

Redditch Borough Council - Catchment Areas Analysis (Flows)

This document is to be read in conjunction with the "Areas" spreadsheet. As part of the EA's actions into Catchment Flood Management Plans, before a risk based approach can be employed, a means of grading watercourses needs to be made.

The 2 principle criteria for designating a particular ditch or watercourse as being defined (by the EA) as a "Rapid Response Catchment" are: -

1) that its time to peak flows is less than 5 hours, and
the peak discharge exceeds 4 m³/s/km² (40 litres/s/ha)

2)

<u>WEST - Bow Brook</u>		Trigger Q	<u>EAST - River Arrow</u>		Total	BDC	
Spring Brook	361.649 ha	14.5 m ³ /sec	River Arrow - BDC	<u>3,217.155 ha</u>		<u>3,217.155</u>	100.00%
(Webheath)	103.075 ha	4.1 m ³ /sec		1 - 3,217.155 ha			
Alders Brook	309.054 ha	12.4 m ³ /sec	Batchley Brook	1,074.776 ha	43.0 m ³ /sec	628.726	58.50%
Thickwithey Brook	114.099 ha	4.6 m ³ /sec	Red Ditch	200.110 ha	8.0 m ³ /sec	107.158	53.55%
	<u>887.877 ha</u>		River Arrow - RBC	<u>116.027 ha</u>			
Swans/Elcocks Brook	491.141 ha	19.6 m ³ /sec		2 - 4,608.068 ha		<u>3,953.039</u>	85.79%
1A -	<u>1,379.018 ha</u>						
The Wharrage	205.951 ha	8.2 m ³ /sec	Dagnell Brook	1,216.660 ha	48.7 m ³ /sec	1,136.710	93.43%
Wixon Brook	158.695 ha	6.3 m ³ /sec	Church Hill Brook	366.971 ha	14.7 m ³ /sec	281.691	76.76%
	<u>364.646 ha</u>		Blacksoils Brook	<u>464.330 ha</u>	18.6 m ³ /sec	<u>239.473</u>	51.57%
1B -	<u>364.646 ha</u>			2,047.961 ha		1,657.874	80.95%
1 - 1,743.664 ha			River Arrow - RBC	<u>504.193 ha</u>			
				3 - 7,160.222 ha		5,610.913	78.36%
Plack Brook	230.604 ha	9.2 m ³ /sec					
Swans Brook	208.431 ha	8.3 m ³ /sec	River Arrow - RBC	<u>1,086.667 ha</u>		<u>157.727</u>	(SoDC)
	<u>439.035 ha</u>			4 - 8,246.889 ha		<u>5,768.640</u>	69.95%
2A -	<u>439.035 ha</u>						
1 - 1,743.664 ha							
2 - 2,182.699 ha							
Doe Bank Brook	226.320 ha	9.1 m ³ /sec					
Brandon Brook	708.039 ha	28.3 m ³ /sec					
3A -	<u>934.359 ha</u>						
Bow Brook	602.855 ha	24.1 m ³ /sec					
	<u>602.855 ha</u>						
3B -	<u>1,537.214 ha</u>						
2 - 2,182.699 ha							
3 - 3,719.913 ha							