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# Greenfield runoff rate estimation for sites

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Calculated by:	Alan Mills
Site name:	Sunnycott Caravan Park
Site location:	Gurnard

## Site Details

Latitude:	50.74200° N
Longitude:	1.33475° W
Reference:	3019129351
Date:	Feb 26 2024 10:58

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 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 be the basis for setting consents for the drainage of surface water runoff from sites.

## Runoff estimation approach

IH124

## Site characteristics

Total site area (ha): 0.8

## Notes

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

## Methodology

$Q_{BAR}$ estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

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

## Soil characteristics

	Default	Edited
SOIL type:	4	4
HOST class:	N/A	N/A
SPR/SPRHOST:	0.47	0.47

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

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.

## Hydrological characteristics

	Default	Edited
SAAR (mm):	794	794
Hydrological region:	7	7
Growth curve factor 1 year:	0.85	0.85
Growth curve factor 30 years:	2.3	2.3

(3) Is  $SPR/SPRHOST \leq 0.3$ ?

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

Growth curve factor 100 years:

3.19

3.19

surface water runoff.

Growth curve factor 200 years:

3.74

3.74

## Greenfield runoff rates

	Default	Edited
<b>Q<sub>BAR</sub> (l/s):</b>	4.48	4.48
<b>1 in 1 year (l/s):</b>	3.8	3.8
<b>1 in 30 years (l/s):</b>	10.29	10.29
<b>1 in 100 year (l/s):</b>	14.28	14.28
<b>1 in 200 years (l/s):</b>	16.74	16.74

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