

## Questions from delegates at the UK SuDS webinar on 28 March 2017

**We reviewed all of the questions that were sent to us during the webinar. We have produced the following set of questions and answers based on these.**

### Can alternative limiting discharge flow rates be set?

The ways of over-riding the greenfield runoff rate are to set an alternative value of  $Q_{bar}$ , or to set a limiting discharge rate between 1 l/s and 5 l/s. At present there are no plans to make the tool more flexible in this regard.

### Why can the minimum discharge rate be edited to a value lower than 5 l/s?

The EA had previously set a value of 5 l/s as a minimum flow rate on the basis of blockage risk. However as 5 l/s for a single property is around 200 l/s/ha, it can be seen why there is pressure to use a lower value. Many suppliers now claim products can reduce flow rates to 1 l/s or less safely without risk of blockage.

### Can the tool cope with multiple soil classes on a site?

The tool cannot use multiple soil classes for one site. All sites have soils which vary in their characteristics across them. Either judgement must be used in choosing an average value, or the site is designed using an alternative approach.

### Why did the old website Greenfield runoff rate tool include M5-60 and r values, yet the new website appears to no longer have these?

These have been removed because they are not used in the calculation.

### Is storage calculated based on impermeable area?

The tool uses both the net impermeable area and the net site area to calculate storage. The net site area dictates the limiting discharge rates (based on the estimation of greenfield runoff rates), so although the runoff model used assumes that 100% runoff only takes place from impermeable surfaces and none from pervious surfaces, the attenuation storage volume is a function of both areas.

### How can this tool be used for sites in Scotland considering a 1:200 year return period should be used for sizing storage?

A specific provision for this is not planned at present. However a simple workaround is to provide the 1:200 year 12 hour rainfall depth to increase the FEH / FSR rainfall factor. This should provide a conservative, but reasonable estimate for the 1:200 year storage requirements. It is recommended

that the volumes are checked before construction proceeds as this may be a little larger than is required.

## Brownfield development is usually based on the concept of “betterment”. Can this tool be used for this situation?

At present this tool is not aimed at brownfield calculations.

## What guidance is there on calculating infiltration rates?

There is a tool for calculating storage volumes from known infiltration rates, but at present it does not calculate infiltration rates from site test data. We will consider whether to develop this.

## What has happened to the cost estimation tool?

This has been removed temporarily while it is being reviewed.

## What has happened to the joint probability tool?

This has been removed temporarily while it is being reviewed. The dependency coefficients for site runoff to rivers need to be revised.

## ReFH2 can report SPRHOST from importing the information from either the FEH web or FEH CDROM.

We have updated the webinar presentation accordingly.