

Greenfield runoff rate estimation for sites

www.uksuds.com | Greenfield runoff tool

Calculated by: Ryan Atherton Site Details Site name: mitton road Latitude: 53.83219° N Site location: whalley Longitude: 2.41699° W This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management Reference: 891791510 for developments", SC030219 (2013), the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may Date: Oct 22 2020 10:03 the basis for setting consents for the drainage of surface water runoff from sites.

R	lunoff	estim	ation	appro	bach
	MIIOII	Count	ation	appi	Juoii

Site characteristics

Notes

2.0 l/s/ha.

Total site area (ha):

2.1

IH124

(1) Is $Q_{BAR} < 2.0 \text{ l/s/ha}$?

Methodology

Q_{BAR} estimation method:

Calculate from SPR and SAAR

Default

Default

1134

10

0.87

1.7

2.08

2.37

SPR estimation method:

Calculate from SOIL type

Soil characteristics

Edited

Hydrological characteristics

Edited

1134

10

0.87

1.7

2.08

2.37

SAAR (mm):

SPR/SPRHOST:

SOIL type: **HOST class:**

Hydrological region:

Growth curve factor 1 year:

Growth curve factor 30 years:

Growth curve factor 100 years:

Growth curve factor 200 years:

4	4	
N/A	N/A	
0.47	0.47	

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

When Q_{BAR} is < 2.0 I/s/ha then limiting discharge rates are set at

(3) Is SPR/SPRHOST ≤ 0.3?

(2) Are flow rates < 5.0 l/s?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

Default Edited Q_{BAR} (I/s): 17.83 17.83 1 in 1 year (I/s): 15.51 15.51 1 in 30 years (I/s): 30.31 30.31 1 in 100 year (I/s): 37.08 37.08 1 in 200 years (I/s): 42.25 42.25

This report was produced using the greenfield runoff tool developed by HR Wallingford and available at www.uksuds.com. The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at www.uksuds.com/terms-and-conditions.htm. The outouts from this tool are estimates of greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, CEH, Hydrosolutions or any other organisation for the use of this data in the design or operational characteristics of any drainage scheme.