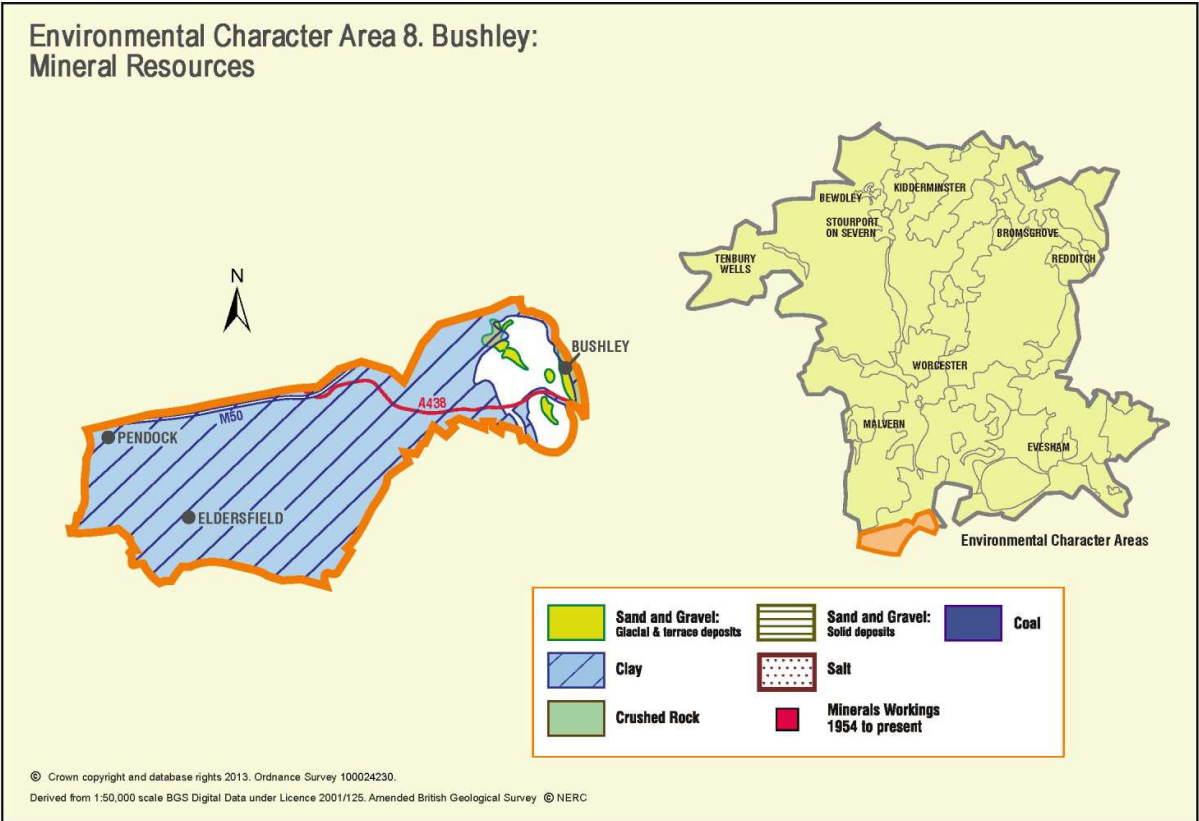


# Appendix 8: Analysis of aggregate resources in ECA 8: Bushley



## ECA Summary for the Fourth Stage consultation on MLP (Winter 2018):

Sand and gravel  
 There are 3 resource areas identified for sand and gravel in Bushley ECA:

- Key: 1
- Not Significant: 1
- Compromised: 1

Crushed rock  
 There are no resource areas identified in Bushley ECA for crushed rock.

Non-aggregates  
 BGS data indicates that there are deposits of clay in this ECA.

## Overview of resource assessment for ECA 8

Sand and gravel resource areas:

Resource number*	Second Stage Consultation		Third Stage Consultation		Fourth Stage Consultation		
	Original estimated resource tonnage (2 tonnes/m <sup>3</sup> )	Significance	Revised estimate of resource tonnage (1.65 tonnes/m <sup>3</sup> )	Significance	New resource number (where resource has been split)	Revised estimate of resource tonnage (1.65 tonnes/m <sup>3</sup> )	Result
8/1	2,666,000	Key	2,199,450	Key	8/1	21,208,580	Key
					8/1b		Compromised
8/2	640,000	Significant	528,000	Not significant	Not reassessed		

<b>Overview</b>		
<b>Resource number:</b>	8/1	
<b>Resource name:</b>	Bushley Green	
<b>Resource area:</b>	28	
<b>Resource depth:</b>	Estimated 9.5m	
<b>Location</b>		
<b>OS sheet reference:</b>	SO 83 SE	
<b>National grid ref:</b>	386359, 233981	
<b>Resource description:</b>		
<b>Resource description:</b>	<p>5<sup>th</sup> to 6<sup>th</sup> terrace sand and gravel. An old pit at Bushley Green indicates a thickness of at least 9.45m. The composition of the gravel varies from rounded quartzite to Malvernian pebbles. The available evidence suggests that a thickness and composition may be very variable and consequently any future investigation would need to be detailed.</p> <p>(Estimated resource depth based on exposure of depth at Bushley Green this is rounded to 9.5m)</p>	
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>		
<b>Commentary:</b>	A small deposit partially compromised by a small-scale ribbon development in the west of the resource area.	
<b>Crude estimate of resource:</b>	Area: 28ha x average depth: 9.5m / 2 Estimated resource volume: 1,333,000m <sup>3</sup> . <b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 2,666,000 tonnes</b>	
<b>Conclusion:</b>	Significant – key resource. Use to define areas of search.	
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>		
<b>Revised estimate of resource:</b>	Area: 28ha x average depth: 9.5m / 2 Estimated resource volume: 1,333,000m <sup>3</sup> . <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 2,199,450 tonnes</b>	
<b>Conclusion:</b>	Significant – key resource.	
<b>Assessment of resource for the Fourth Stage consultation on MLP (August 2018)</b>		

This resource area has been split into areas 8/1 and 8/1b.			
<b>Resource area 8/1</b>		<b>Resource area 8/1b</b>	
<b>Resource area:</b>	27 ha	<b>Commentary:</b>	Screened out due to the following appendix A criterion: <ul style="list-style-type: none"> <li>- Listed Buildings</li> <li>- Site of Special Scientific Interest</li> </ul>
<b>Resource depth:</b>	Estimated 9.5m		
<b>Revised estimate of resource:</b>	Area: 27 ha x average depth: 9.5m ÷ 2 Estimated resource volume: 1,282,500 m <sup>3</sup> <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 2,116,125 tonnes</b>		
<b>Conclusion:</b>	Key resource	<b>Conclusion:</b>	Compromised

<b>Overview</b>		<p>© Crown copyright and database rights 2018 Ordnance Survey 100024230</p> <p>Derived from 1:50,000 scale BGS Digital Data under Licence 2001/125. Amended British Geological Survey © NERC</p>
<b>Resource number:</b>	8/2	
<b>Resource name:</b>	Bushley	
<b>Resource area:</b>	32 ha	
<b>Resource depth:</b>	Estimated 2m	
<b>Location</b>		
<b>OS sheet reference:</b>	SO 83 SE	
<b>National grid ref:</b>	387727, 233981	
<b>Resource description:</b>		
<b>Resource description:</b>	3rd terrace (Holt Heath) sand and gravel. There are no exposures but at the surface gravel with bunter pebbles is present. The deposits are mainly well sorted, well rounded pebbly sands. At Bushley, the memoir states that it is difficult to estimate thickness but that 1-3m would appear reasonable. (Estimated resource depth based on median depth of 2m)	
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>		
<b>Commentary:</b>	A small deposit with a small-scale settlement in the northern end of the resource area and scattered	

	development throughout.
<b>Crude estimate of resource:</b>	Area: 32 ha x average depth: 2m x 0.5 Estimated resource volume: 320,000m <sup>3</sup> <b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 640,000 tonnes.</b>
<b>Conclusion:</b>	Significant. Consider in defining areas of search.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	Area: 32 ha x average depth: 2m x 0.5 Estimated resource volume: 320,000m <sup>3</sup> <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 528,000 tonnes</b>
<b>Conclusion:</b>	Change to conclusion: Not significant.
<b>Assessment of resource for the Fourth Stage consultation on MLP (August 2018)</b>	
Not reassessed due to resource not being classified as Key or Significant in the Third Stage Consultation	