and aluminium foil, clothes and textiles, shoes, household batteries, and paper. The service is also trialling weekly kerbside collections of flexible plastics from trial households with an aim to roll out to 100% of households by 2025.
- 3.9. Residual waste is collected fortnightly from the kerbside in standard 140 litre bins. Additional bin capacity is available to larger households (subject to an administration charge) and for residents with additional medical waste (no charge). Residents with young children in nappies are provided with a separate nappy sack to present next to their residual waste bin.
- 3.10. Separate clinical waste and sharps collections are also provided.
- 3.11. Green waste is collected fortnightly in 240 litre bins through an annual subscription service. Alternatively, residents may purchase garden waste sacks and book one off collections (collected on the same day as their black bin collection).
- 3.12. In the year April 2021 to March 2022 (the most recent year for which published figures are available) the service dealt with 122,522 tonnes of waste from 122,230 households, giving a figure of one tonne per household. During the Covid-19 pandemic household waste increased in line with residents having to stay at home and the effects on people's health, freedoms, behaviours and changing work habits. Since the height of the pandemic, nationally household waste is reducing. The decreases in waste since the pandemic is likely due to a combination of a return to normal lifestyles and now the effects of rising living costs on consumers. Throughout 2022 overall household tonnages have returned to the same levels experienced prior to the pandemic.
- 3.13. Supporting these arrangements is a waste management team responsible for managing contracts, leading on the West of England waste partnership (a contract running until 2030 for disposal at Energy from Waste (EFW) plants of residual / black bin waste), providing education and advice to residents as well as resolving issues.
- 3.14. The council's waste service has four Household Waste Recycling Centres (HWRCs), branded as Sort It centres, in Thornbury, Little Stoke, Mangotsfield and Yate. Two waste transfer stations are in the latter two sites and there are collection vehicle depots in Warmley and Yate. There is also a reuse shop at the Thornbury site. Plans are in place to extend the Mangotsfield HWRC to include a depot that will replace

the site at Warmley by the end of 2025. This will allow for more efficient operations and collection routes which will in turn improve our environmental impact.

- 3.15. There is also a proposed new waste transfer station and vehicle depot in the North Fringe area (North Way site), Filton which is scheduled to be in place by the end of 2025. Future plans include expanding this to a HWRC when funding allows to alleviate existing and anticipated future pressures from the housing growth in the North Fringe area.
- 3.16. YATE (Sort It Centre and transfer station): The existing combined Sort It Centre and transfer station was built in 2002 when the old civic amenity site being converted into a depot for recyclable materials. The SORT IT Centre and Transfer Station is small with a total area including the transfer station of 6,100m<sup>2</sup>. The layout is split with the public access road running between the waste tipping and the recyclable tipping areas and there is very little space on site for queuing vehicles. Making space for any further waste segregation or to handle increased quantities is likely to be difficult. In the financial year April 2021 to March 2022 the Sort It Centre handled 9598 tonnes and of that 69% was recycled or recovered, and the site as a whole (all sections together) handled 58,660 tonnes.
- 3.17. MANGOTSFIELD (Sort It Centre and transfer station): Mangotsfield Sort It Centre combined with the transfer station is 9,500m<sup>2</sup>. Despite being built in 2003, the facility was not designed for the extended range of segregated waste streams now being dealt with. Initially green waste from the wheeled bin collections was taken directly to a composting facility and the recyclable material collected on the kerbside was stored and transferred from Cowhorn Hill Depot. Additional materials have taken up space originally for traffic management with the effect that it slowed the throughput of the site i.e., fewer people could use this site in a given day. By 2015/16 both traffic and waste capacity reached near to the limits of the site and with the current opening times. In 2016/17 changes to opening hours for all sites and a newly introduced residents' vehicle registration scheme linked to ANPR has helped to reduce numbers visiting and also control tonnages. The recent addition of a slip road into the site was made to improve vehicular access and reduce the likelihood of RTA's from vehicles entering the site from both directions on the adjacent Carsons Road. In the financial year April 2021 to March 2022 the Sort It Centre site handled 15,217 tonnes and of that 64% was recycled or recovered. The site as a whole handled 62,500 tonnes.
- 3.18. THORNBURY (Sort It Centre): The site was built in 2005 and has an area of 5,000m<sup>2</sup>. In the financial year April 2021 to March 2022 the site handled 5,622 tonnes and of that 70% was recycled or recovered.
- 3.19. STOKE GIFFORD (Sort It Centre): The Station Road HWRC in Stoke Gifford was built in 1981 before the housing development at Bradley Stoke. The site is small covering an

area of 2,400m<sup>2</sup> and this limits the number of people that can use the site at anyone time to around ten. Because of the limited area available, high vehicles and those with trailers are required to use an alternative site. In the financial year April 2021 to March 2022 the site handled 4,226 tonnes and of that 65% was recycled or recovered. Well used sports facilities to the north and east and the low railway bridge to the south (that would need reconstruction), limit the opportunity to expand the site.

3.20. Map showing the location of the HWRCs.



3.21. 74 vehicles are required for the current service, broken down as follows:

Refuse collection vehicles (RCVs)

- 15 x fortnightly RCVs (including two spare vehicles and one due in October 24)
- 6 x fortnightly garden waste collection vehicles
- 2 x dry mixed recycling vehicles
- 1 x commercial vehicle
- 2 x narrow access vehicles and one spare vehicle

Romaquip recycling vehicles

- 41 x weekly recycling vehicles (including four spare vehicles and a new one due in April 24)
- 3 x narrow access vehicles (including one spare vehicle)

Others

- 2 x vans for bin deliveries
- 1 x van for weekly clinical / medical collections
- 2 x tail-lift box vehicle for bulky waste collections (including one spare)

- 3.22. Each house is provided with the following containers as standard:
- 1 x 140 litre (l) black bin
  - 2 x 55l boxes for household waste recycling
  - 1 x 23l kerbside caddy for food waste
  - 1 x 5l kitchen caddy for food waste
  - 1 x 240l garden waste bin for households subscribing to the garden waste service
- 3.23. Additional recycling boxes and nappy sacks are provided on request.
- 3.24. Residents with additional needs are also provided with additional bins subject to application and assessment.
- 3.25. Flats and Homes in Multiple Occupation are assessed individually, and appropriate containers provided which usually require bin stores to house them. Containers may also include 1,100l Euro bins as well as appropriate sized bins for dry mixed recycling.
- 3.26. Kerbside collections of flexible plastics are currently being trialled to ascertain the most efficient collection process. Additional receptacles may be required for the collection of these materials.

**Future housing development needs to consider the following:**

- The future outsourced collections service contract will include a mechanism to increase collection vehicles and crews to allow for increased housing growth (as is the case for the existing contract with Suez) with agreed trigger points (number of houses) within the contract. The costs of this are met through monthly payments to the contractor for which budget will need to be acquired.
- The impact of additional housing on future insourced arrangements are the costs of waste disposal of both the collected kerbside waste and that brought into the HWRC or directly by trade into the transfer stations as well as haulage and other brokerage costs such as gate fees. Each new property will need to be provided with a set of bins and recycling containers.
- Significant growth of housing will require the consideration of increasing the existing provision of HWRCs and transfer stations to manage the additional waste arisings. Developer contributions are likely to be needed to assist funding new capital requirements and household bins and containers.
- Waste and recycling rounds may need to be rerouted to accommodate additional housing and collection vehicles. Funding will be required to do this.
- Additional resource may be required to communicate changes to collection routes and to ensure communities are supported going forward.

- New legislation may place additional burdens on authorities, in particular relating to minimising waste production and the provision of recycling services.