



# WOKINGHAM BOROUGH COUNCIL

An Extraordinary Meeting of the **EXECUTIVE** will be held virtually on **FRIDAY 11 SEPTEMBER 2020 AT 7.00 PM**

A handwritten signature in black ink, appearing to read 'Susan Parsonage', with a long, sweeping tail.

Susan Parsonage  
Chief Executive  
Published on 3 September 2020

**Note:** The Council has made arrangements under the Coronavirus Act 2020 to hold this meeting virtually via Microsoft Teams. The meeting can be watched live using the following link: [https://youtu.be/FCwei3VIK\\_4](https://youtu.be/FCwei3VIK_4)

This meeting will be filmed for inclusion on the Council's website.

Please note that other people may film, record, tweet or blog from this meeting. The use of these images or recordings is not under the Council's control.



# WOKINGHAM BOROUGH COUNCIL

## Our Vision

***A great place to live, learn, work and grow and a great place to do business***

### Enriching Lives

- Champion outstanding education and enable our children and young people to achieve their full potential, regardless of their background.
- Support our residents to lead happy, healthy lives and provide access to good leisure facilities to complement an active lifestyle.
- Engage and involve our communities through arts and culture and create a sense of identity which people feel part of.
- Support growth in our local economy and help to build business.

### Safe, Strong, Communities

- Protect and safeguard our children, young and vulnerable people.
- Offer quality care and support, at the right time, to prevent the need for long term care.
- Nurture communities and help them to thrive.
- Ensure our borough and communities remain safe for all.

### A Clean and Green Borough

- Do all we can to become carbon neutral and sustainable for the future.
- Protect our borough, keep it clean and enhance our green areas.
- Reduce our waste, improve biodiversity and increase recycling.
- Connect our parks and open spaces with green cycleways.

### Right Homes, Right Places

- Offer quality, affordable, sustainable homes fit for the future.
- Build our fair share of housing with the right infrastructure to support and enable our borough to grow.
- Protect our unique places and preserve our natural environment.
- Help with your housing needs and support people to live independently in their own homes.

### Keeping the Borough Moving

- Maintain and improve our roads, footpaths and cycleways.
- Tackle traffic congestion, minimise delays and disruptions.
- Enable safe and sustainable travel around the borough with good transport infrastructure.
- Promote healthy alternative travel options and support our partners to offer affordable, accessible public transport with good network links.

### Changing the Way We Work for You

- Be relentlessly customer focussed.
- Work with our partners to provide efficient, effective, joined up services which are focussed around you.
- Communicate better with you, owning issues, updating on progress and responding appropriately as well as promoting what is happening in our Borough.
- Drive innovative digital ways of working that will connect our communities, businesses and customers to our services in a way that suits their needs.

## MEMBERSHIP OF THE EXECUTIVE

John Halsall	Leader of the Council
John Kaiser	Deputy Leader and Executive Member for Finance and Housing
Parry Bath	Environment and Leisure
UllaKarin Clark	Children's Services
Charlotte Haitham Taylor	Regeneration
Pauline Jorgensen	Highways and Transport
Charles Margetts	Health, Wellbeing and Adult Services
Stuart Munro	Business and Economic Development
Gregor Murray	Resident Services, Communications and Emissions
Wayne Smith	Planning and Enforcement

ITEM NO.	WARD	SUBJECT	PAGE NO.
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14. **APOLOGIES**  
To receive any apologies for absence

15. **DECLARATION OF INTEREST**  
To receive any declarations of interest

16. **PUBLIC QUESTION TIME**  
To answer any public questions

A period of 30 minutes will be allowed for members of the public to ask questions submitted under notice.

Subject to meeting certain timescales the Council welcomes questions from members of the public on the item on the agenda.

For full details of the procedure for submitting questions please contact the Democratic Services Section on the numbers given below or go to [www.wokingham.gov.uk/publicquestions](http://www.wokingham.gov.uk/publicquestions)

17. **MEMBER QUESTION TIME**  
To answer any Member questions

A period of 20 minutes will be allowed for Members to ask questions submitted under Notice related to the item on the agenda.

Any questions not dealt with within the allotted time will be dealt with in a written reply.

### Matters for Consideration

18. None Specific **PROPOSAL TO MITIGATE AGAINST WET PAPER** 5 - 54

A decision sheet will be available for inspection at the Council's offices (in Democratic Services and the General Office) and on the web site no later than two working days after the meeting.

**CONTACT OFFICER**

**Anne Hunter**

**Tel**

**Email**

**Postal Address**

Democratic and Electoral Services Lead Specialist

0118 974 6051

[anne.hunter@wokingham.gov.uk](mailto:anne.hunter@wokingham.gov.uk)

Civic Offices, Shute End, Wokingham, RG40 1BN

<b>TITLE</b>	<b>Proposal to Mitigate Against Wet Paper</b>
<b>FOR CONSIDERATION BY</b>	The Executive on Friday 11 September 2020
<b>WARD</b>	None Specific;
<b>LEAD OFFICER</b>	Director, Place and Growth - Chris Trill
<b>LEAD MEMBER</b>	Executive Member for Environment and Leisure - Parry Batth

## **PURPOSE OF REPORT (INCLUDING STRATEGIC OUTCOMES)**

To set out how the Council will roll out waterproof recycling bags to replace the current open black recycling boxes to mitigate against the problem of wet paper and card. The proposed changes will help deliver 70% recycling by 2030 in line with our "Climate Change" objectives.

## **RECOMMENDATION**

The Executive is asked to:

- 1) approve the sum of £288k for the purchase of the waterproof recycling bags;
- 2) note the support of the Overview and Scrutiny Management Committee to the resolution made by the Executive at its meeting on 30 July 2020 and;
- 3) approve the proposed change for the recycling container from open black box to a closable waterproof recycling bag by the end of January 2021.

## **EXECUTIVE SUMMARY**

In July 2020, the Councils Executive considered the borrowing of £288k for the purchase of waterproof recycling bags and the revenue implications of the capital borrowing. At a subsequent call-in of this decision, the scrutiny committee upheld this recommendation. This report sets out how the proposed bags will be implemented by the end of January 2021 to mitigate against the collection and rejection of approx. 4,000 tonnes of mixed recycling in 2021/22 and beyond. This would allow the Council to achieve a recycling rate of between 57% - 58% by recovering an estimated 6% of the recycling per annum lost as a result of the high moisture content in paper and card. Given the greater capacity of the bags compared to the current boxes, and the communication plan to promote recycling that will accompany the change of receptacle, it is expected that an additional 1.5% recycling will be realised.

The deployment of the bags would ultimately prevent a budget loss of £600k per annum with a net gain of £403k for a full year (see Financial section below). Furthermore, it is likely additional income of £98k per annum will be realised by diverting approximately 980 tonnes of waste from the blue refuse bags to the new waterproof recycling bags.

Any delays to the implementation of this programme will result in loss of material, (based on 1% per month), associated costs of disposal of the wet material and loss of income.

## **BACKGROUND**

Last year Wokingham Borough Council's (WBC) recycling service performed well in the first two quarters of 2019/20 with a recycling rate of 55.49%. In October 2019, the European end markets (where WBC's recyclate is sent) introduced higher quality standards in response to the widespread global economic changes happening at that time. This resulted in significant proportions of WBC's paper and card being rejected, due to the high moisture content which lowered the quality of the material. Tonnage data for 2019/20, shows the annual recycling rate at 50.83% (a difference of 4.66% compared to the average for the first two quarters of the year). WBC has a 70% recycling rate Climate Emergency target to meet by 2030 (and 100% target by 2050) and the current reduction in recycling rate severely affects the council's progress in meeting this target. The wet waste issue also increased disposal costs in the region of £368,000 in 2019/20.

Since the issue of wet paper and cardboard first surfaced in October 2019 it is now established that wet waste paper and card from WBC will continue to be treated as non-recyclable. Therefore, in order to counteract the lost recycling income and to continue to improve recycling levels in line with the Climate emergency agenda, it is essential that an alternative solution to the open recycling black bins is implemented. The Council commissioned specialist consultants Resource Futures (see full initial report in Appendix 1) to help it produce a short/medium and longer term plan for increasing recycling in the borough. Their initial priority has been to identify a solution to address wet waste that can be implemented as soon as possible.

A full options appraisal has been undertaken and recommendations are set out below

## **BUSINESS CASE (Options Appraisal)**

In order to fully determine and ensure the correct receptacle would be selected, both officers and the commissioned external consultants, Resource Futures, undertook a full options appraisal. This involved assessing other Councils containers and compared criteria including price, health and safety, longevity and carbon impact, testing options working with the Council's contractors and reviewing surveys and trials undertaken elsewhere.

As set out above, given the finance and recycling lost to wet waste, it is important that a solution is implemented as soon as possible. In addition, as our residents have told us that they are happy with our waste service and support recycling through a survey in 2017, it was important that any solution should not fundamentally change the service. With this in mind, research indicated that there are nine different methods that local authorities use for ensuring recyclable material is kept dry. For the immediate term, these solutions are:

- Weighted waterproof recycling bags;
- Non-weighted waterproof recycling bags;
- Hinged lids on kerbside boxes;
- Loose lids on kerbside boxes;
- Shower-caps (bonnets), tied to the handle of the kerbside box; and
- Single use disposable bags.

And in the medium term (where more fundamental changes can be considered):

- Wheeled bins;
- Wheeled bins with a separate container inside; and
- Trollibocs (stackable kerbside boxes).

Resource Futures tested the following four options which were identified as solutions that could be implemented in the short to medium term in order to reduce the levels of wet paper.

- **Option 1:** Do nothing
- **Option 2:** Two loose lids per property for the two existing kerbside boxes
- **Option 3:** Two weighted waterproof recycling bags per property, no kerbside boxes used
- **Option 4:** Two shower caps per property for the two existing kerbside boxes

It is to note that some of our residents have indicated a preference to wheeled bins through response to “Stamp out the Damp” Campaign, on-line petitions and in the Council’s New Homes Survey undertaken annually. Wheeled bins are not a viable solution at the moment as this would require another three vehicles to be able to cover the work due to the extra time it takes to empty individual wheeled bins. They are something that will be considered in a comprehensive way by Resource Futures as they consider longer term plans for the Council to reduce waste and promote recycling.

The table below provides the results of the appraisal of the short to medium options:

Category	Weighting	Considerations	Guide				
				Do nothing (baseline)	1 2 x loose lids per property for existing boxes	2 2 x weighted reusable sacks for all properties receiving a kerbside	3 2 x shower caps per property for existing boxes
Recycling performance	40.0%	Impact on recycling rate	Recycling rate for each option considering potential impacts on wet waste. Maximum recycling points added = 10 points, baseline = 0 points.	0.0	6.0	10.0	6.0
Financial	30.0%	Annual revenue impact (Best)	Annual revenue impact for each option, including the Baseline. Scored as deviation from the maximum (0 points) and minimum (10 points) annualised operational cost calculated for each option.	0.0	4.3	10.0	5.5
	30.0%	Annual revenue impact (Worst)	Annual revenue impact for each option, including the Baseline. Scored as deviation from the maximum (0 points) and minimum (10 points) annualised operational cost calculated for each option.	7.8	0.0	10.0	0.9
	10.0%	Capital cost (Best)	Cost of implementation, with the Baseline (Option 1) scoring the highest (10 points), and most costly option scoring 0.	10.0	0.5	0.0	5.2
	10.0%	Capital cost (Worst)	Cost of implementation, with the Baseline (Option 1) scoring the highest (10 points), and most costly option scoring 0.	10.0	0.0	3.4	1.5
Political + public acceptability	10.0%	Number / type of containers	Points system based on number and type of container, available capacity and communications required. See "Political and public acc."	6.0	1.7	6.7	2.6
Health and safety	5.0%	Maximum weight possible	Weight of empty container plus full possible weight of contents based on average bulk density of comingled recycling. Heaviest scores 0, lightest scores 10.	10.0	9.2	0.0	5.3
Carbon impact	2.5%	Assessment of potential carbon (Best)	Points system based on impact of extra vehicle resource, and diversion of 'wet waste' to recycling. Baseline =5, with options scoring higher or lower in comparison.	5.0	7.0	9.0	7.0
	2.5%	Assessment of potential carbon (Worst)	Points system based on impact of extra vehicle resource, and diversion of 'wet waste' to recycling. Baseline =5, with options scoring higher or lower in comparison.	5.0	3.0	4.0	3.0
Equality impact assessment	2.5%	Potential to affect persons in the protected characteristics group	A high-level impact assessment of how each method of containment has the potential to affect persons in the protected characteristics groups. Baseline =5, with options scoring higher or lower in comparison.	5.0	4.0	6.0	4.5
<b>Best Case Total Score (unweighted):</b>				<b>36.0</b>	<b>32.7</b>	<b>41.7</b>	<b>36.2</b>
<b>Best Case quantitative assessment weighted score:</b>				<b>2.3</b>	<b>4.6</b>	<b>8.0</b>	<b>5.4</b>
<b>Best Case quantitative assessment rank:</b>				<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>
<b>Worst Case Total Score (unweighted):</b>				<b>43.8</b>	<b>23.9</b>	<b>40.1</b>	<b>23.8</b>
<b>Worst Case quantitative assessment weighted score:</b>				<b>4.7</b>	<b>3.2</b>	<b>8.3</b>	<b>3.5</b>
<b>Worst Case quantitative assessment rank:</b>				<b>2</b>	<b>4</b>	<b>1</b>	<b>3</b>

From the above assessment, the best solution to promote recycling in the most cost-effective way is to change the receptacles for recycling to weighted, waterproof bags. A number of products have been investigated with the following considerations:

- Preventing moisture infiltrating bags
- Availability within the market
- Lead in times for delivery
- Size and usability
- Price

The following table outlines the advantages and disadvantages of each of the three options.

	<b>Waterproof shower caps</b>	<b>Lids for boxes</b>	<b>Waterproof recycling bags</b>
<b>Advantage</b>	<p>Initial purchase is the cheapest option</p> <p>Shorter lead times</p> <p>If secured to the box less likely to blow away</p> <p>Can be posted rather than delivered reducing costs</p>	<p>Medium option for purchase cost</p> <p>Shorter lead times</p> <p>Recycling secured in boxes meaning less littering on collection day</p> <p>Lids can be made available from WBC outlets</p>	<p>Fully waterproof once sealed</p> <p>No escape of materials from the bag once it is sealed</p> <p>Greater recycling capacity than current boxes increasing recycling levels</p> <p>Used in another local authority with good resident's and crew feedback</p> <p>Best option to reduce carbon (due to only one additional collection vehicle)</p> <p>Bags can be made available from WBC outlets so no waiting time for delivery</p> <p>Cheapest option overall (due to need for only one additional vehicle/crew as opposed to two vehicles/crew)</p>

			needed for the other options)
	<b>Waterproof shower caps</b>	<b>Lids for boxes</b>	<b>Waterproof recycling bags</b>
<b>Disadvantage</b>	<p>Not durable – likely to tear/rip over a short period of time. Unlikely to be used/replaced once damaged</p> <p>Not fully waterproof if the shower caps are not used or ripped</p> <p>Due to the time taken to replace the shower caps by the crew an additional two collection vehicles would be required</p> <p>More expensive option overall due to additional two vehicles needed and continued replacement</p> <p>Spillage possible when the crew remove the showercap</p>	<p>Likely to become lost/broken or not used by residents which will mean the paper/card becomes wet</p> <p>Due to the time taken to replace the lids on the boxes an additional two collection vehicles would be required</p> <p>More expensive option overall due to additional two vehicles needed</p> <p>More expensive than the waterproof recycling bag</p>	<p>More expensive option than shower caps but fully waterproof once sealed</p> <p>Longer lead times to receive these as opposed to other options</p> <p>One additional vehicle and crew needed</p>

From the above analysis it is clear to see that the waterproof recycling bags are the best option overall financially, environmentally and practicability. Although they are more expensive to purchase initially than the shower caps, they are longer lasting as they are less likely to get broken and lost. This is also reflective of the experiences of Monmouthshire (see below) where they have had a very low replacement rate of these particular bags. They have greater capacity than the current boxes therefore additional recycling will be collected which will improve our recycling rate further. The street scene will be improved by less escape of recyclables on collection day and only one additional collection vehicle will be required, whereas the other options require two, reducing both the carbon and financial impact.

## Bag Selection

A number of bags were assessed from a desktop study as well as practical testing. It was evident that those bags that did not seal or had a 'fold over' flap were not deemed suitable as water still entered the container causing the paper to become wet.

Therefore, a sealed bag was the only practical option to prevent moisture ingress. The preferred bag (Appendix 2) has, been chosen following significant testing of the product by officers and contractors. This testing included spraying the bag with a jet wash up to 20 seconds, a handling test where the bags were filled and moved over some distance and a capacity test to determine how much material could be placed in the bag.

Following these live tests, it was demonstrated that the bag kept the paper material dry, the suitability for moving was met and with a 60 litre capacity, they exceed the volume of the current recycling box. Additionally, the bags are weighted so they will not blow away when empty. This increased capacity (an additional 20 litres per property) will enable and encourage a greater amount of recycling. Larger bags are available (90 litres) but consideration has been given to both our residents, and those collecting the recycling to lift and move the bags.

The bag has a Velcro fastener across the top, to prevent moisture being able to infiltrate the waste and animals being able to get in. The bags will cost £1.66 per bag, cheaper than the current black bins that cost approximately £5.00 including the lid and box (see financial business case below for full financial details) (See Appendix 1 for full Resource Futures Report)

The lifespan of the current recycling boxes is between and five and 10 years. The waterproof recycling bags have been estimated of having a lifespan of between three and five years. However, the container replacement cost is £3.34 cheaper per unit as compared to the box and lid together.

As detailed above, these types of bags are in operation in Monmouthshire County Council, and regular discussions with this Council have occurred to understand their experiences of using this receptacle. An outline case study is detailed as follows:

### Case study: Monmouthshire County Council

In late 2019, Monmouthshire County Council introduced a trial for the sealable, waterproof bags to replace their single use plastic recycling bags which were supplied to all properties. Not only was the aim to reduce the environmental and financial impact of single use plastic but to also consider other ways to keep presented paper and cardboard dry. The trial is ongoing, however full county-wide implementation of the bags is expected in 2021.

Although the trial was to primarily assess the potential cost savings and to determine the quality of paper within the bag, it also set out to understand the wider benefits of these receptacles. Feedback from residents has been, overall, positive in terms of usability and durability and there has not been any issues regarding the quality of the bags tearing/splitting. The crews have also been consulted and the only issue raised was to reduce the handle size which would enable the operatives to move the bags with straight arms rather than bent arms. This design modification has been made, and samples from the bag supplier has incorporated this change.

Both the crews and the Council have undertaken checks of the paper and cardboard presented in the bags and there have not been any concerns in terms of quality or moisture content.

From the Council's experience it is also evident that the bags stay in place during windy conditions with little movement. Clearly, high winds would affect any presented receptacle causing it to move or fall over.

The replacement of bags due to loss is lower as compared to the replacement of existing WBC boxes. Of the 6,000 bags supplied as part of the trial area, there have only been 23 requests for new containers. As a like-for-like comparison in terms of scale, the number of replacement recycling boxes is nearly 270. Undoubtedly many boxes have to be replaced as they become broken due to age, brittleness due to weather conditions, adverse handling and accidental damage. The waterproof recycling bags negate a number of these issues as they are flexible rather than rigid.

### Recycling Performance

Based on 2019/20 performance, an annual loss of 6% of our overall recycling rate would occur as a result of wet waste. It has been estimated that, on top of the approximate 6% of recycling that is lost due to wet paper, the new bags will provide additional capacity for recycling. It is expected that this extra space will achieve a further 1.5% in performance by diverting more recycling from the blue bags. In summary, the weighted waterproof recycling bags will be able to:

- Recover the estimated 6% loss due to wet paper and;
- Gain an additional 1.5% of additional recycling as a result of the additional space. Furthermore, this is an opportunity to promote the recycling service through general communications as well as the leaflet delivered with the bags thereby moving us towards our "Climate Change" target to recycle 70% by 2030.

### Procurement

The bags will be procured through our waste collection contractor Veolia as containers were included in the original OJEU notice. This will enable their specialist procurement section to act on our behalf and use their buying power to get the best possible price and purchasing influence.

### Financial Business Case

At the 30 July 2020 meeting, the Executive approved the borrowing of £288k for the purchase of waterproof recycling bags and the revenue implications of the capital borrowing, which will have the effect of increasing recycling levels and generating a beneficial financial impact far in excess of the cost of borrowing.

The annual costs of both the new bags and an extra vehicle/crew to maintain existing collection standards with a sealable bag receptacle is estimated at £295k p.a. The financial benefit arising from increased recycling and reduced disposal costs, as a result of this initiative, is estimated at £698k per annum. There would therefore be a net gain (budget impact avoidance) of £403k per annum.

## Consultation

Stakeholder consultation and consideration has been assessed as part of this evaluation. In 2017, WBC undertook a comprehensive waste and recycling consultation which set out to gain insight into resident's waste and recycling opinions. 95% of residents stated that it was important to increase recycling and reduce landfill. A further 97% stated that it was important to reduce the impact on our environment.

This consultation also asked residents about the current service and approximately half of respondents said that they were happy with the current collection system. On this basis officers have continued to work on maintaining the current service while promoting its continuous improvement. The issue of wet waste has prompted consideration of the most waterproof option as well as customer desire for greater capacity to recycle more. Going forward there will be further consultation on longer term options towards the end of the current contract.

Significant work by Officers and Resource Futures has been undertaken to ensure the proposed option meets the required outcomes. This has involved engaging an external consultant to undertake a full appraisal of appropriate options that can be implemented as early as possible in the winter period. Officers informed and reviewed the extensive options appraisal, as well as overseeing the process of testing these informed by their experience and knowledge of Wokingham's waste service. Officers have been integral to ensure the selected receptacle is cost-effective, will keep recyclable material dry and is durable.

It is clear that presented material needs to be recycled rather than disposed of and with the current open box system it is very likely more recycling will get wet and residents' efforts would be wasted.

## Implementation and delivery

WBC Officers have been working with our waste collection contractor Veolia and the waste disposal partnership re3 to address how the bags can be implemented and this is highlighted as follows:

- 2 x 60 litre bags to be delivered around 67,000 properties (approximately 3,000/4,000 multi occupancies already have wheeled bins for recycling so these would remain);
- Those properties that are served by the limited access vehicle (approximately 500 properties) would retain the boxes and would have lids provided as the bags are not suitable for lifting into the vehicle that is used to access these properties;
- The recommended colour for the bags is green based on green being related to recycling and green not clashing with any other existing receptacles;
- These bags have an expected 12 week manufacturing timescale and will take approximately five weeks to deliver to residents (19 weeks total) along with an explanatory leaflet and whilst the timescale is tight, it is expected that they would be in place by the end of January 2021.
- It is proposed that these bags will completely replace the black boxes (approximately 67,000 properties) to ensure, as far as reasonably practicable, that our paper is delivered to re3 in a condition to allow it to be recycled;
- Whilst the bags will replace the boxes completely a four to six-week amnesty will be put in place, after which a programme to collect any unwanted boxes.

However, residents may wish to hang onto them for alternative uses which will be encouraged;

- Residents can have more bags and they will be able to collect them from our community hubs. Those residents unable to collect will be accommodated;
- Officers will work with any resident with specific needs to seek a workable alternative solution as detailed in the Impact Equality Assessment in Appendix 3.

### FAQs & Communications Strategy

Significant work has already gone into this element of the project and Officers are aware of the need to “get this right”. However, the principles that worked well with the food waste will be employed to ensure that the campaign first concentrates on “why we’re doing it” then deal with “when we’re implementing it” and finally “how the system will work”. This will include how the boxes will be phased out and eventually collected if required (See Communication Plan and FAQs in Appendix 4 & 5)

In addition to explaining why, when and how the system will work, rolling out the new bags will provide a great opportunity to act as a “springboard” to promote recycling across the borough (including the food waste service) in order to achieve greater recycling through the changed behaviour of residents. The communication strategy will, therefore, focus on wider elements of recycling to maximise the opportunities provided in line with the Council’s Climate Emergency objectives.

### **FINANCIAL IMPLICATIONS OF THE RECOMMENDATION**

***The Council faces severe funding pressures, particularly in the face of the COVID-19 crisis. It is therefore imperative that Council resources are focused on the vulnerable and on its highest priorities.***

	How much will it Cost/ (Save)	Is there sufficient funding – if not quantify the Shortfall	Revenue or Capital?
Current Financial Year (Year 1) (2020/21)	£49,250 (based on three months versus the amount if nothing was done i.e. £150,000)	Yes	Revenue
Next Financial Year (Year 2)	£197k (versus the amount if nothing was done i.e. £600k)	Yes	Revenue
Following Financial Year (Year 3)	£197k (versus the amount if nothing was done i.e. £600k)	Yes	Revenue

## Other Financial Information

### Do nothing

- To do nothing would result in a major budget loss which would amount to £600k per annum. This is calculated though lost income (30%) and an increase of disposal costs (70%) (using Oct –Mar actuals of £400k) = £600kp.a

### To implement waterproof recycling bags

#### Cost of bag solution (two parts)

##### Part 1:

- Cost of bags £288k for 5.5 years (£52k MRP + £8k interest) = £60k p.a.

##### Part 2:

- Cost of new vehicle and crew needed to compensate for the extra time taken to empty new receptacles (based on previous costs and depreciated over 5.5 years) = £235k p.a. (time difference is approximately 3 seconds per property which equates to 55 hours extra per week)

Total = Bags per annum = £60k (Part 1) and vehicle/crew = £235k (Part 2) = £295k p.a.

#### Benefit of bag solution

- The implementation of the bag solution will avoid (30%) increase disposal costs (70%) (using Oct –Mar actuals) of £400k or £600k for the full year which will impact the budget significantly.
- Increased recycling as a result of greater container capacity of 1.5% = £98k per annum income. This equates to additional recycling per property per year of 1kg. This is expected to be realised, not only due to the additional capacity but a determined drive in educational activity. There is still waste material in the blue bags which could be recycled in the kerbside scheme and an educational leaflet will accompany the new bags. This will clearly explain what can be recycled in the bags and the reasons why. There is a high degree of confidence that this is achievable which is borne out of evidence of other Councils which have similarly increased capacity in their own kerbside containers.
- The £98k per annum (1.5% increase of recycling by using these bags) includes all landfill diversion benefits as a result of capturing this additional material.

#### Cost of bag solution

The annual cost of implementing the bags would be £295k p.a. – £98k p.a. = £197k cost per annum. However, this is a significant improvement relative to the current position (see below)

#### Total net gain from bags

£600k – £295k (bag costs) + £98k (increased recycling due to awareness and increased capacity) = £403k

**Benefit of bags relative to open bins = +£403k net gain (budget impact avoidance)**

**Stakeholder Considerations and Consultation**

Stakeholder consultation was undertaken in 2017 to inform the procurement of the waste collection contract. This showed that our residents are generally happy with the waste service and support recycling. The recycling bag solution enables the service to remain largely unchanged and to increase recycling which supports the outcome of the consultation.

There has been considerable testing of the bags with the Council’s waste collection and disposal contractor to ensure that they are appropriate.

This change has been implemented to ensure that the collected paper is kept dry but as detailed in the Executive Summary Political and Public Acceptability were given a 10% weighting in the selection criteria by the consultant in their assessment of the options based on their knowledge, experience and testing of recycling options nationally.

**Public Sector Equality Duty**

Laid out in Appendix 4

**Climate Emergency**

This Council has declared a climate emergency and is committed to playing as full a role as possible – leading by example as well as by exhortation – in achieving a carbon neutral Wokingham Borough by 2030 – This will put us on track to achieve 30% recycling by 2030.

**List of Background Papers**

None not included in Report

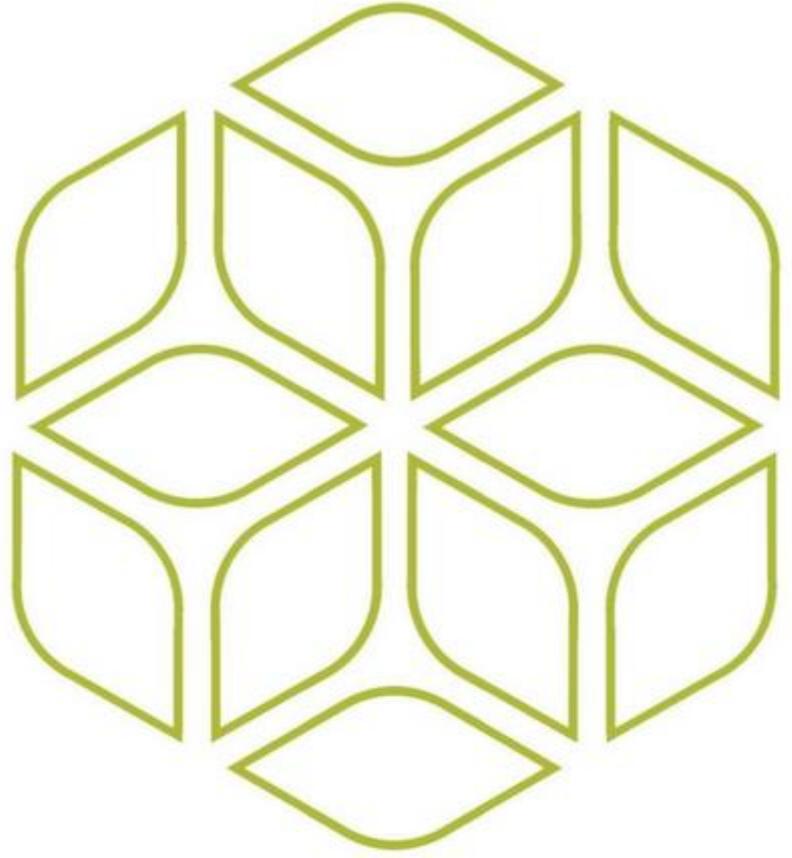
<b>Contact</b> Peter Baveystock	<b>Service Place</b>
<b>Telephone</b> Tel: 0118 974 6338	<b>Email</b> peter.baveystock@wokingham.gov.uk

Appendices

1. Full Resource Futures Report
2. Details of selected bag
3. Impact Equality Assessment
4. Communications Plan
5. FAQ's

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Appendix 1



## Wet waste options appraisal

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Wokingham Borough Council

July 2020



## Executive Summary

Wokingham Borough Council's (WBC) current recycling service performed well in the first two quarters of 2019/20 with a recycling rate of 55.49%<sup>1</sup>. In October 2019, the European end markets (where WBC recyclate is sent) introduced higher quality standards in response to the widespread global economic changes happening at that time. This resulted in significant proportions of WBC's paper and card being rejected, due to the high moisture content which lowered the quality of the material. Tonnage data for 2019/20, shows the annual recycling rate at 50.83% (a difference of 4.66% compared to the average for the first two quarters of the year). WBC has a 70% recycling rate Climate Emergency target to meet by 2030 (and 100% target by 2050) and this reduction in recycling rate severely affects the council's progress in meeting this target. The wet waste issue also increased disposal costs in the region of £368,000 in 2019/20. WBC is rightly concerned about this issue and a solution is required which can be implemented in readiness for inclement weather arriving in Autumn 2020.

Research indicated that there are nine different methods that local authorities use for ensuring recyclable material is kept dry. For the immediate term, these solutions are:

- Weighted waterproof recycling bags;
- Non-weighted waterproof recycling bags;
- Hinged lids on kerbside boxes;
- Loose lids on kerbside boxes;
- Shower-caps (bonnets), tied to the handle of the kerbside box; and
- Single use disposable bags.

And in the medium term:

- Wheeled bins;
- Wheeled bins with a separate container inside; and
- Trollibocs (stackable kerbside boxes).

The option of using non-weighted waterproof recycling bags for all recyclate was discounted due to there being no containment available to contain the bags in following collection, resulting in empty bags being left at the mercy of the weather.

Research identified that the hinged lidded box option only had a capacity of 40 litres. Compared to the 55 litres of the existing kerbside box, the reduction in capacity resulted in this option being discounted.

Single use disposable bags to contain paper and card was also discounted as an option, based on the negative environmental impacts implementing this solution would bring.

Using the findings from the desktop study, the following options were identified for appraisal for all non-flatted properties currently receiving a kerbside recycling collection service using two kerbside boxes:

- **Option 1:** Do nothing;
- **Option 2:** Two loose lids per property for the two existing kerbside boxes;
- **Option 3:** Two weighted waterproof recycling bags per property, no kerbside boxes used;

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<sup>1</sup> Figure taken from an average of Q1 and Q2 2019/20 tonnage data figures from WBC Options Appraisal for Wet Paper MS Excel document

- **Option 4:** Two shower caps per property for the two existing kerbside boxes.

The table below provides the results of the appraisal for each option:

Category	Weighting	Considerations	Guide	1	2	3	4
				Do nothing (baseline)	2 x loose lids per property for existing boxes	2 x weighted reusable sacks for all properties receiving a kerbside	2 x shower caps per property for existing boxes
<b>Recycling performance</b>	<b>40.0%</b>	Impact on recycling rate	Recycling rate for each option considering potential impacts on wet waste. Maximum recycling points added = 10 points, baseline = 0 points.	0.0	6.0	10.0	6.0
<b>Financial</b>	<b>30.0%</b>	Annual revenue impact (Best)	Annual revenue impact for each option, including the Baseline. Scored as deviation from the maximum (0 points) and minimum (10 points) annualised operational cost calculated for each option.	0.0	4.3	10.0	5.5
	<b>30.0%</b>	Annual revenue impact (Worst)	Annual revenue impact for each option, including the Baseline. Scored as deviation from the maximum (0 points) and minimum (10 points) annualised operational cost calculated for each option.	7.8	0.0	10.0	0.9
	<b>10.0%</b>	Capital cost (Best)	Cost of implementation, with the Baseline (Option 1) scoring the highest (10 points), and most costly option scoring 0.	10.0	0.5	0.0	5.2
	<b>10.0%</b>	Capital cost (Worst)	Cost of implementation, with the Baseline (Option 1) scoring the highest (10 points), and most costly option scoring 0.	10.0	0.0	3.4	1.5
<b>Political + public acceptability</b>	<b>10.0%</b>	Number / type of containers	Points system based on number and type of container, available capacity and communications required. See "Political and public acc.".	6.0	1.7	6.7	2.6
<b>Health and safety</b>	<b>5.0%</b>	Maximum weight possible	Weight of empty container plus full possible weight of contents based on average bulk density of comingled recycling. Heaviest scores 0, lightest scores 10.	10.0	9.2	0.0	5.3
<b>Carbon impact</b>	<b>2.5%</b>	Assessment of potential carbon (Best)	Points system based on impact of extra vehicle resource, and diversion of 'wet waste' to recycling. Baseline =5, with options scoring higher or lower in comparison.	5.0	7.0	9.0	7.0
	<b>2.5%</b>	Assessment of potential carbon (Worst)	Points system based on impact of extra vehicle resource, and diversion of 'wet waste' to recycling. Baseline =5, with options scoring higher or lower in comparison.	5.0	3.0	4.0	3.0
<b>Equality impact assessment</b>	<b>2.5%</b>	Potential to affect persons in the protected characteristics group	A high-level impact assessment of how each method of containment has the potential to affect persons in the protected characteristics groups. Baseline =5, with options scoring higher or lower in comparison.	5.0	4.0	6.0	4.5
<b>Best Case Total Score (unweighted):</b>				<b>36.0</b>	<b>32.7</b>	<b>41.7</b>	<b>36.2</b>
<b>Best Case quantitative assessment weighted score:</b>				<b>2.3</b>	<b>4.6</b>	<b>8.0</b>	<b>5.4</b>
<b>Best Case quantitative assessment rank:</b>				<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>
<b>Worst Case Total Score (unweighted):</b>				<b>43.8</b>	<b>23.9</b>	<b>40.1</b>	<b>23.8</b>
<b>Worst Case quantitative assessment weighted score:</b>				<b>4.7</b>	<b>3.2</b>	<b>8.3</b>	<b>3.5</b>
<b>Worst Case quantitative assessment rank:</b>				<b>2</b>	<b>4</b>	<b>1</b>	<b>3</b>

The overall results of both the best case and worst-case options appraisals shows that Option 3 (weighted waterproof recycling bags) is the preferred option, ranking first in both the best and worst-case scenarios. This option scored highest in recycling performance, annual revenue impact, political and public acceptability, carbon impact (best-case) and in the equality impact assessment category. It is therefore recommended that Option 3 is progressed to alleviate the current issues associated with wet waste.

To mitigate any confusion arising at the point the service changes, WBC should consider allowing residents a grace period where the existing kerbside boxes and/or weighted bags are collected for a short period of time whilst the weighted bags become embedded. In addition, as kerbside boxes will no longer be used, the council will need to decide how the boxes will be discontinued from their current use – whether they are collected back or whether residents are asked to repurpose them.

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## 1 Introduction

Wokingham Borough Council's (WBC) current recycling service provides a weekly kerbside collection of paper, cardboard, cans, tins, aerosols, cartons, foil and plastic bottles, tubs, pots and trays. Kerbside properties have two 55 litre boxes issued per household and flatted properties have large comingled recycling bins. A weekly food waste collection service also operates all properties.

The service performed well in the first two quarters of 2019/20 with a recycling rate of 55.49%<sup>2</sup>. In October 2019, the European end markets (where WBC recyclate is sent) introduced higher quality standards in response to the widespread global economic changes happening at that time. This resulted in significant proportions of WBC's paper and card being rejected, due to the high moisture content which lowered the quality of the material. Tonnage data for 2019/20, shows the annual recycling rate at 50.83% (a difference of 4.66% compared to the average for the first two quarters of the year). It should be noted that the impact of wet waste is only based on two quarters of data (quarter 3 and quarter 4) and therefore the impact on the recycling performance is likely to be greater in 2020/21. WBC has a 70% recycling rate Climate Emergency target to meet by 2030 (and 100% target by 2050) and this reduction in recycling rate severely affects the council's progress in meeting this target. The wet waste issue also increased disposal costs in the region of £368,000 in 2019/20.

WBC is rightly concerned about this issue and a solution is required which can be implemented in readiness for inclement weather arriving in Autumn 2020.

In remediation, the council has already:

- initiated changes in disposal methods;
- launched a communications campaign to drive resident behaviour change for storing mixed paper and card to ensure its kept dry; and
- undertaken an options appraisal of various measures to remediate this issue.

WBC has appointed Resource Futures to further explore the options available. Firstly, suitable options need to be identified which can be implemented immediately. These options will be appraised against a set of agreed categories and weightings and a preferred option identified for implementation. Secondly, options which provide a permanent solution to the issue but which require further preparation to implement (for example, because the type of containment identified affects the types of vehicles required to collect them) will be identified in readiness for appraising these as part of the medium term options appraisal, to follow.

## 2 Desktop study

Research was undertaken to identify possible solutions to the wet waste issue. WBC confirmed that to eradicate the issue of wet paper and cardboard, all recycling must be kept dry as far as practicable, since if other recyclate had moisture present at the point of collection, it would make the paper and cardboard wet when it was mixed with the other recyclate in the collection vehicles. Research indicated that there are

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<sup>2</sup> Figure taken from an average of Q1 and Q2 2019/20 tonnage data figures from WBC Options Appraisal for Wet Paper MS Excel document

nine different methods that local authorities use for ensuring recyclable material is kept dry. For the immediate term, these solutions are:

- Weighted waterproof recycling bags;
- Non-weighted waterproof recycling bags;
- Hinged lids on kerbside boxes;
- Loose lids on kerbside boxes;
- Shower-caps (bonnets), tied to the handle of the kerbside box; and
- Single use disposable bags.

And in the medium term:

- Wheeled bins;
- Wheeled bins with a separate container inside; and
- Trollibocs (stackable kerbside boxes).

The desktop study then identified the councils who use each solution to ensure recyclate is kept dry. Whilst every endeavour was made to find comparable local authorities to benchmark, due to the small number of local authorities who use each of the solutions found, most of the authorities included within this study are not directly comparable with WBC as they collect glass at the kerbside, operate various dry recycling collection methods (including twin-stream and multi-stream) and at various collection frequencies.

## **2.1 Immediate term options research**

The option of using non-weighted waterproof recycling bags for all recyclate was discounted as with this option kerbside boxes will be discontinued and therefore returned bags cannot be contained following collection.

Research identified that the hinged lidded box option only had a capacity of 40 litres. Compared to the 55 litres of the existing kerbside box, the reduction in capacity resulted in this option being discounted.

Single use disposable bags to contain paper and card was also discounted as an option, based on the negative environmental impacts implementing this solution would bring.

### **2.1.1 Weighted waterproof recycling bags**

A range of councils use waterproof recycling bags for separately containing paper and/or cardboard to keep the material dry, with most councils choosing a weighted waterproof recycling bag to ensure as far as possible that it is retained following collection during inclement weather. It should be noted that most councils use a combination of bags and boxes for the containment of dry recycling. The councils listed in Table 1 below use a weighted recycling bag for containing paper and/or card as a minimum, and kerbside boxes and/or bags for containing other recycling material.

Table 1: Local authorities who use a separate weighted recycling bag to contain paper and/or card

Local authority	Only weighted bags used?	Capacity	Bottom handle?	Image
Brentwood Borough Council	Yes	130L	Yes (customised handles at the bottom, different to manufacture standard type)	
Bristol City Council	No (plus boxes)	90L	Yes	
Pembrokeshire County Council	No (plus another bag and boxes)	Not known	Yes	
Carlisle City Council	No (plus boxes)	70L	Yes	
Monmouthshire County Council	No (plus another bag and box)	Not known	Not known	

Local authority	Only weighted bags used?	Capacity	Bottom handle?	Image
Cheltenham Borough Council	No (plus boxes)	Not known	Not known	
Gloucester City Council	No (plus boxes)	Not known	Not known	
Eden District Council	No (plus boxes)	40L	Not known	

From this list, the only council who collected all kerbside recycling material comingled was Brentwood Borough Council. However, this scheme has not yet started (due to commence in August 2020) and whilst it will replace the existing bag scheme which uses single use bags, it is not yet an established collection method to prove of use to WBC.

**2.1.2 Loose lids on kerbside boxes**

Several local authorities use loose rigid lids on kerbside boxes to ensure recycling material is kept dry, as illustrated below. The lids clip on to the rim of the kerbside boxes and need to be replaced back inside the box following collection to ensure they are not lost.



Table 2 shows the councils who have adopted this approach. We were unable to find an authority who used solely lidded kerbside boxes for their collection service. Research showed that the councils who use at least one lidded kerbside box to contain recycling in only use a combination of bags and boxes or boxes and wheeled bins.

*Table 2: Local authorities who use loose lids on kerbside boxes*

Local authority
Neath Port Talbot Council
Chiltern area (now part of Buckinghamshire Council)
South Bucks area (now part of Buckinghamshire Council)
Wycombe area (now part of Buckinghamshire Council)
Wiltshire Council
Harlow District Council

### 2.1.3 Shower caps

Shower caps (or bonnets) are UV stable waterproof woven polypropylene sheets with an elasticated edge. They fit snugly over the kerbside boxes to prevent the material inside from being affected by the weather. Shower caps have the ability to be tied on to the handles of the kerbside boxes so as not to be lost during collection and are illustrated below.



The use of shower caps on kerbside boxes to keep recycling material dry was uncommon amongst local authorities. However, it is the cheapest solution available in terms of the per unit capital cost (at approximately 60 pence per unit). Table 3 details those councils who use this approach.

*Table 3: Local authorities who use shower caps*

Local authority
Merthyr Tydfil County Borough Council
Copeland Borough Council
East Lothian Council

## 2.2 Medium term options research

There are three options available to WBC which will solve the issue of wet waste in the medium term, detailed below. To implement any of these solutions, a fundamental change in the collection contract and/or the collection vehicles will be necessary, making these unsuitable options for immediate implementation.

### 2.2.1 Wheeled bins

Wheeled bins are frequently used by local authorities to contain dry mixed recycling. To ensure only comparable councils are considered, only those that do not collect glass at the kerbside were researched. These are detailed in Table 4.

*Table 4: Local authorities who use wheeled bins for recycling and who do not collect glass at the kerbside*

Local authority
Leeds City Council
Kirklees Metropolitan Council
Cherwell District Council
East Suffolk Council
Rushcliffe Borough Council
Bedford Borough Council
Gravesham Borough Council
Bracknell Forest Council
Aberdeenshire Council

### 2.2.2 Wheeled bins with a separate container inside

Wheeled bins which have either a 19, 40 or 55 litre inner caddy resting inside the frame of the bin enables the separate collection of a (usually singular) material stream, such as cans, paper or glass, as illustrated below.



This helps ensure the quality of all recycling material collected is retained by containing the material in the caddy in a different pod on the collection vehicle to the rest of the material contained in the body of the bin. The authorities which use them to separately collect paper and/or card are detailed in Table 5, although it should be noted that all these authorities also collect glass at the kerbside within the main body of the wheeled bin.

*Table 5: Local authorities who use wheeled bins with a separate container inside*

Local authority	Material contained in the separate container
Derbyshire Dales District Council	Paper and card
Isle of Wight Council	Paper and card
Birmingham City Council	Paper
Darlington Borough Council	Paper and card
Redcar and Cleveland Borough Council	Paper
Sunderland City Metropolitan Borough Council	Paper
South Tyneside Council	Paper
Gateshead Council	Paper
South Derbyshire District Council	Paper
Bolsover District Council	Paper
Nuneaton and Bedworth Borough Council	Paper and card
Welwyn Hatfield District Council	Paper

### 2.2.3 Trollibocs

Trollibocs are a recycling system which holds three stackable recycling boxes in a wheeled frame to store boxes upright whilst retaining full use of the boxes in situ. They are also easily transported to the kerbside, as illustrated below.



Since Trollobocs containers can be collected using WBC's existing collection methods (i.e. by using a slave bin during collection) and by using existing recycling collection vehicles, these would be suitable as an immediate solution to the wet waste issue. However, the cost per unit is approximately £37. Compared with other immediate term options this makes it financially unsuitable to compare and it would not score well in an options appraisal because of this. It has therefore been included as a medium term option, with the cost issue being more balanced by the other containment options.

The local authorities using the Trolloboc system are detailed in Table 6.

*Table 6: Local authorities who use the Trolloboc system*

Local authority
Conwy County Borough Council
Blaenau Gwent County Borough Council
Lisburn and Castlereagh City Council
Pembrokeshire County Council
East Ayrshire Council
Isle of Anglesey County Council
Gwynedd County Council

In addition, Denbighshire Council also has plans to introduce Trollobocs (along with four weekly residual waste collections) from 2021. Furthermore, Northwest Leicestershire District Council is trialling a Trolloboc system amongst 250 households<sup>3</sup>.

<sup>3</sup> <https://www.nwleics.gov.uk/pages/recyclemore>

### 3 Options Appraisal

Using the findings from the desktop study, the following options were identified for appraisal for all non-flatted properties currently receiving a kerbside recycling collection service using two kerbside boxes:

- **Option 1:** Do nothing
- **Option 2:** Two loose lids per property for the two existing kerbside boxes
- **Option 3:** Two weighted waterproof recycling bags per property, no kerbside boxes used
- **Option 4:** Two shower caps per property for the two existing kerbside boxes

It was agreed with WBC that the options which retained the use of the kerbside boxes should be provided with two lids (Option 2) and two shower caps (Option 4) to ensure both boxes have a covering provided. This helps to mitigate the risk of moisture being transferred to paper and card once loaded into the collection vehicle. For the purposes of modelling, it was determined that 150,000 units would therefore be required for these options.

No medium term solutions were included as this will be undertaken separately as part of the medium term options appraisal, to follow as part of the continuing Waste Improvement Activities project.

#### 3.1 Options appraisal approach

An options appraisal was produced by WBC to evaluate a range of possible solutions to the wet waste issue. An updated model has been developed from these initial assumptions and refined in consultation with WBC Officers.

Specific categories were identified and agreed for the appraisal and an appropriate weighting has been applied to each to reflect the relative importance in the category achieving WBC's Climate Emergency objectives, summarised in Table 7.

*Table 7: Agreed categories and weightings used to evaluate each option in the appraisal*

Category	Weighting applied
Recycling performance	40.0%
Financial (annual cost)	30.0%
Financial (capital cost)	10.0%
Health and safety	5.0%
Political and public acceptability	10.0%
Carbon impact <sup>4</sup>	2.5%
Equality impact assessment	2.5%

##### 3.1.1 Procurement assumptions (not included within scoring of appraisal)

The lead times for procuring 150,000 units for each option is typically 6-8 weeks. However, WBC's collection contractor, Veolia, have advised that to supply weighted waterproof recycling bags could take an estimated 12 weeks. Due to the impact on manufacturing from the COVID-19 pandemic, current delivery

<sup>4</sup> It should be noted that this exercise did not include undertaking a full carbon impact assessment. Instead, a high level assessment was undertaken which identified the extent of each solution requiring an increased number of vehicles to deliver the collection service, as well as the impact of diverting 'wet' paper/card from EfW to recycling

times are expected to be unusually long. For the purposes of the model, delivery time is set at 5 weeks across all options.

### 3.1.2 Additional vehicle assumptions

When WBC undertook an initial options appraisal to evaluate the options available in remedying the wet waste issue, Veolia advised that two additional collection vehicles would be necessary when operating a solution which involved lids, which was previously considered. Veolia stated that there will be a significant impact on productivity time expected as crews are unable to complete rounds at current speeds owing to the handling of the lids. It is likely that Veolia will consider Option 4 (shower caps) to have the same issue since the shower caps need to be handled in a similar way. As a consequence of Veolia's initial information, we have estimated that one extra vehicle would also be necessary for Option 3 (bags) due to the additional capacity this option offers, which will affect the capacity of the vehicle and consequently the size of the rounds. The Velcro on the bags (Option 3) is also likely to affect productivity time, albeit to a lesser extent than in Option 2 (lids) and Option 4 (shower caps).

When the modelling was initially undertaken the additional cost of vehicles and crew significantly disadvantaged these options. As the impact of these options is currently untested, two options appraisals were run: one with the additional vehicles and staff being necessary and one without. This dual modelling presents WBC with a 'worst-case' options appraisal and a 'best-case' options appraisal with which to assess the impact of this issue. The differences in the outputs of the modelling is seen in the financial category and the carbon impacts category. The results of the modelling are the same for both appraisals across all other categories.

## 3.2 Options appraisal results

The results of the wet waste options appraisal are provided in full in the attached 'wet waste option appraisal' MS Excel document. Each Option was appraised against each category and given a score out of 10, with 10 being the highest score and 0 being the lowest.

Table 8 below provides a summary of the results of the appraisal for each option, including the best-case (in light salmon colour) and the worst-case (in darker salmon colour) scenario results. Each subsequent section provides the detailed results for each category assessed.

Table 8: Options appraisal results

Category	Weighting	Considerations	Guide	1	2	3	4	
				Do nothing (baseline)	2 x loose lids per property for existing boxes	2 x weighted reusable sacks for all properties receiving a kerbside	2 x shower caps per property for existing boxes	
<b>Recycling performance</b>	<b>40.0%</b>	Impact on recycling rate	Recycling rate for each option considering potential impacts on wet waste. Maximum recycling points added = 10 points, baseline = 0 points.	0.0	6.0	10.0	6.0	
<b>Financial</b>	<b>30.0%</b>	Annual revenue impact (Best)	Annual revenue impact for each option, including the Baseline. Scored as deviation from the maximum (0 points) and minimum (10 points) annualised operational cost calculated for each option.	0.0	4.3	10.0	5.5	
	<b>30.0%</b>	Annual revenue impact (Worst)	Annual revenue impact for each option, including the Baseline. Scored as deviation from the maximum (0 points) and minimum (10 points) annualised operational cost calculated for each option.	7.8	0.0	10.0	0.9	
	<b>10.0%</b>	Capital cost (Best)	Cost of implementation, with the Baseline (Option 1) scoring the highest (10 points), and most costly option scoring 0.	10.0	0.5	0.0	5.2	
	<b>10.0%</b>	Capital cost (Worst)	Cost of implementation, with the Baseline (Option 1) scoring the highest (10 points), and most costly option scoring 0.	10.0	0.0	3.4	1.5	
<b>Political + public acceptability</b>	<b>10.0%</b>	Number / type of containers	Points system based on number and type of container, available capacity and communications required. See "Political and public acc.".	6.0	1.7	6.7	2.6	
<b>Health and safety</b>	<b>5.0%</b>	Maximum weight possible	Weight of empty container plus full possible weight of contents based on average bulk density of comingled recycling. Heaviest scores 0, lightest scores 10.	10.0	9.2	0.0	5.3	
<b>Carbon impact</b>	<b>2.5%</b>	Assessment of potential carbon (Best)	Points system based on impact of extra vehicle resource, and diversion of 'wet waste' to recycling. Baseline =5, with options scoring higher or lower in comparison.	5.0	7.0	9.0	7.0	
	<b>2.5%</b>	Assessment of potential carbon (Worst)	Points system based on impact of extra vehicle resource, and diversion of 'wet waste' to recycling. Baseline =5, with options scoring higher or lower in comparison.	5.0	3.0	4.0	3.0	
<b>Equality impact assessment</b>	<b>2.5%</b>	Potential to affect persons in the protected characteristics group	A high-level impact assessment of how each method of containment has the potential to affect persons in the protected characteristics groups. Baseline =5, with options scoring higher or lower in comparison.	5.0	4.0	6.0	4.5	
				<b>Best Case Total Score (unweighted):</b>	<b>36.0</b>	<b>32.7</b>	<b>41.7</b>	<b>36.2</b>
				<b>Best Case quantitative assessment weighted score:</b>	<b>2.3</b>	<b>4.6</b>	<b>8.0</b>	<b>5.4</b>
				<b>Best Case quantitative assessment rank:</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>
				<b>Worst Case Total Score (unweighted):</b>	<b>43.8</b>	<b>23.9</b>	<b>40.1</b>	<b>23.8</b>
				<b>Worst Case quantitative assessment weighted score:</b>	<b>4.7</b>	<b>3.2</b>	<b>8.3</b>	<b>3.5</b>
				<b>Worst Case quantitative assessment rank:</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>3</b>

### 3.2.1 Recycling performance

A 40% weighting was applied to this category to reflect the importance of the preferred option contributing directly to achieving WBC's Climate Emergency targets.

The wet waste issue in 2019/20 resulted in a reduction in recycling rate of 4.66% arising from only the last two quarters, since the wet waste issue did not arise until October 2019. Since inclement weather is variable year on year, WBC determined that it should be assumed the wet waste issue results in an annual 6% loss in recycling rate for Option 1 (do nothing). Modelling a 6% recycling rate loss due to the wet waste issue results in a projected recycling rate of 49.5% for Option 1, the 'do nothing' scenario. As other options aim to solve this issue, this scored 0 for recycling performance.

Options which provide a lid or shower cap for existing boxes were determined to reduce this recycling rate loss by half (3%). The assumption is based on the fact that the attachment of the covering will be at the residents' discretion, especially where lids or caps have been lost but not replaced, and therefore some wet waste is likely to remain an issue. Option 2 (lids) and Option 4 (shower caps) therefore both scored 6 with recycling rates of 52.5% each.

Option 3 (bags) is determined to reduce wet waste contamination to 1%, leading to a recycling rate of 54.5%. This is owing to the integral sealing mechanism of the bag, which is likely to be closed by residents in most cases. Option 3 (bags) therefore scored 10 and was the highest scoring option for recycling performance.

### 3.2.2 Financial

Within the modelling, annual revenue impact and capital costs were separately appraised, with a weighting of 30% and 10% respectively.

#### 3.2.2.1 Annual revenue results

Annual revenue impacts include the cost of delivering the collection service, including extra resourcing if required, the annual cost of container replacement and the disposal cost of materials based on expected recycling rates.

The revenue cost includes the cost of replacing containers each year. For Options 2 (lids) and 4 (shower caps), it is assumed that 75% of residents may opt to revert to using one covering if the second is lost or damaged. Despite the replacement rate of weighted waterproof recycling bags being determined as higher than those for boxes (7.5% per year compared to 5% per year), the cost saving per unit means no significant impact on costs is expected compared to the baseline. In terms of replacement distribution costs, shower caps and recycling bags incur only a third of the costs associated with lids, as these can be supplied by WBC outlets such as libraries and the council Offices, while lids are assumed to always be replaced through dedicated delivery to the kerbside.

For Option 1 (do nothing), the cost of disposing the 6% wet waste is confirmed as £436,000 per annum, based on costs incurred by WBC during the period November 2019 to March 2020. This includes the £368,000 per annum incurred through disposal of wet waste through Energy from Waste (EfW), and a £68,000 contamination fee. For each option, we have assumed the cost of disposing the wet waste paper and card is proportional to the figure of £368,000 per annum, based on the wet waste contamination percentage produced by each container type (i.e., when 3% is lost to wet waste, cost of disposal is halved). We have also costed the disposal saving realised through diversion of 'wet' paper and card from EfW to

recycling, based on a disposal saving of £100 per tonne. A contamination cost of £68,000 is applied to each option as a recycling contamination fee, irrespective of the wet waste issue.

#### Best-case scenario results

In the best-case options appraisal, it is assumed no extra resourcing of vehicles will be required to deliver the service. As the cost of container replacement differs by only £40,000, the results of the annual revenue impacts are primarily influenced by the cost of disposal. Option 1 (do nothing), provides the greatest annual revenue impact (£436,000 per annum) owing to the disposal costs incurred by the 6% wet waste contamination. Option 1 therefore scored 0.

Option 2 (lids) scored 4.3 because the wet waste contamination has decreased to 3%. Similarly, Option 4 (shower caps) scored 5.5.

The highest scoring option is Option 3 (bags), with a score of 10, providing a cost saving of approximately £233,000 per annum when compared to Option 1 (do nothing).

#### Worst-case scenario results

In the worst-case options appraisal, it is assumed that two extra vehicles will be required to implement Option 2 (lids) and Option 4 (shower caps) and one extra vehicle will be required to implement Option 3 (bags). We have therefore assumed that annual revenue impacts will include costs of running the vehicles (£50,000 per annum) and the cost of two additional crews (£118,540 per crew per annum, based on three loaders and one driver).

Option 1 scored 7.8 because no additional vehicles are needed to deliver the service. Comparatively, Option 2 (lids) and Option 4 (shower caps) scored 0 and 0.9 respectively due the requirement of two extra vehicles, including running costs and crew costs.

Option 3 (bags) was the highest scoring option, with a score of 10, providing a cost saving of approximately £65,000 per annum when compared to Option 1 (do nothing). This is owing to the reduced cost of container replacement throughout the year, one further vehicle being required and a disposal saving through the diversion of 5% paper and card material which would otherwise be wet waste in the 'do nothing' scenario.

#### 3.2.2.2 Capital costs results

Capital costs are treated separately within the appraisal and are determined as the initial cost of purchasing the new containers, and the purchase of additional vehicles, relative to the baseline. The purchase of containers, or container accessories, will also incur an initial distribution cost however, as this cost is currently unknown and likely to be relatively similar across all options, this has been omitted from the modelling.

#### Best-case scenario results

Based on capital costs alone, Option 1 (do nothing), provides the highest score of 10, simply owing to the fact that no intervention is taking place and therefore no additional costs are necessary.

Option 3 (bags) scores 0, and therefore scores the lowest due to the high cost of purchasing the bags compared to lids. Option 2 (lids) scored 0.5 due to being the second most expensive option with an implementation cost of £180,000 owing to the purchase of two lids per household.,

The second highest scoring option is Option 4 (shower cap) with a score of 5.2, as the unit costs are half of those required by lids.

### Worst-case scenario results

Based on capital costs alone, Option 1 (do nothing), provides the highest score of 10 because no additional vehicles are required.

Option 2 (lids) scores 0 and is the lowest ranking option, followed by Option 4 (shower caps) with a score of 1.5. This is because both Options require two additional vehicles to resource at a cost of £440,000.

Option 3 (bags) scores 3.4 because only one additional vehicle is required in this scenario.

### **3.2.3 Political and public acceptability**

Political and public acceptability is appraised by a points-based system which scores each option based on several important factors of relevance to both residents and members. This includes the number and type of containers required, the available capacity at the kerbside, and communications approach. For each option, a subjective score was provided to determine the preference of each option. The current service scored the highest as there was no deviation from the popular service. The option which required the greatest service change scored the lowest.

For capacity scoring, we have assumed that boxes without lids, or those with flexible shower caps could be filled over the rim of the box and have therefore assumed available capacity equates to 65 litres per box (i.e. 10 litres more capacity than available in Option 2 (lids)).

For Option 3 (bags) a number of bags with different specifications were identified, with sizes ranging from 60 litres to 130 litres. A mid-range point of 90 litres was assumed for the purposes of modelling. It was determined that two weighted bags per property would be required to ensure an appropriate level of capacity was maintained at the kerbside, in lieu of losing the kerbside boxes which have no covering in this option and therefore can no longer be used. The most suitable specification of weighted recycling bag was considered to be those which have a pitched opening at the top, with Velcro along the opening to almost eliminate the likelihood of moisture getting in, as illustrated with the Monmouthshire County Council kerbside recycling service, below.



For communications, we have provided a score based on the nature of the communications required to carry out each option. For Option 1 (do nothing), we have provided a central score of 5 (out of 10). This reflects the need to encourage residents to limit wet waste via stacking methods, but without intervention. Both Option 2 (lids) and Option 4 (shower caps) scored below this, as messaging will need to be instructive to enforce the importance of utilising the coverings. Option 3 (bags) scored the highest, reflecting the positive messaging related to increased capacity at kerbside and the ease of use in covering due to the Velcro fastening at the top.

These individual scoring factors were then combined to provide an overall public and political acceptability score, with a 10% weighting in the appraisal.

Option 3 (bags) performed the best with a score of 6.7 owing to increased capacity at the kerbside, supported by positive communications from WBC. This was closely followed by Option 1 (do nothing) which scored 6 as no new containment is required. Option 4 (shower caps) and Option 2 (lids) were deemed to be much less publicly and politically acceptable and scored 2.6 and 1.7 respectively with the difference in the scores being that shower caps provide slightly more capacity in the box compared to using the lids.

### 3.2.4 Health and safety

To appraise each option in terms of health and safety, a score was calculated based on the maximum weight of the container if filled. This category applies a 10% weighting to the overall score. We used an approximation of 53.9kg/m<sup>3</sup> for the bulk density of recyclate (minus glass), the capacity of each container, and the weight of each empty container to calculate the maximum weight presented by each household at the kerbside.

Option 1 (do nothing) and Option 2 (lids) had the highest scores of 10 and 9.2 respectively, with the lowest maximum weights of 9.8kg and 9.9kg, while Option 3 (bags) had the lowest score of 0 owing to the largest capacity and therefore heaviest containment result of 11.3kg arising from the increased capacity provided by bags compared to the kerbside boxes.

Option 4 (shower caps) scored 5.3 due to having mid-range capacity (and therefore weight) between the boxes (Option 1 and Option 2) and the bags (Option 3).

### 3.2.5 Carbon impact

A carbon impact score was provided to assess the appropriateness of each option based on their potential climate impact. A 'high level' score was given to each option, based on the amount of wet recyclate prevented, and therefore diverted to recycling, against the number of vehicles required to service the collection. This score was weighted as 2.5% within the overall options appraisal.

A best-case and worst-case options appraisal was undertaken as the impact of the additional vehicles detailed in the capital cost category would consequently have an impact on carbon.

#### Best-case scenario results

Within the best-case scenario, with no extra resource determined for the options, Option 3 (bags) scored the highest, with a score of 9. This was determined by the fact that this provides the most protection against wet waste contamination, and therefore more tonnage is recycled. Option 4 (shower caps) scored 7 due to the likelihood that some residents would not use them. Similarly, Option 2 (lids) also scored 7 for the same reason.

The worst performing option was Option 1 (do nothing) which scored 5, which was the starting point from which to compare the other Options.

#### Worst-case scenario

Within the worst-case scenario, as Option 2 (lids) and Option 4 (shower caps) were deemed to require an extra two vehicles for service delivery, these Options both scored 3. Option 3 (bags) scored 4 owing to the one additional vehicle necessary. Option 1 (do nothing) scored 5 based on no additional vehicles being necessary.

### 3.2.6 Equality impact assessment

When considering making changes to the recycling collection service, WBC has a statutory duty to assess the likely impact of any decisions on groups with protected characteristics, as defined in the Equality Act 2010.

There are nine protected characteristics which must be given due regard in the context of the need to promote equality of opportunity. These are between persons of:

- age;
- disability;
- gender reassignment;
- marriage and civil partnership;
- pregnancy and maternity;
- race;
- religion or belief;
- sex; and
- sexual orientation.

Equality Impact Assessments (EIAs) were introduced under the Race Relations Amendment Act 2000, as a way of requiring public service providers to assess the likely impact of policy decisions on these groups. Whilst the completion of equality impact assessments is not a legal requirement in England, it is a useful method of demonstrating compliance in ensuring that the protected characteristics and any resulting issues have been carefully considered.

A high-level equality impact assessment was undertaken for each Option, in terms of how each method of containment has the potential to affect persons in the protected characteristics groups. A score was provided for each Option, with a weighting of 2.5% applied in the options appraisal.

Using a score of 5 (out of 10) for Option 1 (do nothing), we provided a comparative score to highlight any possible equality issues associated with each option. All options scored similarly. The appraisal identified Option 3 (bags) would be likely to present a slightly improved containment for those with mobility issues compared to the kerbside boxes, since residents no longer have to hold a box at waist height. Therefore, this option scored 6 and was the highest scoring option.

Option 2 (lids) and Option 4 (shower caps) meanwhile could represent a further mobility issues as these both need to be secured to the boxes which may be difficult for older and/or disabled or less able residents. These Options therefore scored 4 and 4.5 respectively, with Option 4 (shower caps) scoring slightly higher due to the shower caps being slightly easier to affix to the box.

### 3.2.7 Overall results

In Option 1 (do nothing) there is no need to run additional vehicles and no disruption to the existing service. However, the service is clearly in contrary to the council's Climate Emergency agenda. With this option, WBC will continue losing potentially recyclable material due to the wet waste issue, pay additional costs and there will continue to be a negative impact on recycling rate. In short, do nothing means a highly significant impact on WBC's recycling rate and disposal budget. Option 1 therefore scored the lowest in the best-case options appraisal scenario with an overall weighted score of 2.3 out of 10. However, in the worst-case scenario Option 1 scored better, with an overall score of 4.7, ranked in second place. This is due to no additional vehicles being necessary with this option.

With Option 2 (lids), there is also no guarantee of paper and card being dry due to residents' discretion to use the lids. It is anticipated that there would be high volumes of calls for damaged and lost lids, as well as complaints being received of lids blowing across streets and littering the locality. In addition, there is likely to be a reduced capacity with this Option as boxes can no longer be filled over the box height as in Option 1 (do nothing) and Option 4 (shower caps). This may lead to a requirement of extra boxes from residents and/or previously recyclable material instead going into the residual waste stream once capacity of the boxes has been reached. However, the impact on wet paper and cardboard will be noticeable, diverting 3% from wet paper into recycling. It should be noted that the recycling rate is still not expected to recover to the baseline of 56% in wet weather due to residents' discretion to use lids and the potential for uncovered side waste to be presented. This Option scored 4.6 out of 10 in the best-case scenario and ranked in third place. In the worst-case scenario it scored the lowest of all Options with a score of 3.2 and ranked fourth, largely due to the costs of the two additional vehicles and the slightly higher unit cost of the lids compared to Option 4 (shower caps).

The overall results of both the best-case and worst-case options appraisals shows that Option 3 (weighted recycling bags) is the highest scoring option, ranking first in both scenarios. The option scores significantly above the other Options with a best-case scenario score of 8 out of 10 and a worst-case scenario score of 8.3 out of 10. This option scored highest in recycling performance, annual revenue impact, political and public acceptability, carbon impact (best-case) and in the equality impact assessment categories. Similarly to Option 2 (lids) and Option 4 (shower caps), it will still be at residents discretion to ensure the bag is secured correctly using the Velcro fastening. In addition, with this option boxes will become redundant so additional communications and support from the customer delivery team will be needed to advise against usage.

Option 4 (shower caps) ranked second in the best-case scenario with a score of 5.4 and ranked third in the worst-case scenario with a score of 3.5. This option scored well for recycling performance, annual revenue impact, capital cost, and carbon impact. However, similarly to Option 2 (lids), several disadvantages should be noted. Two additional collection vehicles at the cost of £440k would be required in the worst-case scenario. Furthermore, residents may not tie the shower cap to their boxes, resulting in an increased quantity going missing and needing replacement. There is therefore the need to account for the same replacement schedule as with Option 2 (lids). It is anticipated that there would therefore be high call volumes and complaints regarding lost shower caps, as well as complaints being received of lids blowing across streets and littering the locality, requiring additional support from the communications and customer delivery teams. However, this Option presents additional capacity to be presented in the same way as with Option 1 (do nothing). Shower caps are also the cheapest capital cost option to implement, aside from doing nothing.

## 4 Recommendations

The wet waste options appraisal result identifies that the preferred solution to the wet waste issue is the weighted waterproof recycling bags option, in both the best-case and worst-case scenarios. It is therefore recommended that this option is progressed to alleviate the current issues associated with wet waste.

## 5 Operational considerations for the preferred option

There is uncertainty in relation to the impact of operating the weighted bag option (as well as with Option 2 (lids) and Option 4 (shower caps)) on the number of additional collection vehicles which may be required. Further discussion and testing of the bags with Veolia will be necessary to determine the resource requirements of this option. Following this, further analysis of the impact on pick rates can be undertaken to assess the resource requirements in more detail. This would provide WBC with some due diligence on the assessments which Veolia will similarly make when considering the impacts of collecting weighted recycling bags instead of kerbside boxes.

When introducing the weighted bags option, it is important to consider the service changes from a resident perspective. Two key changes will take place. Firstly, the kerbside boxes will be discontinued from use and secondly new receptacles, the weighted bags, will be introduced. To mitigate any confusion arising at the point the service changes, WBC should consider allowing residents a grace period where the existing kerbside boxes and/or weighted bags are collected for a short period of time whilst the weighted bags become embedded. This will allow residents time to transition to the service change and WBC time to deliver any bags which may have been missed from the initial delivery.

Operatives will need to communicate with residents who present boxes for collection during this time. A bespoke communications plan should be written to support this, detailing what communication method should be used (i.e. stickers on boxes, for example). However, it is recommended that the overall communications campaign which accompanies the service change does not deviate from the simple message that bags will replace boxes from a given date, despite operating a grace period of collecting boxes. It is also important to limit operating the grace period for any longer than four collection cycles; with this ideally lasting for two to three. Allowing any longer than this can cause confusion amongst residents and potentially lead to additional customer enquiries and complaints.

As kerbside boxes will no longer be used, there are two options available for ensuring the boxes are discontinued from their current use:

1. Collect back the boxes; or
2. Ask residents to repurpose the boxes.

The advantages and disadvantages of these options are summarised in Table 9.

Table 9: Advantages and disadvantages of each option

Option	Advantages	Disadvantages
Collect back the boxes	<ul style="list-style-type: none"> <li>• Will minimise complaints from residents at the point the service changes</li> <li>• Will minimise the likelihood of any boxes being fly tipped</li> </ul>	<ul style="list-style-type: none"> <li>• Expensive as dedicated vehicles and staff will be required, working full time for up to four weeks (i.e. four collection cycles). Disposal costs of the boxes will also need to be factored in</li> <li>• A bespoke communications plan will be necessary</li> <li>• Will not capture all boxes owing to residents forgetting, holidays, illness etc and therefore complaints may still be received</li> <li>• Collecting and disposing of boxes before the end of their life expectancy may lead to complaints about misspending</li> <li>• If residents haven't yet received their weighted bags (perhaps they were accidentally missed off the initial bag delivery, for example), collecting the boxes back in could leave residents with no containment for a period of time, causing complaints and potentially resulting in recycle going in the residual waste stream</li> </ul>
Residents repurpose boxes	<ul style="list-style-type: none"> <li>• Re-use is top of the waste hierarchy and demonstrates that the council adheres to its own messaging</li> <li>• The boxes are multi-functional and many residents can usefully repurpose them (as storage for use in sheds / attics / playrooms / bedrooms or as planters in the garden, for example)</li> <li>• There are no costs associated with this option, aside from any communications support</li> <li>• Residents can take the boxes to the HRC for disposal or give them to friends or neighbours who may be able to use them</li> </ul>	<ul style="list-style-type: none"> <li>• A bespoke communications plan will be necessary</li> <li>• Complaints will be received from residents who do not wish to find an alternative use for them or who do not wish to dispose of them themselves</li> <li>• May lead to an increase in likelihood of residents fly tipping the boxes, although they will be accepted at the HRCs, so this risk is minimised</li> </ul>

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## Appendix 2 Waterproof Recycling Bag Information

The three sample bags being tested at re3 for resistance to moisture on Monday 20<sup>th</sup> July.



### Data for the Weighted Waterproof Recycling Bag

- 60 litre capacity
- 40x40x60cm
- Cost £1.66 per unit
- Stands upright
- 2 lifting handles & 1 tip handle
- 350g rubber pad to add weight
- Velcro strip across the width of the bag at the top
- Manufacturing tolerance +/- 5%
- Made from woven polypropylene with plastic coating

Selected sealed bag based on stringent testing for moisture.

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### Appendix 3

## **Equality Impact Assessment For Place (WASTE & RECYCLING COLLECTIONS – (Change of container from a recycling box to a waterproof recycling bag)**

**Start date: Winter 2020**

August 2020

Version 1

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Describe the main purpose of the service

- To collect mixed dry recycling from approximately 67,000 properties across the Borough
- To ensure that this waste is kept dry
- To provide a service available to all

Who are the main beneficiaries of the service?

- Approx. 67,000 properties in the Borough

Who were involved in the creation of the impact assessment how did you collect the data e.g. Focus groups, questionnaires, interviews. What documents did you reference in the creation of the EqIA

Communication programme	September 2020 onwards
Articles in Town and Parish News	September 2020 onwards
Executive Report	September 24 <sup>th</sup> 2020
All Member Briefings	October 2020
Information leaflet to be delivered through letter box with bags	December/January 2020/21

**Impact Table**

	Positive impact	Negative impact	Explanation/mitigation	Source Document
Race	Work with Localities (Community Engagement)		No issue identified	

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Disability

Assisted collections, available. Some residents with visual impairment, mental health issues and mobility problems are unable to place their waste by the kerbside.

The difficulty is mitigated by the provision of the "assisted collection service" where eligible residents have their waste collected from wherever they store it. Clienting to implement a system to help those with special requirements around an extra allocation of bags for those highlighting they have a problem.

Executive Report 28<sup>th</sup> October 2010 attachment 4. As this was deemed not to be a significant change to the service the Council had a duty to inform but not consult on the overall strategy.

See below web site address for assisted collections:  
<https://selfservice.wokingham.gov.uk/services/assistedcollection/>

Age

Assisted collections, available. Some residents with visual impairment, mental health issues and mobility problems are unable to place their waste by the kerbside.

The difficulty is mitigated by the provision of the "assisted collection service" where eligible residents have their waste collected from wherever they store it. Clienting to implement a system to help those with special requirements around an extra allocation of bags for those highlighting they have a problem.

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Sexual Orientation

No Issue Identified

Faith	Provide awareness that waste for places of worship is regarded as household waste and therefore is collected free provided they stay within the annual 80 bags limit	Ongoing work with Places of Worship	
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## Appendix 4

### Communications, Engagement and Marketing Plan for Waste Improvements Project – Short Term

#### Objective:

To inform residents that we are replacing the black recycling boxes with weighted waterproof recycling bags

#### Key messages:

- Our recycling services are not changing, we will still collect in the same way and on the same day, but waterproof recycling bags will replace the black boxes
- The new recycling bags are waterproof, which will keep the recycling material dry and allow more of our collections to be recycled
- Recycling wet paper is not as simple as it used to be, moisture affects the quality of recycling paper and wet paper often cannot be recycled
- The market for recycled paper has changed, forcing up the standard of recycled paper required by the companies who buy it from us
- We have an ambitious goal to drive up our recycling rates and can only achieve this if we can recycle all paper and card which is not possible if it has a high moisture content
- Here's how to do it – details of solution

#### Target audiences

1. Members
2. Town and parish councils
3. All borough residents

Communications and engagement methods	When
<b>Members</b>  Media release and FAQs sent to all members prior to launch	September/October
<b>Leaflet design &amp; printing</b> <ul style="list-style-type: none"> <li>• Work with Digital Solutions on leaflet design and printing</li> <li>• Design – 1 week</li> <li>• Printing – 1 week</li> <li>• Royal Mail – 3 to 4 weeks</li> </ul>	September/October
<b>Pre-launch information campaign</b> <ul style="list-style-type: none"> <li>• Direct mail to every house in the borough               <ul style="list-style-type: none"> <li>○ FAQs</li> <li>○ How to use the new recycling bags</li> <li>○ What to do with old black boxes</li> </ul> </li> <li>• Web pages with info</li> <li>• News release</li> <li>• Connect</li> <li>• Social media (WBC and wider groups)</li> </ul>	October/November

<ul style="list-style-type: none"> <li>• Notification to all members and town and parish councils</li> <li>• Notifications to disability and other hard to reach groups</li> </ul>	
<p><b>Launch</b></p> <ul style="list-style-type: none"> <li>• News release</li> <li>• Connect</li> <li>• Social media (WBC and wider groups)</li> <li>• Notification to all members and town and parish councils</li> </ul>	One week before product delivery starts
<p><b>Delivery</b></p> <ul style="list-style-type: none"> <li>• Letter/Info sheet with bags <ul style="list-style-type: none"> <li>○ What to do with old boxes</li> <li>○ FAQs on wet paper</li> <li>○ How to use new recycling bags</li> <li>○ What you can/cannot recycle</li> <li>○ Tips on increasing your recycling</li> <li>○ Why recycling is important</li> </ul> </li> </ul>	Product delivery
<p><b>Ongoing promotion</b></p> <ul style="list-style-type: none"> <li>• Every other week social media reminders</li> <li>• Every other week Connect general news newsletter</li> <li>• Every other week Connect waste/recycling newsletter</li> </ul>	Following launch, throughout delivery period and first month of use
<p><b>Increasing recycling rates campaign</b></p> <ul style="list-style-type: none"> <li>• Target food waste, electric and electronic equipment, plastics, paper/card, glass, textiles</li> <li>• Weekly topic for Social media and eNewsletter campaign to increase recycling rates</li> <li>• Monthly media releases</li> <li>• Work with national campaign WRAP – campaigns Wokingham Recycles; Don't bin it, bring it; Recycle Now</li> </ul>	Launch December/January and ongoing

## Appendix 5:

### Proposed change to recycling containers FAQ September 2020

#### **Q 1. What is the proposed change?**

We are proposing to replace the existing black recycling boxes with waterproof recycling bags during winter 2020/21 (roll out date TBC). The new bags are made from a waterproof material and seal at the top. The bags are bigger than the existing boxes, each with the capacity to hold 60 litres. This change is for houses only and will not impact communal properties such as flats.

#### **Q 2. Why do we need to change?**

When it rains, card and paper recycling gets wet in our recycling boxes. Previously the moisture level of our recycling was not an issue. However last year the UK and European markets, where most of our recycling is re-processed, started demanding higher quality recycling due to a change in the world market. It means that the quality of paper and cardboard from Wokingham is unable to match the higher quality now. As result all our recycling cannot be recycled when it gets wet. This could cost the Council £600,000 per year and could result in a 6% decrease in our recycling rate every year.

In a 2017 market research survey our residents have informed us that treating their recycling in an ethical way is a top priority. The recycling bags are being proposed as an alternative recycling option to keep paper and card dry and allow it to be recycled.

#### **Q 3. What options have been looked at and why are bags the best option for WBC?**

In a market research survey conducted in 2017 by a consultancy, 92% of residents supported the current service of continuing with weekly collections with blue bags and recycling boxes. Due to the emergent issue of wet paper and cardboard we now have to replace the recycling boxes. As we need to act quickly, we considered only short-term options including lids and shower caps for the existing recycling boxes, and waterproof recycling bags. All these options were assessed by an independent consultant and the waterproof recycling bags stood out to be the best option to tackle the issue of wet paper and cardboard, as well as being the better choice environmentally, financially and socially amongst the available options.

#### **Q 4. How do we know the bags are fit for purpose?**

Monmouthshire County Council has trialled these bags for a year now, and following satisfactory results from their trial, they are planning to roll these bags out to the entire borough next year. We have tested the bags with our partners Veolia and re3 and both are satisfied with the result of the tests. In addition, we have carried out in-house testing to assess how user friendly they are from a resident's perspective and found them more user friendly than our recycling boxes.

#### **Q 5. How do reusable bags benefit residents?**

- Prevent litter and access by animals
- Prevent paper and card getting wet
- Have greater capacity
- Provide savings on ongoing container costs
- Allow for easy collection from Community Hubs
- Are less likely to be broken or damaged
- Provide added convenience due to easy handling

**Q 6. What is the useful life of these bags?**

The life expectancy of the bags is up to five years. This can be prolonged if these are stored indoors in order to reduce their exposure to UV light. Dragging and overfilling can also degrade the fabric of the bags, which would shorten their lifespan.

**Q 7. Are the new waterproof recycling bags secure?**

The bags come with a Velcro strip running across the width of the bag and two additional Velcro strips at both ends of the opening to help keep all your recycling secure and dry. The Velcro has been tested and has a lifespan of 10,000 openings. It is best to store these indoors to keep them away from permanent or prolonged exposure to UV light.

**Q 8. Will the bags have the same capacity as the black boxes?**

The bags have a 60 litre capacity and are bigger than the current black boxes

**Q 9. How many bags will I get?**

Each house would receive two bags. However, residents can have as many bags as they wish and will be able to collect additional bags from hubs after the borough-wide roll out.

**Q 10. What can I recycle in the bags?**

There is no change to the items that can be recycled. We will continue to collect the following items:

- Paper
- Cardboard (broken down and folded)
- Plastic bottles including lids
- Plastic pots, tubs and trays (no black plastic)
- Food tins and drinks cans
- Aerosols (empty please)
- Milk, soup and juice cartons

Residents can also benefit from our re3cyclpedia app for further assistance which can be accessed by using our website [www.wokingham.gov.uk/rubbish-and-recycling](http://www.wokingham.gov.uk/rubbish-and-recycling)

**Q 11. We put metal cans to be recycled, so could sharp edges tear the fabric?**

The bags are tested so there is very low risk of the bags being cut with metal edges. Sharp edged items are still not advised to be put in the recycling. These can pose a health and safety risk to the collection operators.

**Q 12. If I have a large piece of cardboard and it doesn't fit in the bags, what do I do?**

Residents will be able to place cardboard inside the bags if broken down into smaller pieces. Larger cardboard can also be recycled at one of our Household Waste Recycling Centres (HWRCs) in Smallmead, Reading or Longshot Lane, Bracknell.

Please help us recycle all your paper & cardboard. It constitutes the majority of our recycling and losing it out of the recycling loop means a considerable impact on our recycling rate and on the environment. Card and paper are a finite resource and can only be recycled if it remains dry.

**Q 13. Why can I still not recycle glass in the new bags?**

The new bags are just replacing the existing recycling boxes to help us manage the issue of wet paper and cardboard. Our current bottle banks are an established system for recycling glass. By sorting glass into colours at our bottle banks, it means it definitely gets recycled into another glass bottle rather than crushed and used for another purpose such as aggregate. You can find your nearest bottle bank site on [www.recyclenow.com](http://www.recyclenow.com).

**Q 14. Will there be any changes to the collection day?**

The vast majority of residents will not have their collection day changed. Residents will be informed by letter where any minor change is necessary.

**Q 15. Where to present your recycling on the collection day?**

Bags should be presented at your usual collection point, along with your blue bin bags and food waste caddy. We will still collect rubbish, recycling and food waste at the same time in the same vehicle.

**Q 16. Won't rubbish tip out of bags during emptying?**

Our crew will continue to carry their bins with them and will empty the bags into their bins before tipping them into the truck. This will reduce the risk of recyclates littering the street.

**Q 17. What will the Council do to stop bags being blown down the street?**

The bags come with a 350g rubber pad at the bottom which will keep them from blowing away. The trial in Monmouthshire has found that the bags do not blow away when empty with only 23 replacement bags being requested by the 6,000 households that have trialled the since September 2019.

**Q 18. Bin men will have to put them away properly to stop them being a trip hazard?**

As with our current black boxes, the collection crew will leave them where they have collected from. Weight added at the bottom of the bags will keep them from moving.

**Q 19. Surely it will take them longer to empty the bags properly?**

Yes, we estimate we will need to add an extra vehicle to the existing fleet to accommodate this change. The positive impact on our recycling rate and the cost avoidance from solving the wet paper problem will outweigh the financial impact of the additional vehicle by over £400k per annum.

**Q 20. Should we all store the bags inside to keep the paper dry?**

If you can keep the bags inside that would be great but we understand not everyone can. If you have to store them outside please keep them sealed all the time to keep your paper and cardboard dry.

**Q 21. Will they stand up to being washed?**

It is strictly not advised to wash the bags in the washing machine. A light rinse or wipe will help keep them clean. It is also advised to quickly rinse your recycling which will reduce the risk of the bags getting dirty in the first place.

**Q 22. How do I get an extra new bag or a replacement bag?**

After the initial roll out, bags will be available from all the hubs that currently provide our blue bin bags and garden waste bags. Visit our website [www.wokingham.gov.uk](http://www.wokingham.gov.uk) for further information.

**Q 23. Elderly residents won't be able to use them conveniently especially if they are weighted**

The weight of the rubber pad, which is added for this purpose, is only 350g. Together with the weight of the bag these are slightly less than the existing recycling boxes. The weight of an empty recycling box is approximately 1400g. These bags are much easier to handle as there is less bending as compared to the current box.

**Q 24. I am on assisted collection will this continue?**

Yes, your assisted collection will continue. All your rubbish, recycling and food waste will continue to be collected from your designated collection point.

**Q 25. Can I still use recycling boxes along with bags if this proposal goes ahead?**

If the proposed recycling bags goes ahead, then once the bags are delivered residents can use the new bags only. However, there will be a transition period of four weeks after delivery, after which the recycling boxes will not be emptied.

**Q 26. Why can't we have lids for the black boxes?**

We looked at the possibility of lids through the options assessment but determined that they are less effective and more costly both financially and environmentally.

**Q 27. What do I do with my old black recycling boxes if the proposal goes ahead?**

Wherever possible we encourage residents to repurpose their old recycling boxes. For example, some residents use these as garden planters or for storage. However, we will collect any unwanted black recycling boxes once the reusable bags are delivered. A schedule for the delivery of new bags and collection of old boxes will be provided if the proposal goes forward.

**Q 28. Will you send the collection team again if I miss the collection slot for redundant recycling boxes?**

If you miss the scheduled collection of the old recycling boxes then we will be unable to arrange a further collection. Residents will be able to dispose of their unwanted recycling boxes at one of our recycling centres at Smallmead, Reading or Longshot Lane, Bracknell.

**Q 29. Why can't we have wheelie bins?**

Using wheelie bins significantly slows down the operation for the collection vehicles going around the borough. It's estimated that we would need another three vehicles to be able to cover the borough due to the extra time it takes to empty individual wheelie bins compared to the current system (where collection operatives empty multiple recycling boxes in one bin, they carry it with them, which goes on the back of the truck before being tipped in). Wheelie bins are not possible while retaining weekly collections due to the additional cost but are more viable for fortnightly collections.

**Q 30. Did you consider metal bins which are weighted, waterproof and 100% recyclable?**

Metal bins are considerably more expensive and heavier than the proposed waterproof recycling bags. To provide two bins per home would cost the council £1.3million, which is substantially more expensive than the waterproof recycling bags.

**Q 31. Surely the council could spend the £600k on something more important?**

£600k is the amount that the Council would lose per year as a result of wet card and paper, made up of lost income from recycling and additional cost to dispose of this material. The cost of the bag solution is £288k (a one-off payment to purchase the bags) and £235k per year for the additional vehicle and crew. Within one year, the council will have recouped the money lost to wet waste and from year two onwards, the bag option will be £365k per year cheaper for the council than the black recycling boxes.

**Q 32. Will there be a consultation with residents?**

The proposed change would not result in a change to the level of service our residents receive, only a change to the container used. Your waste and recycling will be collected every week in the same way but using a different container - all that would change is that we ask you to put the recycling in the new bags as opposed to the open recycling boxes to enable us to recycle more because paper and card would be kept dry.

**Q 33. Is there a cost to delaying this decision?**

Any delay in putting in place this initiative will cost the Council £13,000 a week and reduce 1% recycling every month.

**Q 34. Bearing that in mind could there be a pilot trial in a certain areas?**

Unfortunately, recent experience has demonstrated that we need to implement a solution as soon as possible to offset the environmental and financial impact of wet waste. In addition to undertaking a full options report, we have spoken to Monmouthshire County Council who use this particular type of bag with positive results and tested them with our partners to make sure that they are fit for purpose.

**We thank all our residents for their recycling efforts.**

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