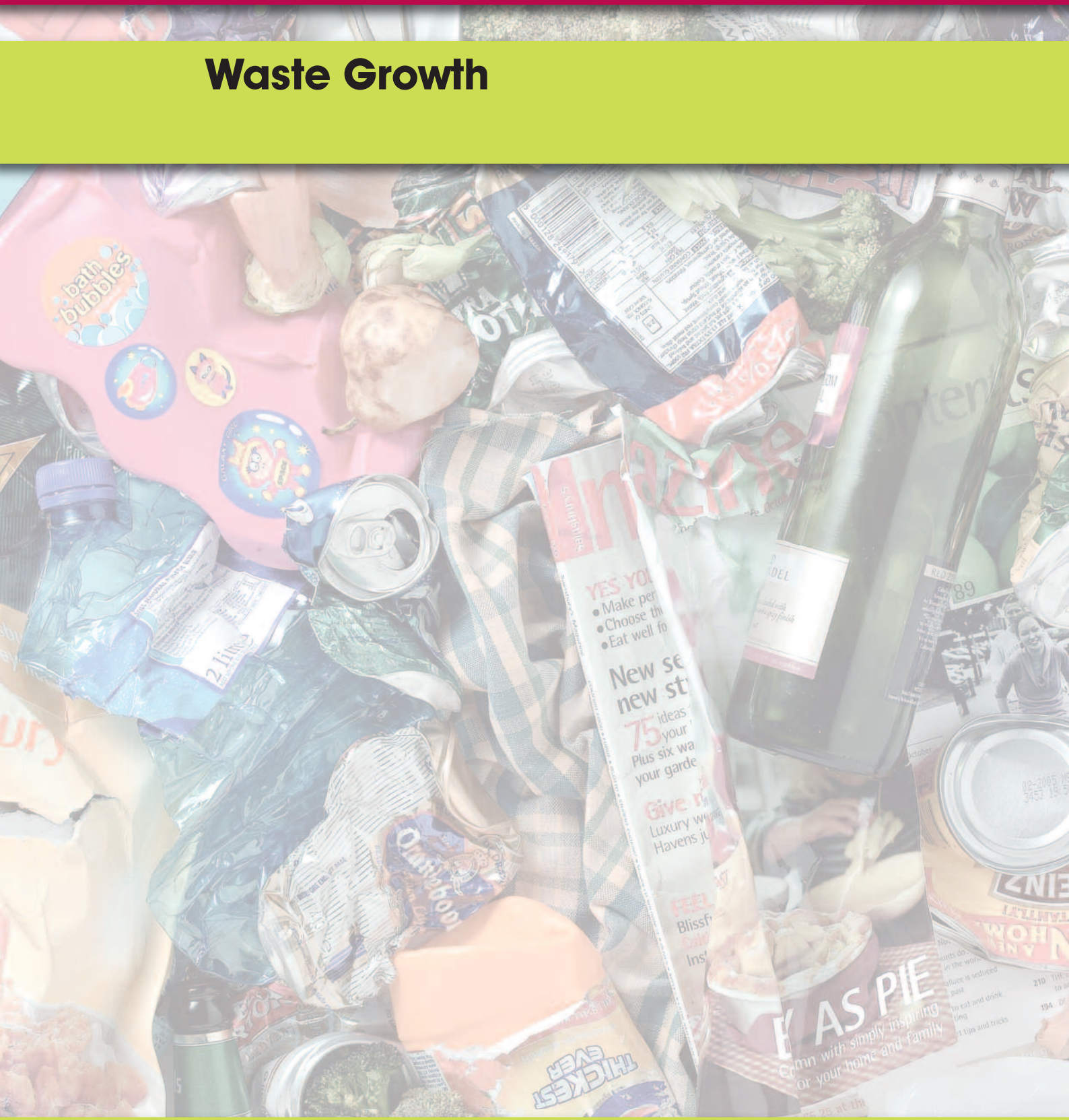
Annex A

Waste Growth



The Joint Municipal Waste Management Strategy
for Herefordshire and Worcestershire 2004 - 2034

First review August 2011

Waste Growth

In developing the Joint Municipal Waste Management Strategy (JMWMS) for Herefordshire and Worcestershire it is important to try and predict the future waste tonnages that will have to be managed. The amount and type of waste will be dependent on a number of factors including:

- The number of additional dwellings. In the period 2006 to 2026, the current Regional Spatial Strategy allocates more than 16,000 dwellings in Herefordshire and more than 36,500 dwellings in Worcestershire.
- Government policy and legislation.
- The economic climate.
- The effects of climate change.
- Demographic structure.

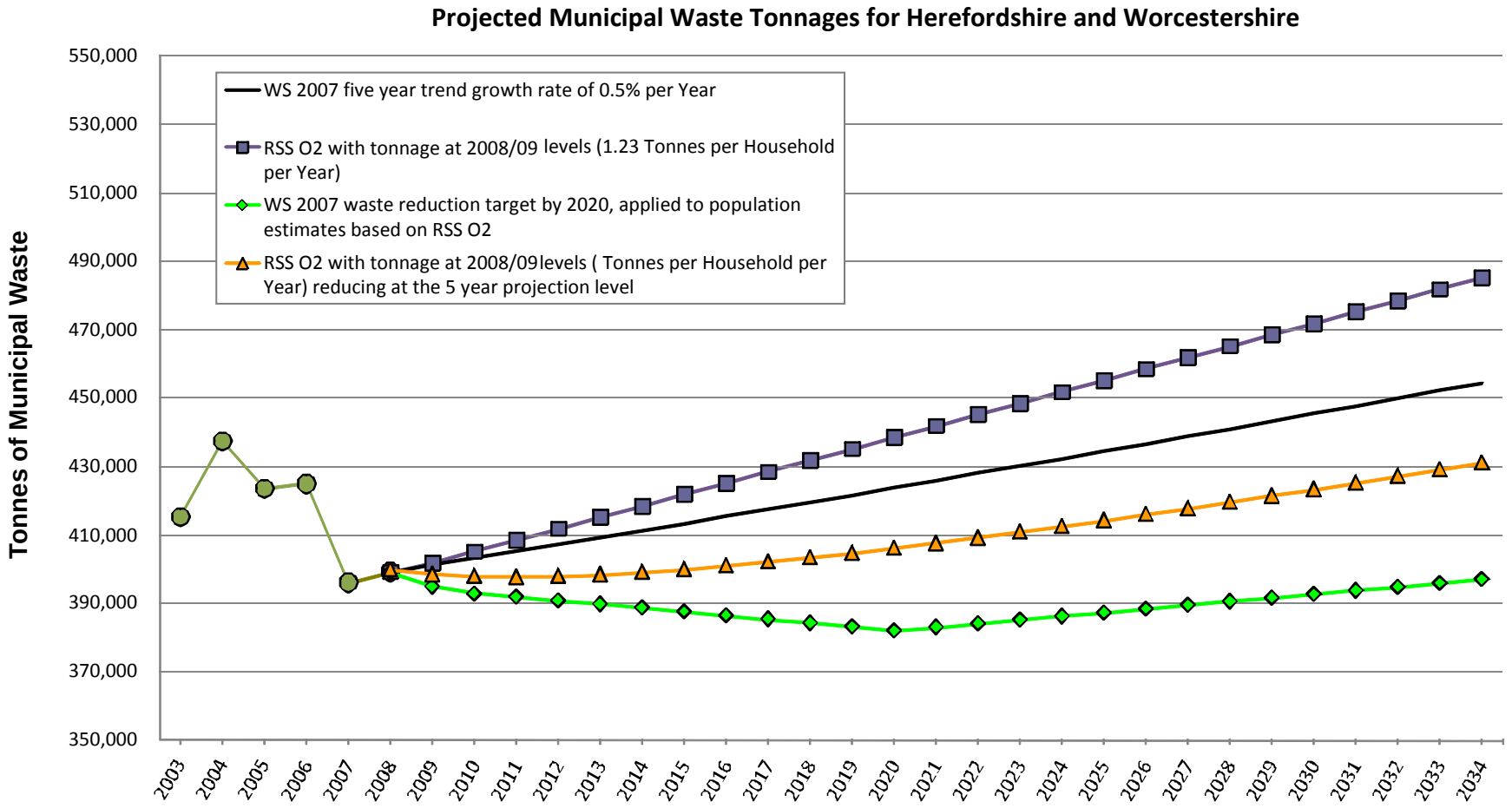
The amount of Municipal Solid Waste (MSW) produced in Herefordshire and Worcestershire has levelled off and started to fall over the last four years. A number of different growth scenarios have been investigated to try and show how this might change in the future and this will help determine the expected tonnage that will require disposal.

- **Scenario 1** - a top end estimate of the average MSW growth rate for the last five years, as quoted in the Waste Strategy for England 2007.
- **Scenario 2** – a forecast of MSW growth based on the latest (2008/09) tonnages for Herefordshire and Worcestershire, with rates of production per household remaining constant, but with the number of households growing in line with option 2 from the Regional Spatial Strategy
- **Scenario 3** – a forecast of MSW growth based on the objectives from the Waste Strategy for England 2007 to reduce household waste not re-used, recycled or composted to 225kg/head by 2020. So with a 50% re-use, recycling and composting rate that means total household waste arisings will be 450kg/head. The growth in population associated with option 2 of the Regional Spatial Strategy has been applied to the total household waste arisings of 450kg/head. Non-household waste arisings have been assumed to remain static.
- **Scenario 4** – a forecast of MSW growth based on a profile of the MSW arisings in Herefordshire and Worcestershire from the last five years but with the number of households growing in line with option 2 of the Regional Spatial Strategy**.**

Table 1 and Figure 1 show the expected future growth of MSW under these different scenarios.

Scenario	Tonnes MSW in 2010	Tonnes MSW in 2015	Tonnes MSW in 2020	Tonnes MSW in 2034	Difference 2008/09 to 2034
1 - 0.5% growth	403,202	413,383	423,822	454,473	58,480 tonnes annual increase
2 - 2008/09 kg/hh with RSS option 2	405,139	421,817	438,496	485,197	89,204 tonnes annual increase
3 - WS 2007 with RSS option 2	392,889	387,574	381,886	397,007	1,014 tonnes annual increase
4 - 5 year projection with RSS option 2	397,886	399,929	406,109	430,976	34,983 tonnes annual increase

Figure 1 – Projected Municipal Solid Waste Growth Scenarios for Herefordshire and Worcestershire



- The Regional Spacial Strategy has a number of options for annual build rates of new dwellings and the one that Worcestershire are proposing to adopt is option two. This would give approximately an extra 1,900 dwellings per annum in Worcestershire.

Conclusion

The planned level of house building in the Regional Spatial Strategy means that the number of households in Herefordshire and Worcestershire is expected to grow considerably over the next 20 years. It is therefore essential that this be taken into account when growth scenarios for Herefordshire and Worcestershire are considered.

To ensure greater deliverability, this Strategy and the Waste Core Strategies for Herefordshire and Worcestershire need to be aligned.

Sensitivity Analyses of the effect of differing growth rates will be explored during development of the Strategy.

Quantitative examples of how reductions in MSW arisings can be achieved will be fully explored in the waste minimisation options appraisal report.

The waste growth scenario used for the review of the JMWMS is scenario 2, where rates of production per household remain constant at 2007/08 levels but the number of households grows in line with option 2 from the Regional Spatial Strategy. The reason behind this choice is that although we are intending to concentrate our efforts on waste minimisation we are also implementing paid for green waste collections in some local authority areas. Our experience shows that new green waste collections actually generate an increased overall tonnage of MSW, it is our belief that this will balance the waste minimisation efforts and thus waste growth will be due only to the growth in the number of households