

# UK Design Flood Estimation

Generated on 05 May 2021 08:18:23 by User  
 Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: 1ACA-BF0A

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 1 year

### Summary of results

Rainfall - FEH 2013 model (mm):	20.75	Total runoff (ML):	0.27
Total Rainfall (mm):	13.26	Total flow (ML):	0.68
Peak Rainfall (mm):	3.01	Peak flow (m <sup>3</sup> /s):	0.01

### Parameters

*Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.*

*\* Indicates that the user locked the duration/timestep*

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.84	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.2912	0.0000	0.1094	0.0000	0.00147	0.00147
00:30:00	0.4879	0.0000	0.1838	0.0000	0.00145	0.00148
01:00:00	0.8131	0.0000	0.3076	0.0001	0.00143	0.00156
01:30:00	1.3445	0.0000	0.5125	0.0003	0.00142	0.00177
02:00:00	2.1880	0.0000	0.8442	0.0008	0.00141	0.00218
02:30:00	3.0141	0.0000	1.1835	0.0015	0.00141	0.00294
03:00:00	2.1880	0.0000	0.8740	0.0028	0.00143	0.00419
03:30:00	1.3445	0.0000	0.5433	0.0045	0.00148	0.00594
04:00:00	0.8131	0.0000	0.3309	0.0064	0.00156	0.00795
04:30:00	0.4879	0.0000	0.1994	0.0083	0.00167	0.01
05:00:00	0.2912	0.0000	0.1193	0.0101	0.00182	0.0119
05:30:00	0.0000	0.0000	0.0000	0.0114	0.00199	0.0134
06:00:00	0.0000	0.0000	0.0000	0.0121	0.00219	0.0143
06:30:00	0.0000	0.0000	0.0000	0.0120	0.0024	0.0144
07:00:00	0.0000	0.0000	0.0000	0.0114	0.0026	0.014
07:30:00	0.0000	0.0000	0.0000	0.0104	0.00278	0.0132
08:00:00	0.0000	0.0000	0.0000	0.0093	0.00294	0.0123
08:30:00	0.0000	0.0000	0.0000	0.0081	0.00308	0.0112
09:00:00	0.0000	0.0000	0.0000	0.0070	0.0032	0.0102
09:30:00	0.0000	0.0000	0.0000	0.0060	0.00329	0.00932
10:00:00	0.0000	0.0000	0.0000	0.0052	0.00337	0.00854
10:30:00	0.0000	0.0000	0.0000	0.0044	0.00343	0.00785
11:00:00	0.0000	0.0000	0.0000	0.0037	0.00347	0.00721
11:30:00	0.0000	0.0000	0.0000	0.0031	0.0035	0.00661
12:00:00	0.0000	0.0000	0.0000	0.0025	0.00352	0.00606
12:30:00	0.0000	0.0000	0.0000	0.0020	0.00353	0.00554
13:00:00	0.0000	0.0000	0.0000	0.0015	0.00352	0.00505
13:30:00	0.0000	0.0000	0.0000	0.0011	0.00351	0.00459
14:00:00	0.0000	0.0000	0.0000	0.0007	0.00349	0.00419
14:30:00	0.0000	0.0000	0.0000	0.0004	0.00345	0.00386
15:00:00	0.0000	0.0000	0.0000	0.0002	0.00342	0.00363
15:30:00	0.0000	0.0000	0.0000	0.0001	0.00338	0.00348
16:00:00	0.0000	0.0000	0.0000	0.0000	0.00334	0.00338
16:30:00	0.0000	0.0000	0.0000	0.0000	0.00329	0.00331
17:00:00	0.0000	0.0000	0.0000	0.0000	0.00325	0.00325

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.00321	0.00321
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00317	0.00317
18:30:00	0.0000	0.0000	0.0000	0.0000	0.00313	0.00313
19:00:00	0.0000	0.0000	0.0000	0.0000	0.00309	0.00309
19:30:00	0.0000	0.0000	0.0000	0.0000	0.00305	0.00305
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00301	0.00301
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00297	0.00297
21:00:00	0.0000	0.0000	0.0000	0.0000	0.00293	0.00293
21:30:00	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00286	0.00286
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00282	0.00282
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00279	0.00279
23:30:00	0.0000	0.0000	0.0000	0.0000	0.00275	0.00275
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00272	0.00272
24:30:00	0.0000	0.0000	0.0000	0.0000	0.00268	0.00268
25:00:00	0.0000	0.0000	0.0000	0.0000	0.00265	0.00265
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00261	0.00261
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00258	0.00258
26:30:00	0.0000	0.0000	0.0000	0.0000	0.00255	0.00255
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00251	0.00251
27:30:00	0.0000	0.0000	0.0000	0.0000	0.00248	0.00248
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00245	0.00245
28:30:00	0.0000	0.0000	0.0000	0.0000	0.00242	0.00242
29:00:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
29:30:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00233	0.00233
30:30:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
31:00:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
31:30:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221
32:30:00	0.0000	0.0000	0.0000	0.0000	0.00218	0.00218
33:00:00	0.0000	0.0000	0.0000	0.0000	0.00216	0.00216
33:30:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
34:00:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
34:30:00	0.0000	0.0000	0.0000	0.0000	0.00207	0.00207
35:00:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
36:00:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
36:30:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
37:00:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
37:30:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
38:00:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
38:30:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187
39:00:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
39:30:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
40:00:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
40:30:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
41:00:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
41:30:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
42:30:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
43:00:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
43:30:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
44:30:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
45:00:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
45:30:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
46:30:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
47:00:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
47:30:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148

## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*

# UK Design Flood Estimation

Generated on 05 May 2021 08:22:44 by User

Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: 1ACA-BF0A

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 2 year

### Summary of results

Rainfall - FEH 2013 model (mm):	23.78	Total runoff (ML):	0.31
Total Rainfall (mm):	15.20	Total flow (ML):	0.78
Peak Rainfall (mm):	3.45	Peak flow (m <sup>3</sup> /s):	0.02

### Parameters

Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.

\* Indicates that the user locked the duration/timestep

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.81	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes



Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.3337	0.0000	0.1254	0.0000	0.00147	0.00147
00:30:00	0.5591	0.0000	0.2107	0.0000	0.00145	0.00148
01:00:00	0.9318	0.0000	0.3530	0.0001	0.00144	0.00158
01:30:00	1.5408	0.0000	0.5887	0.0004	0.00142	0.00182
02:00:00	2.5075	0.0000	0.9713	0.0009	0.00141	0.00229
02:30:00	3.4542	0.0000	1.3650	0.0017	0.00142	0.00317
03:00:00	2.5075	0.0000	1.0105	0.0032	0.00144	0.00461
03:30:00	1.5408	0.0000	0.6291	0.0051	0.0015	0.00663
04:00:00	0.9318	0.0000	0.3835	0.0074	0.00159	0.00895
04:30:00	0.5591	0.0000	0.2312	0.0096	0.00172	0.0113
05:00:00	0.3337	0.0000	0.1384	0.0116	0.00189	0.0135
05:30:00	0.0000	0.0000	0.0000	0.0132	0.00209	0.0153
06:00:00	0.0000	0.0000	0.0000	0.0140	0.00232	0.0163
06:30:00	0.0000	0.0000	0.0000	0.0139	0.00256	0.0164
07:00:00	0.0000	0.0000	0.0000	0.0132	0.00279	0.0159
07:30:00	0.0000	0.0000	0.0000	0.0120	0.003	0.015
08:00:00	0.0000	0.0000	0.0000	0.0108	0.00319	0.0139
08:30:00	0.0000	0.0000	0.0000	0.0094	0.00335	0.0128
09:00:00	0.0000	0.0000	0.0000	0.0081	0.00348	0.0116
09:30:00	0.0000	0.0000	0.0000	0.0070	0.00359	0.0106
10:00:00	0.0000	0.0000	0.0000	0.0060	0.00368	0.00966
10:30:00	0.0000	0.0000	0.0000	0.0051	0.00375	0.00886
11:00:00	0.0000	0.0000	0.0000	0.0043	0.0038	0.00812
11:30:00	0.0000	0.0000	0.0000	0.0036	0.00384	0.00744
12:00:00	0.0000	0.0000	0.0000	0.0029	0.00387	0.0068
12:30:00	0.0000	0.0000	0.0000	0.0023	0.00388	0.00621
13:00:00	0.0000	0.0000	0.0000	0.0018	0.00387	0.00564
13:30:00	0.0000	0.0000	0.0000	0.0013	0.00386	0.00511
14:00:00	0.0000	0.0000	0.0000	0.0008	0.00383	0.00464
14:30:00	0.0000	0.0000	0.0000	0.0005	0.0038	0.00427
15:00:00	0.0000	0.0000	0.0000	0.0002	0.00376	0.00401
15:30:00	0.0000	0.0000	0.0000	0.0001	0.00372	0.00383
16:00:00	0.0000	0.0000	0.0000	0.0000	0.00367	0.00372
16:30:00	0.0000	0.0000	0.0000	0.0000	0.00362	0.00364
17:00:00	0.0000	0.0000	0.0000	0.0000	0.00358	0.00358

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.00353	0.00353
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00349	0.00349
18:30:00	0.0000	0.0000	0.0000	0.0000	0.00344	0.00344
19:00:00	0.0000	0.0000	0.0000	0.0000	0.0034	0.0034
19:30:00	0.0000	0.0000	0.0000	0.0000	0.00335	0.00335
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00331	0.00331
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00327	0.00327
21:00:00	0.0000	0.0000	0.0000	0.0000	0.00323	0.00323
21:30:00	0.0000	0.0000	0.0000	0.0000	0.00319	0.00319
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00315	0.00315
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00311	0.00311
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00307	0.00307
23:30:00	0.0000	0.0000	0.0000	0.0000	0.00303	0.00303
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00299	0.00299
24:30:00	0.0000	0.0000	0.0000	0.0000	0.00295	0.00295
25:00:00	0.0000	0.0000	0.0000	0.0000	0.00291	0.00291
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00288	0.00288
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00284	0.00284
26:30:00	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00277	0.00277
27:30:00	0.0000	0.0000	0.0000	0.0000	0.00273	0.00273
28:00:00	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027
28:30:00	0.0000	0.0000	0.0000	0.0000	0.00266	0.00266
29:00:00	0.0000	0.0000	0.0000	0.0000	0.00263	0.00263
29:30:00	0.0000	0.0000	0.0000	0.0000	0.00259	0.00259
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00256	0.00256
30:30:00	0.0000	0.0000	0.0000	0.0000	0.00253	0.00253
31:00:00	0.0000	0.0000	0.0000	0.0000	0.0025	0.0025
31:30:00	0.0000	0.0000	0.0000	0.0000	0.00246	0.00246
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00243	0.00243
32:30:00	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024
33:00:00	0.0000	0.0000	0.0000	0.0000	0.00237	0.00237
33:30:00	0.0000	0.0000	0.0000	0.0000	0.00234	0.00234
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00231	0.00231
34:30:00	0.0000	0.0000	0.0000	0.0000	0.00228	0.00228
35:00:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.00222	0.00222
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00219	0.00219
36:30:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
37:00:00	0.0000	0.0000	0.0000	0.0000	0.00214	0.00214
37:30:00	0.0000	0.0000	0.0000	0.0000	0.00211	0.00211
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
38:30:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
39:00:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
39:30:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
40:30:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195
41:00:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
41:30:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
42:30:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
43:00:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
43:30:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
44:30:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
45:00:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
45:30:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
46:00:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
46:30:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
47:00:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
47:30:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
48:30:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
49:00:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
49:30:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
50:30:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
51:00:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149

## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*

# UK Design Flood Estimation

Generated on 05 May 2021 08:26:18 by User  
Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: 1ACA-BF0A

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 30 year

### Summary of results

Rainfall - FEH 2013 model (mm):	48.74	Total runoff (ML):	0.66
Total Rainfall (mm):	31.16	Total flow (ML):	1.59
Peak Rainfall (mm):	7.08	Peak flow (m <sup>3</sup> /s):	0.03

### Parameters

*Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.*

*\* Indicates that the user locked the duration/timestep*

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.65	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.6840	0.0000	0.2573	0.0000	0.00147	0.00147
00:30:00	1.1460	0.0000	0.4338	0.0001	0.00145	0.00152
01:00:00	1.9100	0.0000	0.7307	0.0003	0.00144	0.00173
01:30:00	3.1582	0.0000	1.2292	0.0008	0.00143	0.00224
02:00:00	5.1397	0.0000	2.0563	0.0018	0.00143	0.00325
02:30:00	7.0801	0.0000	2.9462	0.0036	0.00145	0.00507
03:00:00	5.1397	0.0000	2.2211	0.0066	0.00152	0.00813
03:30:00	3.1582	0.0000	1.3992	0.0108	0.00164	0.0124
04:00:00	1.9100	0.0000	0.8589	0.0155	0.00183	0.0174
04:30:00	1.1460	0.0000	0.5200	0.0204	0.0021	0.0225
05:00:00	0.6840	0.0000	0.3120	0.0248	0.00244	0.0272
05:30:00	0.0000	0.0000	0.0000	0.0282	0.00286	0.031
06:00:00	0.0000	0.0000	0.0000	0.0300	0.00332	0.0333
06:30:00	0.0000	0.0000	0.0000	0.0300	0.00381	0.0338
07:00:00	0.0000	0.0000	0.0000	0.0285	0.00428	0.0328
07:30:00	0.0000	0.0000	0.0000	0.0262	0.00472	0.0309
08:00:00	0.0000	0.0000	0.0000	0.0234	0.00511	0.0285
08:30:00	0.0000	0.0000	0.0000	0.0205	0.00545	0.026
09:00:00	0.0000	0.0000	0.0000	0.0177	0.00574	0.0234
09:30:00	0.0000	0.0000	0.0000	0.0152	0.00597	0.0212
10:00:00	0.0000	0.0000	0.0000	0.0130	0.00616	0.0192
10:30:00	0.0000	0.0000	0.0000	0.0112	0.00632	0.0175
11:00:00	0.0000	0.0000	0.0000	0.0094	0.00644	0.0159
11:30:00	0.0000	0.0000	0.0000	0.0079	0.00653	0.0144
12:00:00	0.0000	0.0000	0.0000	0.0065	0.00659	0.0131
12:30:00	0.0000	0.0000	0.0000	0.0052	0.00663	0.0118
13:00:00	0.0000	0.0000	0.0000	0.0039	0.00663	0.0106
13:30:00	0.0000	0.0000	0.0000	0.0028	0.00662	0.00942
14:00:00	0.0000	0.0000	0.0000	0.0018	0.00658	0.00841
14:30:00	0.0000	0.0000	0.0000	0.0011	0.00653	0.00759
15:00:00	0.0000	0.0000	0.0000	0.0006	0.00646	0.00702
15:30:00	0.0000	0.0000	0.0000	0.0003	0.00639	0.00666
16:00:00	0.0000	0.0000	0.0000	0.0001	0.00631	0.00642
16:30:00	0.0000	0.0000	0.0000	0.0000	0.00623	0.00626
17:00:00	0.0000	0.0000	0.0000	0.0000	0.00615	0.00616

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.00608	0.00608
18:00:00	0.0000	0.0000	0.0000	0.0000	0.006	0.006
18:30:00	0.0000	0.0000	0.0000	0.0000	0.00592	0.00592
19:00:00	0.0000	0.0000	0.0000	0.0000	0.00585	0.00585
19:30:00	0.0000	0.0000	0.0000	0.0000	0.00577	0.00577
20:00:00	0.0000	0.0000	0.0000	0.0000	0.0057	0.0057
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00562	0.00562
21:00:00	0.0000	0.0000	0.0000	0.0000	0.00555	0.00555
21:30:00	0.0000	0.0000	0.0000	0.0000	0.00548	0.00548
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00541	0.00541
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00534	0.00534
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00527	0.00527
23:30:00	0.0000	0.0000	0.0000	0.0000	0.00521	0.00521
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00514	0.00514
24:30:00	0.0000	0.0000	0.0000	0.0000	0.00507	0.00507
25:00:00	0.0000	0.0000	0.0000	0.0000	0.00501	0.00501
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00495	0.00495
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00488	0.00488
26:30:00	0.0000	0.0000	0.0000	0.0000	0.00482	0.00482
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00476	0.00476
27:30:00	0.0000	0.0000	0.0000	0.0000	0.0047	0.0047
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00464	0.00464
28:30:00	0.0000	0.0000	0.0000	0.0000	0.00458	0.00458
29:00:00	0.0000	0.0000	0.0000	0.0000	0.00452	0.00452
29:30:00	0.0000	0.0000	0.0000	0.0000	0.00446	0.00446
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00441	0.00441
30:30:00	0.0000	0.0000	0.0000	0.0000	0.00435	0.00435
31:00:00	0.0000	0.0000	0.0000	0.0000	0.00429	0.00429
31:30:00	0.0000	0.0000	0.0000	0.0000	0.00424	0.00424
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00418	0.00418
32:30:00	0.0000	0.0000	0.0000	0.0000	0.00413	0.00413
33:00:00	0.0000	0.0000	0.0000	0.0000	0.00408	0.00408
33:30:00	0.0000	0.0000	0.0000	0.0000	0.00403	0.00403
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00397	0.00397
34:30:00	0.0000	0.0000	0.0000	0.0000	0.00392	0.00392
35:00:00	0.0000	0.0000	0.0000	0.0000	0.00387	0.00387



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.00382	0.00382
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00378	0.00378
36:30:00	0.0000	0.0000	0.0000	0.0000	0.00373	0.00373
37:00:00	0.0000	0.0000	0.0000	0.0000	0.00368	0.00368
37:30:00	0.0000	0.0000	0.0000	0.0000	0.00363	0.00363
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00359	0.00359
38:30:00	0.0000	0.0000	0.0000	0.0000	0.00354	0.00354
39:00:00	0.0000	0.0000	0.0000	0.0000	0.00349	0.00349
39:30:00	0.0000	0.0000	0.0000	0.0000	0.00345	0.00345
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00341	0.00341
40:30:00	0.0000	0.0000	0.0000	0.0000	0.00336	0.00336
41:00:00	0.0000	0.0000	0.0000	0.0000	0.00332	0.00332
41:30:00	0.0000	0.0000	0.0000	0.0000	0.00328	0.00328
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00324	0.00324
42:30:00	0.0000	0.0000	0.0000	0.0000	0.00319	0.00319
43:00:00	0.0000	0.0000	0.0000	0.0000	0.00315	0.00315
43:30:00	0.0000	0.0000	0.0000	0.0000	0.00311	0.00311
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00307	0.00307
44:30:00	0.0000	0.0000	0.0000	0.0000	0.00303	0.00303
45:00:00	0.0000	0.0000	0.0000	0.0000	0.003	0.003
45:30:00	0.0000	0.0000	0.0000	0.0000	0.00296	0.00296
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00292	0.00292
46:30:00	0.0000	0.0000	0.0000	0.0000	0.00288	0.00288
47:00:00	0.0000	0.0000	0.0000	0.0000	0.00285	0.00285
47:30:00	0.0000	0.0000	0.0000	0.0000	0.00281	0.00281
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00277	0.00277
48:30:00	0.0000	0.0000	0.0000	0.0000	0.00274	0.00274
49:00:00	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027
49:30:00	0.0000	0.0000	0.0000	0.0000	0.00267	0.00267
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00263	0.00263
50:30:00	0.0000	0.0000	0.0000	0.0000	0.0026	0.0026
51:00:00	0.0000	0.0000	0.0000	0.0000	0.00257	0.00257
51:30:00	0.0000	0.0000	0.0000	0.0000	0.00253	0.00253
52:00:00	0.0000	0.0000	0.0000	0.0000	0.0025	0.0025
52:30:00	0.0000	0.0000	0.0000	0.0000	0.00247	0.00247
53:00:00	0.0000	0.0000	0.0000	0.0000	0.00244	0.00244

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
53:30:00	0.0000	0.0000	0.0000	0.0000	0.00241	0.00241
54:00:00	0.0000	0.0000	0.0000	0.0000	0.00238	0.00238
54:30:00	0.0000	0.0000	0.0000	0.0000	0.00235	0.00235
55:00:00	0.0000	0.0000	0.0000	0.0000	0.00232	0.00232
55:30:00	0.0000	0.0000	0.0000	0.0000	0.00229	0.00229
56:00:00	0.0000	0.0000	0.0000	0.0000	0.00226	0.00226
56:30:00	0.0000	0.0000	0.0000	0.0000	0.00223	0.00223
57:00:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
57:30:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
58:00:00	0.0000	0.0000	0.0000	0.0000	0.00214	0.00214
58:30:00	0.0000	0.0000	0.0000	0.0000	0.00212	0.00212
59:00:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
59:30:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
60:00:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
60:30:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
61:00:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
61:30:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
62:00:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
62:30:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
63:00:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
63:30:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
64:00:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
64:30:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
65:00:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
65:30:00	0.0000	0.0000	0.0000	0.0000	0.00177	0.00177
66:00:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
66:30:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
67:00:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
67:30:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
68:00:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
68:30:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
69:00:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
69:30:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
70:00:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
70:30:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
71:00:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
71:30:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
72:00:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015

## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*

# UK Design Flood Estimation

Generated on 05 May 2021 08:28:27 by User

Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: 1ACA-BF0A

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 100 year

### Summary of results

Rainfall - FEH 2013 model (mm):	61.50	Total runoff (ML):	0.86
Total Rainfall (mm):	39.32	Total flow (ML):	2.01
Peak Rainfall (mm):	8.93	Peak flow (m <sup>3</sup> /s):	0.04

### Parameters

*Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.*

*\* Indicates that the user locked the duration/timestep*

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.57	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.8632	0.0000	0.3249	0.0000	0.00147	0.00147
00:30:00	1.4463	0.0000	0.5487	0.0001	0.00145	0.00153
01:00:00	2.4104	0.0000	0.9267	0.0004	0.00144	0.00181
01:30:00	3.9856	0.0000	1.5657	0.0010	0.00143	0.00246
02:00:00	6.4861	0.0000	2.6372	0.0023	0.00144	0.00374
02:30:00	8.9349	0.0000	3.8137	0.0046	0.00147	0.00606
03:00:00	6.4861	0.0000	2.8997	0.0084	0.00155	0.00997
03:30:00	3.9856	0.0000	1.8366	0.0138	0.0017	0.0155
04:00:00	2.4104	0.0000	1.1309	0.0199	0.00194	0.0218
04:30:00	1.4463	0.0000	0.6859	0.0262	0.00227	0.0284
05:00:00	0.8632	0.0000	0.4120	0.0319	0.0027	0.0346
05:30:00	0.0000	0.0000	0.0000	0.0363	0.00322	0.0396
06:00:00	0.0000	0.0000	0.0000	0.0388	0.0038	0.0426
06:30:00	0.0000	0.0000	0.0000	0.0388	0.0044	0.0432
07:00:00	0.0000	0.0000	0.0000	0.0369	0.00499	0.0419
07:30:00	0.0000	0.0000	0.0000	0.0340	0.00554	0.0395
08:00:00	0.0000	0.0000	0.0000	0.0304	0.00603	0.0364
08:30:00	0.0000	0.0000	0.0000	0.0267	0.00646	0.0331
09:00:00	0.0000	0.0000	0.0000	0.0230	0.00682	0.0298
09:30:00	0.0000	0.0000	0.0000	0.0198	0.00711	0.0269
10:00:00	0.0000	0.0000	0.0000	0.0170	0.00735	0.0243
10:30:00	0.0000	0.0000	0.0000	0.0145	0.00755	0.0221
11:00:00	0.0000	0.0000	0.0000	0.0123	0.0077	0.02
11:30:00	0.0000	0.0000	0.0000	0.0103	0.00782	0.0181
12:00:00	0.0000	0.0000	0.0000	0.0085	0.0079	0.0164
12:30:00	0.0000	0.0000	0.0000	0.0067	0.00795	0.0147
13:00:00	0.0000	0.0000	0.0000	0.0052	0.00797	0.0131
13:30:00	0.0000	0.0000	0.0000	0.0037	0.00795	0.0116
14:00:00	0.0000	0.0000	0.0000	0.0024	0.00791	0.0103
14:30:00	0.0000	0.0000	0.0000	0.0014	0.00785	0.00925
15:00:00	0.0000	0.0000	0.0000	0.0007	0.00777	0.00851
15:30:00	0.0000	0.0000	0.0000	0.0004	0.00768	0.00804
16:00:00	0.0000	0.0000	0.0000	0.0001	0.00759	0.00773
16:30:00	0.0000	0.0000	0.0000	0.0000	0.00749	0.00754
17:00:00	0.0000	0.0000	0.0000	0.0000	0.0074	0.0074

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.0073	0.0073
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00721	0.00721
18:30:00	0.0000	0.0000	0.0000	0.0000	0.00712	0.00712
19:00:00	0.0000	0.0000	0.0000	0.0000	0.00703	0.00703
19:30:00	0.0000	0.0000	0.0000	0.0000	0.00694	0.00694
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00685	0.00685
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00676	0.00676
21:00:00	0.0000	0.0000	0.0000	0.0000	0.00668	0.00668
21:30:00	0.0000	0.0000	0.0000	0.0000	0.00659	0.00659
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00651	0.00651
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00642	0.00642
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00634	0.00634
23:30:00	0.0000	0.0000	0.0000	0.0000	0.00626	0.00626
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00618	0.00618
24:30:00	0.0000	0.0000	0.0000	0.0000	0.0061	0.0061
25:00:00	0.0000	0.0000	0.0000	0.0000	0.00602	0.00602
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00595	0.00595
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00587	0.00587
26:30:00	0.0000	0.0000	0.0000	0.0000	0.0058	0.0058
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00572	0.00572
27:30:00	0.0000	0.0000	0.0000	0.0000	0.00565	0.00565
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00558	0.00558
28:30:00	0.0000	0.0000	0.0000	0.0000	0.0055	0.0055
29:00:00	0.0000	0.0000	0.0000	0.0000	0.00543	0.00543
29:30:00	0.0000	0.0000	0.0000	0.0000	0.00537	0.00537
30:00:00	0.0000	0.0000	0.0000	0.0000	0.0053	0.0053
30:30:00	0.0000	0.0000	0.0000	0.0000	0.00523	0.00523
31:00:00	0.0000	0.0000	0.0000	0.0000	0.00516	0.00516
31:30:00	0.0000	0.0000	0.0000	0.0000	0.0051	0.0051
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00503	0.00503
32:30:00	0.0000	0.0000	0.0000	0.0000	0.00497	0.00497
33:00:00	0.0000	0.0000	0.0000	0.0000	0.0049	0.0049
33:30:00	0.0000	0.0000	0.0000	0.0000	0.00484	0.00484
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00478	0.00478
34:30:00	0.0000	0.0000	0.0000	0.0000	0.00472	0.00472
35:00:00	0.0000	0.0000	0.0000	0.0000	0.00466	0.00466



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00454	0.00454
36:30:00	0.0000	0.0000	0.0000	0.0000	0.00448	0.00448
37:00:00	0.0000	0.0000	0.0000	0.0000	0.00442	0.00442
37:30:00	0.0000	0.0000	0.0000	0.0000	0.00437	0.00437
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00431	0.00431
38:30:00	0.0000	0.0000	0.0000	0.0000	0.00426	0.00426
39:00:00	0.0000	0.0000	0.0000	0.0000	0.0042	0.0042
39:30:00	0.0000	0.0000	0.0000	0.0000	0.00415	0.00415
40:00:00	0.0000	0.0000	0.0000	0.0000	0.0041	0.0041
40:30:00	0.0000	0.0000	0.0000	0.0000	0.00404	0.00404
41:00:00	0.0000	0.0000	0.0000	0.0000	0.00399	0.00399
41:30:00	0.0000	0.0000	0.0000	0.0000	0.00394	0.00394
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00389	0.00389
42:30:00	0.0000	0.0000	0.0000	0.0000	0.00384	0.00384
43:00:00	0.0000	0.0000	0.0000	0.0000	0.00379	0.00379
43:30:00	0.0000	0.0000	0.0000	0.0000	0.00374	0.00374
44:00:00	0.0000	0.0000	0.0000	0.0000	0.0037	0.0037
44:30:00	0.0000	0.0000	0.0000	0.0000	0.00365	0.00365
45:00:00	0.0000	0.0000	0.0000	0.0000	0.0036	0.0036
45:30:00	0.0000	0.0000	0.0000	0.0000	0.00356	0.00356
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00351	0.00351
46:30:00	0.0000	0.0000	0.0000	0.0000	0.00347	0.00347
47:00:00	0.0000	0.0000	0.0000	0.0000	0.00342	0.00342
47:30:00	0.0000	0.0000	0.0000	0.0000	0.00338	0.00338
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00333	0.00333
48:30:00	0.0000	0.0000	0.0000	0.0000	0.00329	0.00329
49:00:00	0.0000	0.0000	0.0000	0.0000	0.00325	0.00325
49:30:00	0.0000	0.0000	0.0000	0.0000	0.00321	0.00321
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00317	0.00317
50:30:00	0.0000	0.0000	0.0000	0.0000	0.00313	0.00313
51:00:00	0.0000	0.0000	0.0000	0.0000	0.00309	0.00309
51:30:00	0.0000	0.0000	0.0000	0.0000	0.00305	0.00305
52:00:00	0.0000	0.0000	0.0000	0.0000	0.00301	0.00301
52:30:00	0.0000	0.0000	0.0000	0.0000	0.00297	0.00297
53:00:00	0.0000	0.0000	0.0000	0.0000	0.00293	0.00293

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
53:30:00	0.0000	0.0000	0.0000	0.0000	0.00289	0.00289
54:00:00	0.0000	0.0000	0.0000	0.0000	0.00286	0.00286
54:30:00	0.0000	0.0000	0.0000	0.0000	0.00282	0.00282
55:00:00	0.0000	0.0000	0.0000	0.0000	0.00278	0.00278
55:30:00	0.0000	0.0000	0.0000	0.0000	0.00275	0.00275
56:00:00	0.0000	0.0000	0.0000	0.0000	0.00271	0.00271
56:30:00	0.0000	0.0000	0.0000	0.0000	0.00268	0.00268
57:00:00	0.0000	0.0000	0.0000	0.0000	0.00265	0.00265
57:30:00	0.0000	0.0000	0.0000	0.0000	0.00261	0.00261
58:00:00	0.0000	0.0000	0.0000	0.0000	0.00258	0.00258
58:30:00	0.0000	0.0000	0.0000	0.0000	0.00255	0.00255
59:00:00	0.0000	0.0000	0.0000	0.0000	0.00251	0.00251
59:30:00	0.0000	0.0000	0.0000	0.0000	0.00248	0.00248
60:00:00	0.0000	0.0000	0.0000	0.0000	0.00245	0.00245
60:30:00	0.0000	0.0000	0.0000	0.0000	0.00242	0.00242
61:00:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
61:30:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
62:00:00	0.0000	0.0000	0.0000	0.0000	0.00233	0.00233
62:30:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
63:00:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
63:30:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
64:00:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221
64:30:00	0.0000	0.0000	0.0000	0.0000	0.00218	0.00218
65:00:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215
65:30:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
66:00:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
66:30:00	0.0000	0.0000	0.0000	0.0000	0.00207	0.00207
67:00:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
67:30:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
68:00:00	0.0000	0.0000	0.0000	0.0000	0.00199	0.00199
68:30:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
69:00:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
69:30:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
70:00:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
70:30:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187
71:00:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
71:30:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
72:00:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
72:30:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
73:00:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
73:30:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
74:00:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
74:30:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
75:00:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
75:30:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
76:00:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
76:30:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
77:00:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
77:30:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
78:00:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
78:30:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
79:00:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
79:30:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148

## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*

# UK Design Flood Estimation

Generated on 05 May 2021 08:30:27 by User  
Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: 1ACA-BF0A

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 100 year 1.4 CC

### Summary of results

Rainfall - FEH 2013 model (mm):	86.11	Total runoff (ML):	1.26
Total Rainfall (mm):	55.05	Total flow (ML):	2.81
Peak Rainfall (mm):	12.51	Peak flow (m <sup>3</sup> /s):	0.06

### Parameters

*Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.*

*\* Indicates that the user locked the duration/timestep*

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No
Climate change factor	1.40	Yes

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.43	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	1.2085	0.0000	0.4554	0.0000	0.00147	0.00147
00:30:00	2.0248	0.0000	0.7716	0.0001	0.00145	0.00156
01:00:00	3.3746	0.0000	1.3098	0.0005	0.00144	0.00196
01:30:00	5.5798	0.0000	2.2314	0.0015	0.00143	0.00288
02:00:00	9.0806	0.0000	3.8060	0.0032	0.00145	0.00469
02:30:00	12.5089	0.0000	5.5973	0.0065	0.0015	0.008
03:00:00	9.0806	0.0000	4.3205	0.0120	0.0016	0.0136
03:30:00	5.5798	0.0000	2.7622	0.0197	0.00181	0.0215
04:00:00	3.3746	0.0000	1.7102	0.0286	0.00213	0.0308
04:30:00	2.0248	0.0000	1.0404	0.0378	0.00258	0.0404
05:00:00	1.2085	0.0000	0.6262	0.0463	0.00316	0.0494
05:30:00	0.0000	0.0000	0.0000	0.0530	0.00385	0.0568
06:00:00	0.0000	0.0000	0.0000	0.0568	0.00464	0.0614
06:30:00	0.0000	0.0000	0.0000	0.0570	0.00546	0.0624
07:00:00	0.0000	0.0000	0.0000	0.0544	0.00626	0.0606
07:30:00	0.0000	0.0000	0.0000	0.0501	0.00701	0.0571
08:00:00	0.0000	0.0000	0.0000	0.0449	0.00769	0.0526
08:30:00	0.0000	0.0000	0.0000	0.0395	0.00827	0.0477
09:00:00	0.0000	0.0000	0.0000	0.0341	0.00877	0.0428
09:30:00	0.0000	0.0000	0.0000	0.0293	0.00918	0.0385
10:00:00	0.0000	0.0000	0.0000	0.0252	0.00951	0.0347
10:30:00	0.0000	0.0000	0.0000	0.0216	0.00978	0.0313
11:00:00	0.0000	0.0000	0.0000	0.0183	0.01	0.0283
11:30:00	0.0000	0.0000	0.0000	0.0153	0.0102	0.0255
12:00:00	0.0000	0.0000	0.0000	0.0126	0.0103	0.0229
12:30:00	0.0000	0.0000	0.0000	0.0101	0.0104	0.0205
13:00:00	0.0000	0.0000	0.0000	0.0077	0.0104	0.0181
13:30:00	0.0000	0.0000	0.0000	0.0056	0.0104	0.0159
14:00:00	0.0000	0.0000	0.0000	0.0036	0.0103	0.014
14:30:00	0.0000	0.0000	0.0000	0.0021	0.0102	0.0124
15:00:00	0.0000	0.0000	0.0000	0.0011	0.0101	0.0113
15:30:00	0.0000	0.0000	0.0000	0.0005	0.01	0.0106
16:00:00	0.0000	0.0000	0.0000	0.0002	0.00991	0.0101
16:30:00	0.0000	0.0000	0.0000	0.0001	0.00978	0.00985
17:00:00	0.0000	0.0000	0.0000	0.0000	0.00966	0.00966

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.00954	0.00954
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00941	0.00941
18:30:00	0.0000	0.0000	0.0000	0.0000	0.00929	0.00929
19:00:00	0.0000	0.0000	0.0000	0.0000	0.00918	0.00918
19:30:00	0.0000	0.0000	0.0000	0.0000	0.00906	0.00906
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00894	0.00894
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00883	0.00883
21:00:00	0.0000	0.0000	0.0000	0.0000	0.00872	0.00872
21:30:00	0.0000	0.0000	0.0000	0.0000	0.0086	0.0086
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00849	0.00849
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00839	0.00839
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00828	0.00828
23:30:00	0.0000	0.0000	0.0000	0.0000	0.00817	0.00817
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00807	0.00807
24:30:00	0.0000	0.0000	0.0000	0.0000	0.00797	0.00797
25:00:00	0.0000	0.0000	0.0000	0.0000	0.00786	0.00786
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00776	0.00776
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00766	0.00766
26:30:00	0.0000	0.0000	0.0000	0.0000	0.00757	0.00757
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00747	0.00747
27:30:00	0.0000	0.0000	0.0000	0.0000	0.00737	0.00737
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00728	0.00728
28:30:00	0.0000	0.0000	0.0000	0.0000	0.00719	0.00719
29:00:00	0.0000	0.0000	0.0000	0.0000	0.0071	0.0071
29:30:00	0.0000	0.0000	0.0000	0.0000	0.007	0.007
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00691	0.00691
30:30:00	0.0000	0.0000	0.0000	0.0000	0.00683	0.00683
31:00:00	0.0000	0.0000	0.0000	0.0000	0.00674	0.00674
31:30:00	0.0000	0.0000	0.0000	0.0000	0.00665	0.00665
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00657	0.00657
32:30:00	0.0000	0.0000	0.0000	0.0000	0.00648	0.00648
33:00:00	0.0000	0.0000	0.0000	0.0000	0.0064	0.0064
33:30:00	0.0000	0.0000	0.0000	0.0000	0.00632	0.00632
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00624	0.00624
34:30:00	0.0000	0.0000	0.0000	0.0000	0.00616	0.00616
35:00:00	0.0000	0.0000	0.0000	0.0000	0.00608	0.00608



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.006	0.006
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00593	0.00593
36:30:00	0.0000	0.0000	0.0000	0.0000	0.00585	0.00585
37:00:00	0.0000	0.0000	0.0000	0.0000	0.00578	0.00578
37:30:00	0.0000	0.0000	0.0000	0.0000	0.0057	0.0057
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00563	0.00563
38:30:00	0.0000	0.0000	0.0000	0.0000	0.00556	0.00556
39:00:00	0.0000	0.0000	0.0000	0.0000	0.00549	0.00549
39:30:00	0.0000	0.0000	0.0000	0.0000	0.00542	0.00542
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00535	0.00535
40:30:00	0.0000	0.0000	0.0000	0.0000	0.00528	0.00528
41:00:00	0.0000	0.0000	0.0000	0.0000	0.00521	0.00521
41:30:00	0.0000	0.0000	0.0000	0.0000	0.00514	0.00514
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00508	0.00508
42:30:00	0.0000	0.0000	0.0000	0.0000	0.00501	0.00501
43:00:00	0.0000	0.0000	0.0000	0.0000	0.00495	0.00495
43:30:00	0.0000	0.0000	0.0000	0.0000	0.00489	0.00489
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00482	0.00482
44:30:00	0.0000	0.0000	0.0000	0.0000	0.00476	0.00476
45:00:00	0.0000	0.0000	0.0000	0.0000	0.0047	0.0047
45:30:00	0.0000	0.0000	0.0000	0.0000	0.00464	0.00464
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00458	0.00458
46:30:00	0.0000	0.0000	0.0000	0.0000	0.00452	0.00452
47:00:00	0.0000	0.0000	0.0000	0.0000	0.00447	0.00447
47:30:00	0.0000	0.0000	0.0000	0.0000	0.00441	0.00441
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00435	0.00435
48:30:00	0.0000	0.0000	0.0000	0.0000	0.0043	0.0043
49:00:00	0.0000	0.0000	0.0000	0.0000	0.00424	0.00424
49:30:00	0.0000	0.0000	0.0000	0.0000	0.00419	0.00419
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00413	0.00413
50:30:00	0.0000	0.0000	0.0000	0.0000	0.00408	0.00408
51:00:00	0.0000	0.0000	0.0000	0.0000	0.00403	0.00403
51:30:00	0.0000	0.0000	0.0000	0.0000	0.00398	0.00398
52:00:00	0.0000	0.0000	0.0000	0.0000	0.00393	0.00393
52:30:00	0.0000	0.0000	0.0000	0.0000	0.00388	0.00388
53:00:00	0.0000	0.0000	0.0000	0.0000	0.00383	0.00383

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
53:30:00	0.0000	0.0000	0.0000	0.0000	0.00378	0.00378
54:00:00	0.0000	0.0000	0.0000	0.0000	0.00373	0.00373
54:30:00	0.0000	0.0000	0.0000	0.0000	0.00368	0.00368
55:00:00	0.0000	0.0000	0.0000	0.0000	0.00364	0.00364
55:30:00	0.0000	0.0000	0.0000	0.0000	0.00359	0.00359
56:00:00	0.0000	0.0000	0.0000	0.0000	0.00354	0.00354
56:30:00	0.0000	0.0000	0.0000	0.0000	0.0035	0.0035
57:00:00	0.0000	0.0000	0.0000	0.0000	0.00345	0.00345
57:30:00	0.0000	0.0000	0.0000	0.0000	0.00341	0.00341
58:00:00	0.0000	0.0000	0.0000	0.0000	0.00337	0.00337
58:30:00	0.0000	0.0000	0.0000	0.0000	0.00332	0.00332
59:00:00	0.0000	0.0000	0.0000	0.0000	0.00328	0.00328
59:30:00	0.0000	0.0000	0.0000	0.0000	0.00324	0.00324
60:00:00	0.0000	0.0000	0.0000	0.0000	0.0032	0.0032
60:30:00	0.0000	0.0000	0.0000	0.0000	0.00316	0.00316
61:00:00	0.0000	0.0000	0.0000	0.0000	0.00312	0.00312
61:30:00	0.0000	0.0000	0.0000	0.0000	0.00308	0.00308
62:00:00	0.0000	0.0000	0.0000	0.0000	0.00304	0.00304
62:30:00	0.0000	0.0000	0.0000	0.0000	0.003	0.003
63:00:00	0.0000	0.0000	0.0000	0.0000	0.00296	0.00296
63:30:00	0.0000	0.0000	0.0000	0.0000	0.00292	0.00292
64:00:00	0.0000	0.0000	0.0000	0.0000	0.00288	0.00288
64:30:00	0.0000	0.0000	0.0000	0.0000	0.00285	0.00285
65:00:00	0.0000	0.0000	0.0000	0.0000	0.00281	0.00281
65:30:00	0.0000	0.0000	0.0000	0.0000	0.00278	0.00278
66:00:00	0.0000	0.0000	0.0000	0.0000	0.00274	0.00274
66:30:00	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027
67:00:00	0.0000	0.0000	0.0000	0.0000	0.00267	0.00267
67:30:00	0.0000	0.0000	0.0000	0.0000	0.00264	0.00264
68:00:00	0.0000	0.0000	0.0000	0.0000	0.0026	0.0026
68:30:00	0.0000	0.0000	0.0000	0.0000	0.00257	0.00257
69:00:00	0.0000	0.0000	0.0000	0.0000	0.00254	0.00254
69:30:00	0.0000	0.0000	0.0000	0.0000	0.0025	0.0025
70:00:00	0.0000	0.0000	0.0000	0.0000	0.00247	0.00247
70:30:00	0.0000	0.0000	0.0000	0.0000	0.00244	0.00244
71:00:00	0.0000	0.0000	0.0000	0.0000	0.00241	0.00241

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
71:30:00	0.0000	0.0000	0.0000	0.0000	0.00238	0.00238
72:00:00	0.0000	0.0000	0.0000	0.0000	0.00235	0.00235
72:30:00	0.0000	0.0000	0.0000	0.0000	0.00232	0.00232
73:00:00	0.0000	0.0000	0.0000	0.0000	0.00229	0.00229
73:30:00	0.0000	0.0000	0.0000	0.0000	0.00226	0.00226
74:00:00	0.0000	0.0000	0.0000	0.0000	0.00223	0.00223
74:30:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
75:00:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
75:30:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215
76:00:00	0.0000	0.0000	0.0000	0.0000	0.00212	0.00212
76:30:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
77:00:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
77:30:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
78:00:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
78:30:00	0.0000	0.0000	0.0000	0.0000	0.00199	0.00199
79:00:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
79:30:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
80:00:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
80:30:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
81:00:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
81:30:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
82:00:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
82:30:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
83:00:00	0.0000	0.0000	0.0000	0.0000	0.00177	0.00177
83:30:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
84:00:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
84:30:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
85:00:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
85:30:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
86:00:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
86:30:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
87:00:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
87:30:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
88:00:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
88:30:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
89:00:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
89:30:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
90:00:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148

## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*

# UK Design Flood Estimation

Generated on 05 May 2021 08:34:45 by User

Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: D841-68A2

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 1 year

### Summary of results

Rainfall - FEH 2013 model (mm):	21.29	Total runoff (ML):	0.28
Total Rainfall (mm):	13.79	Total flow (ML):	0.70
Peak Rainfall (mm):	0.81	Peak flow (m <sup>3</sup> /s):	0.01

### Parameters

*Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.*

*\* Indicates that the user locked the duration/timestep*

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	06:00:00 [05:30:00]	Yes
Timestep (hh:mm:ss)	00:08:00 [00:30:00]	Yes
SCF (Seasonal correction factor)	0.65	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.83	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.0602	0.0000	0.0226	0.0000	0.00147	0.00147
00:08:00	0.0683	0.0000	0.0257	0.0000	0.00147	0.00147
00:16:00	0.0776	0.0000	0.0291	0.0000	0.00146	0.00147
00:24:00	0.0880	0.0000	0.0331	0.0000	0.00146	0.00147
00:32:00	0.0999	0.0000	0.0376	0.0000	0.00145	0.00148
00:40:00	0.1133	0.0000	0.0426	0.0000	0.00145	0.00149
00:48:00	0.1285	0.0000	0.0484	0.0001	0.00144	0.00151
00:56:00	0.1456	0.0000	0.0549	0.0001	0.00144	0.00153
01:04:00	0.1650	0.0000	0.0623	0.0001	0.00143	0.00156
01:12:00	0.1869	0.0000	0.0707	0.0002	0.00143	0.0016
01:20:00	0.2117	0.0000	0.0801	0.0002	0.00142	0.00165
01:28:00	0.2396	0.0000	0.0908	0.0003	0.00142	0.0017
01:36:00	0.2710	0.0000	0.1029	0.0004	0.00142	0.00177
01:44:00	0.3064	0.0000	0.1166	0.0004	0.00141	0.00186
01:52:00	0.3461	0.0000	0.1320	0.0005	0.00141	0.00195
02:00:00	0.3907	0.0000	0.1494	0.0007	0.00141	0.00207
02:08:00	0.4406	0.0000	0.1689	0.0008	0.00141	0.0022
02:16:00	0.4962	0.0000	0.1909	0.0009	0.00141	0.00235
02:24:00	0.5579	0.0000	0.2154	0.0011	0.00141	0.00253
02:32:00	0.6257	0.0000	0.2425	0.0013	0.00141	0.00274
02:40:00	0.6987	0.0000	0.2720	0.0016	0.00141	0.00297
02:48:00	0.7725	0.0000	0.3022	0.0018	0.00141	0.00324
02:56:00	0.8076	0.0000	0.3176	0.0021	0.00142	0.00355
03:04:00	0.7725	0.0000	0.3054	0.0025	0.00142	0.0039
03:12:00	0.6987	0.0000	0.2776	0.0029	0.00143	0.00428
03:20:00	0.6257	0.0000	0.2497	0.0033	0.00144	0.00471
03:28:00	0.5579	0.0000	0.2235	0.0037	0.00145	0.00516
03:36:00	0.4962	0.0000	0.1995	0.0042	0.00147	0.00564
03:44:00	0.4406	0.0000	0.1777	0.0047	0.00148	0.00614
03:52:00	0.3907	0.0000	0.1580	0.0052	0.0015	0.00666
04:00:00	0.3461	0.0000	0.1403	0.0057	0.00152	0.0072
04:08:00	0.3064	0.0000	0.1244	0.0062	0.00154	0.00774
04:16:00	0.2710	0.0000	0.1103	0.0067	0.00157	0.00829
04:24:00	0.2396	0.0000	0.0976	0.0072	0.0016	0.00884
04:32:00	0.2117	0.0000	0.0864	0.0078	0.00163	0.0094



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
04:40:00	0.1869	0.0000	0.0764	0.0083	0.00166	0.00994
04:48:00	0.1650	0.0000	0.0675	0.0088	0.0017	0.0105
04:56:00	0.1456	0.0000	0.0596	0.0093	0.00174	0.011
05:04:00	0.1285	0.0000	0.0527	0.0097	0.00178	0.0115
05:12:00	0.1133	0.0000	0.0462	0.0102	0.00182	0.012
05:20:00	0.0999	0.0000	0.0408	0.0106	0.00186	0.0125
05:28:00	0.0880	0.0000	0.0360	0.0110	0.00191	0.0129
05:36:00	0.0776	0.0000	0.0317	0.0113	0.00196	0.0133
05:44:00	0.0683	0.0000	0.0279	0.0116	0.00201	0.0136
05:52:00	0.0602	0.0000	0.0246	0.0119	0.00206	0.014
06:00:00	0.0000	0.0000	0.0000	0.0121	0.00212	0.0142
06:08:00	0.0000	0.0000	0.0000	0.0123	0.00217	0.0145
06:16:00	0.0000	0.0000	0.0000	0.0124	0.00223	0.0146
06:24:00	0.0000	0.0000	0.0000	0.0124	0.00228	0.0147
06:32:00	0.0000	0.0000	0.0000	0.0124	0.00234	0.0148
06:40:00	0.0000	0.0000	0.0000	0.0124	0.0024	0.0148
06:48:00	0.0000	0.0000	0.0000	0.0123	0.00245	0.0147
06:56:00	0.0000	0.0000	0.0000	0.0122	0.00251	0.0147
07:04:00	0.0000	0.0000	0.0000	0.0120	0.00256	0.0146
07:12:00	0.0000	0.0000	0.0000	0.0118	0.00262	0.0144
07:20:00	0.0000	0.0000	0.0000	0.0116	0.00267	0.0143
07:28:00	0.0000	0.0000	0.0000	0.0113	0.00272	0.0141
07:36:00	0.0000	0.0000	0.0000	0.0111	0.00277	0.0139
07:44:00	0.0000	0.0000	0.0000	0.0108	0.00282	0.0136
07:52:00	0.0000	0.0000	0.0000	0.0105	0.00287	0.0134
08:00:00	0.0000	0.0000	0.0000	0.0102	0.00292	0.0132
08:08:00	0.0000	0.0000	0.0000	0.0099	0.00296	0.0129
08:16:00	0.0000	0.0000	0.0000	0.0096	0.003	0.0126
08:24:00	0.0000	0.0000	0.0000	0.0093	0.00304	0.0124
08:32:00	0.0000	0.0000	0.0000	0.0090	0.00308	0.0121
08:40:00	0.0000	0.0000	0.0000	0.0087	0.00312	0.0118
08:48:00	0.0000	0.0000	0.0000	0.0084	0.00316	0.0116
08:56:00	0.0000	0.0000	0.0000	0.0081	0.00319	0.0113
09:04:00	0.0000	0.0000	0.0000	0.0078	0.00322	0.011
09:12:00	0.0000	0.0000	0.0000	0.0075	0.00325	0.0107
09:20:00	0.0000	0.0000	0.0000	0.0072	0.00328	0.0105

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
09:28:00	0.0000	0.0000	0.0000	0.0069	0.00331	0.0102
09:36:00	0.0000	0.0000	0.0000	0.0066	0.00334	0.00996
09:44:00	0.0000	0.0000	0.0000	0.0064	0.00336	0.00972
09:52:00	0.0000	0.0000	0.0000	0.0061	0.00338	0.00949
10:00:00	0.0000	0.0000	0.0000	0.0059	0.00341	0.00927
10:08:00	0.0000	0.0000	0.0000	0.0056	0.00343	0.00906
10:16:00	0.0000	0.0000	0.0000	0.0054	0.00345	0.00885
10:24:00	0.0000	0.0000	0.0000	0.0052	0.00346	0.00865
10:32:00	0.0000	0.0000	0.0000	0.0050	0.00348	0.00845
10:40:00	0.0000	0.0000	0.0000	0.0048	0.0035	0.00826
10:48:00	0.0000	0.0000	0.0000	0.0046	0.00351	0.00807
10:56:00	0.0000	0.0000	0.0000	0.0044	0.00352	0.00789
11:04:00	0.0000	0.0000	0.0000	0.0042	0.00354	0.00771
11:12:00	0.0000	0.0000	0.0000	0.0040	0.00355	0.00753
11:20:00	0.0000	0.0000	0.0000	0.0038	0.00356	0.00736
11:28:00	0.0000	0.0000	0.0000	0.0036	0.00357	0.00719
11:36:00	0.0000	0.0000	0.0000	0.0034	0.00358	0.00703
11:44:00	0.0000	0.0000	0.0000	0.0033	0.00358	0.00686
11:52:00	0.0000	0.0000	0.0000	0.0031	0.00359	0.00671
12:00:00	0.0000	0.0000	0.0000	0.0030	0.0036	0.00655
12:08:00	0.0000	0.0000	0.0000	0.0028	0.0036	0.0064
12:16:00	0.0000	0.0000	0.0000	0.0026	0.00361	0.00625
12:24:00	0.0000	0.0000	0.0000	0.0025	0.00361	0.0061
12:32:00	0.0000	0.0000	0.0000	0.0023	0.00361	0.00596
12:40:00	0.0000	0.0000	0.0000	0.0022	0.00361	0.00582
12:48:00	0.0000	0.0000	0.0000	0.0021	0.00361	0.00568
12:56:00	0.0000	0.0000	0.0000	0.0019	0.00361	0.00554
13:04:00	0.0000	0.0000	0.0000	0.0018	0.00361	0.00541
13:12:00	0.0000	0.0000	0.0000	0.0017	0.00361	0.00528
13:20:00	0.0000	0.0000	0.0000	0.0015	0.00361	0.00514
13:28:00	0.0000	0.0000	0.0000	0.0014	0.00361	0.00502
13:36:00	0.0000	0.0000	0.0000	0.0013	0.0036	0.00489
13:44:00	0.0000	0.0000	0.0000	0.0012	0.0036	0.00477
13:52:00	0.0000	0.0000	0.0000	0.0011	0.00359	0.00465
14:00:00	0.0000	0.0000	0.0000	0.0009	0.00359	0.00454
14:08:00	0.0000	0.0000	0.0000	0.0008	0.00358	0.00442

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
14:16:00	0.0000	0.0000	0.0000	0.0007	0.00357	0.00432
14:24:00	0.0000	0.0000	0.0000	0.0007	0.00356	0.00422
14:32:00	0.0000	0.0000	0.0000	0.0006	0.00356	0.00413
14:40:00	0.0000	0.0000	0.0000	0.0005	0.00355	0.00404
14:48:00	0.0000	0.0000	0.0000	0.0004	0.00354	0.00396
14:56:00	0.0000	0.0000	0.0000	0.0004	0.00353	0.00389
15:04:00	0.0000	0.0000	0.0000	0.0003	0.00352	0.00383
15:12:00	0.0000	0.0000	0.0000	0.0003	0.00351	0.00377
15:20:00	0.0000	0.0000	0.0000	0.0002	0.0035	0.00372
15:28:00	0.0000	0.0000	0.0000	0.0002	0.00349	0.00368
15:36:00	0.0000	0.0000	0.0000	0.0002	0.00348	0.00363
15:44:00	0.0000	0.0000	0.0000	0.0001	0.00346	0.0036
15:52:00	0.0000	0.0000	0.0000	0.0001	0.00345	0.00356
16:00:00	0.0000	0.0000	0.0000	0.0001	0.00344	0.00353
16:08:00	0.0000	0.0000	0.0000	0.0001	0.00343	0.0035
16:16:00	0.0000	0.0000	0.0000	0.0001	0.00342	0.00348
16:24:00	0.0000	0.0000	0.0000	0.0000	0.00341	0.00345
16:32:00	0.0000	0.0000	0.0000	0.0000	0.0034	0.00343
16:40:00	0.0000	0.0000	0.0000	0.0000	0.00338	0.00341
16:48:00	0.0000	0.0000	0.0000	0.0000	0.00337	0.00339
16:56:00	0.0000	0.0000	0.0000	0.0000	0.00336	0.00337
17:04:00	0.0000	0.0000	0.0000	0.0000	0.00335	0.00336
17:12:00	0.0000	0.0000	0.0000	0.0000	0.00334	0.00334
17:20:00	0.0000	0.0000	0.0000	0.0000	0.00333	0.00333
17:28:00	0.0000	0.0000	0.0000	0.0000	0.00332	0.00332
17:36:00	0.0000	0.0000	0.0000	0.0000	0.0033	0.0033
17:44:00	0.0000	0.0000	0.0000	0.0000	0.00329	0.00329
17:52:00	0.0000	0.0000	0.0000	0.0000	0.00328	0.00328
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00327	0.00327
18:08:00	0.0000	0.0000	0.0000	0.0000	0.00326	0.00326
18:16:00	0.0000	0.0000	0.0000	0.0000	0.00325	0.00325
18:24:00	0.0000	0.0000	0.0000	0.0000	0.00324	0.00324
18:32:00	0.0000	0.0000	0.0000	0.0000	0.00323	0.00323
18:40:00	0.0000	0.0000	0.0000	0.0000	0.00322	0.00322
18:48:00	0.0000	0.0000	0.0000	0.0000	0.0032	0.0032
18:56:00	0.0000	0.0000	0.0000	0.0000	0.00319	0.00319

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
19:04:00	0.0000	0.0000	0.0000	0.0000	0.00318	0.00318
19:12:00	0.0000	0.0000	0.0000	0.0000	0.00317	0.00317
19:20:00	0.0000	0.0000	0.0000	0.0000	0.00316	0.00316
19:28:00	0.0000	0.0000	0.0000	0.0000	0.00315	0.00315
19:36:00	0.0000	0.0000	0.0000	0.0000	0.00314	0.00314
19:44:00	0.0000	0.0000	0.0000	0.0000	0.00313	0.00313
19:52:00	0.0000	0.0000	0.0000	0.0000	0.00312	0.00312
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00311	0.00311
20:08:00	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031
20:16:00	0.0000	0.0000	0.0000	0.0000	0.00309	0.00309
20:24:00	0.0000	0.0000	0.0000	0.0000	0.00308	0.00308
20:32:00	0.0000	0.0000	0.0000	0.0000	0.00306	0.00306
20:40:00	0.0000	0.0000	0.0000	0.0000	0.00305	0.00305
20:48:00	0.0000	0.0000	0.0000	0.0000	0.00304	0.00304
20:56:00	0.0000	0.0000	0.0000	0.0000	0.00303	0.00303
21:04:00	0.0000	0.0000	0.0000	0.0000	0.00302	0.00302
21:12:00	0.0000	0.0000	0.0000	0.0000	0.00301	0.00301
21:20:00	0.0000	0.0000	0.0000	0.0000	0.003	0.003
21:28:00	0.0000	0.0000	0.0000	0.0000	0.00299	0.00299
21:36:00	0.0000	0.0000	0.0000	0.0000	0.00298	0.00298
21:44:00	0.0000	0.0000	0.0000	0.0000	0.00297	0.00297
21:52:00	0.0000	0.0000	0.0000	0.0000	0.00296	0.00296
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00295	0.00295
22:08:00	0.0000	0.0000	0.0000	0.0000	0.00294	0.00294
22:16:00	0.0000	0.0000	0.0000	0.0000	0.00293	0.00293
22:24:00	0.0000	0.0000	0.0000	0.0000	0.00292	0.00292
22:32:00	0.0000	0.0000	0.0000	0.0000	0.00291	0.00291
22:40:00	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029
22:48:00	0.0000	0.0000	0.0000	0.0000	0.00289	0.00289
22:56:00	0.0000	0.0000	0.0000	0.0000	0.00288	0.00288
23:04:00	0.0000	0.0000	0.0000	0.0000	0.00287	0.00287
23:12:00	0.0000	0.0000	0.0000	0.0000	0.00286	0.00286
23:20:00	0.0000	0.0000	0.0000	0.0000	0.00285	0.00285
23:28:00	0.0000	0.0000	0.0000	0.0000	0.00284	0.00284
23:36:00	0.0000	0.0000	0.0000	0.0000	0.00283	0.00283
23:44:00	0.0000	0.0000	0.0000	0.0000	0.00282	0.00282

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
23:52:00	0.0000	0.0000	0.0000	0.0000	0.00281	0.00281
24:00:00	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028
24:08:00	0.0000	0.0000	0.0000	0.0000	0.00279	0.00279
24:16:00	0.0000	0.0000	0.0000	0.0000	0.00278	0.00278
24:24:00	0.0000	0.0000	0.0000	0.0000	0.00277	0.00277
24:32:00	0.0000	0.0000	0.0000	0.0000	0.00277	0.00277
24:40:00	0.0000	0.0000	0.0000	0.0000	0.00276	0.00276
24:48:00	0.0000	0.0000	0.0000	0.0000	0.00275	0.00275
24:56:00	0.0000	0.0000	0.0000	0.0000	0.00274	0.00274
25:04:00	0.0000	0.0000	0.0000	0.0000	0.00273	0.00273
25:12:00	0.0000	0.0000	0.0000	0.0000	0.00272	0.00272
25:20:00	0.0000	0.0000	0.0000	0.0000	0.00271	0.00271
25:28:00	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027
25:36:00	0.0000	0.0000	0.0000	0.0000	0.00269	0.00269
25:44:00	0.0000	0.0000	0.0000	0.0000	0.00268	0.00268
25:52:00	0.0000	0.0000	0.0000	0.0000	0.00267	0.00267
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00266	0.00266
26:08:00	0.0000	0.0000	0.0000	0.0000	0.00265	0.00265
26:16:00	0.0000	0.0000	0.0000	0.0000	0.00264	0.00264
26:24:00	0.0000	0.0000	0.0000	0.0000	0.00264	0.00264
26:32:00	0.0000	0.0000	0.0000	0.0000	0.00263	0.00263
26:40:00	0.0000	0.0000	0.0000	0.0000	0.00262	0.00262
26:48:00	0.0000	0.0000	0.0000	0.0000	0.00261	0.00261
26:56:00	0.0000	0.0000	0.0000	0.0000	0.0026	0.0026
27:04:00	0.0000	0.0000	0.0000	0.0000	0.00259	0.00259
27:12:00	0.0000	0.0000	0.0000	0.0000	0.00258	0.00258
27:20:00	0.0000	0.0000	0.0000	0.0000	0.00257	0.00257
27:28:00	0.0000	0.0000	0.0000	0.0000	0.00256	0.00256
27:36:00	0.0000	0.0000	0.0000	0.0000	0.00256	0.00256
27:44:00	0.0000	0.0000	0.0000	0.0000	0.00255	0.00255
27:52:00	0.0000	0.0000	0.0000	0.0000	0.00254	0.00254
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00253	0.00253
28:08:00	0.0000	0.0000	0.0000	0.0000	0.00252	0.00252
28:16:00	0.0000	0.0000	0.0000	0.0000	0.00251	0.00251
28:24:00	0.0000	0.0000	0.0000	0.0000	0.0025	0.0025
28:32:00	0.0000	0.0000	0.0000	0.0000	0.00249	0.00249

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
28:40:00	0.0000	0.0000	0.0000	0.0000	0.00249	0.00249
28:48:00	0.0000	0.0000	0.0000	0.0000	0.00248	0.00248
28:56:00	0.0000	0.0000	0.0000	0.0000	0.00247	0.00247
29:04:00	0.0000	0.0000	0.0000	0.0000	0.00246	0.00246
29:12:00	0.0000	0.0000	0.0000	0.0000	0.00245	0.00245
29:20:00	0.0000	0.0000	0.0000	0.0000	0.00244	0.00244
29:28:00	0.0000	0.0000	0.0000	0.0000	0.00244	0.00244
29:36:00	0.0000	0.0000	0.0000	0.0000	0.00243	0.00243
29:44:00	0.0000	0.0000	0.0000	0.0000	0.00242	0.00242
29:52:00	0.0000	0.0000	0.0000	0.0000	0.00241	0.00241
30:00:00	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024
30:08:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
30:16:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
30:24:00	0.0000	0.0000	0.0000	0.0000	0.00238	0.00238
30:32:00	0.0000	0.0000	0.0000	0.0000	0.00237	0.00237
30:40:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
30:48:00	0.0000	0.0000	0.0000	0.0000	0.00235	0.00235
30:56:00	0.0000	0.0000	0.0000	0.0000	0.00235	0.00235
31:04:00	0.0000	0.0000	0.0000	0.0000	0.00234	0.00234
31:12:00	0.0000	0.0000	0.0000	0.0000	0.00233	0.00233
31:20:00	0.0000	0.0000	0.0000	0.0000	0.00232	0.00232
31:28:00	0.0000	0.0000	0.0000	0.0000	0.00231	0.00231
31:36:00	0.0000	0.0000	0.0000	0.0000	0.00231	0.00231
31:44:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
31:52:00	0.0000	0.0000	0.0000	0.0000	0.00229	0.00229
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00228	0.00228
32:08:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
32:16:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
32:24:00	0.0000	0.0000	0.0000	0.0000	0.00226	0.00226
32:32:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225
32:40:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
32:48:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
32:56:00	0.0000	0.0000	0.0000	0.0000	0.00223	0.00223
33:04:00	0.0000	0.0000	0.0000	0.0000	0.00222	0.00222
33:12:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221
33:20:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
33:28:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
33:36:00	0.0000	0.0000	0.0000	0.0000	0.00219	0.00219
33:44:00	0.0000	0.0000	0.0000	0.0000	0.00218	0.00218
33:52:00	0.0000	0.0000	0.0000	0.0000	0.00218	0.00218
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
34:08:00	0.0000	0.0000	0.0000	0.0000	0.00216	0.00216
34:16:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215
34:24:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215
34:32:00	0.0000	0.0000	0.0000	0.0000	0.00214	0.00214
34:40:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
34:48:00	0.0000	0.0000	0.0000	0.0000	0.00212	0.00212
34:56:00	0.0000	0.0000	0.0000	0.0000	0.00212	0.00212
35:04:00	0.0000	0.0000	0.0000	0.0000	0.00211	0.00211
35:12:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
35:20:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
35:28:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
35:36:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
35:44:00	0.0000	0.0000	0.0000	0.0000	0.00207	0.00207
35:52:00	0.0000	0.0000	0.0000	0.0000	0.00207	0.00207
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
36:08:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
36:16:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
36:24:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
36:32:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
36:40:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
36:48:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
36:56:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
37:04:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
37:12:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
37:20:00	0.0000	0.0000	0.0000	0.0000	0.00199	0.00199
37:28:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
37:36:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
37:44:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
37:52:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
38:08:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
38:16:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
38:24:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
38:32:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
38:40:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
38:48:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
38:56:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
39:04:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
39:12:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
39:20:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
39:28:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
39:36:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
39:44:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187
39:52:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
40:08:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
40:16:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
40:24:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
40:32:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
40:40:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
40:48:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
40:56:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
41:04:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
41:12:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
41:20:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
41:28:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
41:36:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
41:44:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
41:52:00	0.0000	0.0000	0.0000	0.0000	0.00177	0.00177
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
42:08:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
42:16:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
42:24:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
42:32:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
42:40:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
42:48:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
42:56:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
43:04:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
43:12:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
43:20:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
43:28:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
43:36:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
43:44:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
43:52:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
44:08:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
44:16:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
44:24:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
44:32:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
44:40:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
44:48:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
44:56:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
45:04:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
45:12:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
45:20:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
45:28:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
45:36:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
45:44:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
45:52:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
46:08:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
46:16:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
46:24:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
46:32:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
46:40:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
46:48:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
46:56:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
47:04:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
47:12:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
47:20:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
47:28:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
47:36:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
47:44:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
47:52:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
48:08:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
48:16:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
48:24:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
48:32:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
48:40:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
48:48:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148

## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*

# UK Design Flood Estimation

Generated on 05 May 2021 08:37:17 by User  
Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: D841-68A2

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 2 year

### Summary of results

Rainfall - FEH 2013 model (mm):	24.36	Total runoff (ML):	0.32
Total Rainfall (mm):	15.78	Total flow (ML):	0.81
Peak Rainfall (mm):	0.92	Peak flow (m <sup>3</sup> /s):	0.02

### Parameters

*Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.*

*\* Indicates that the user locked the duration/timestep*

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	06:00:00 [05:30:00]	Yes
Timestep (hh:mm:ss)	00:08:00 [00:30:00]	Yes
SCF (Seasonal correction factor)	0.65	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.81	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.0689	0.0000	0.0259	0.0000	0.00147	0.00147
00:08:00	0.0782	0.0000	0.0294	0.0000	0.00147	0.00147
00:16:00	0.0888	0.0000	0.0334	0.0000	0.00146	0.00147
00:24:00	0.1007	0.0000	0.0379	0.0000	0.00146	0.00147
00:32:00	0.1143	0.0000	0.0430	0.0000	0.00145	0.00148
00:40:00	0.1296	0.0000	0.0488	0.0000	0.00145	0.0015
00:48:00	0.1470	0.0000	0.0554	0.0001	0.00144	0.00152
00:56:00	0.1666	0.0000	0.0629	0.0001	0.00144	0.00154
01:04:00	0.1888	0.0000	0.0713	0.0001	0.00143	0.00158
01:12:00	0.2139	0.0000	0.0809	0.0002	0.00143	0.00162
01:20:00	0.2422	0.0000	0.0918	0.0003	0.00142	0.00168
01:28:00	0.2741	0.0000	0.1041	0.0003	0.00142	0.00175
01:36:00	0.3100	0.0000	0.1179	0.0004	0.00142	0.00183
01:44:00	0.3505	0.0000	0.1336	0.0005	0.00142	0.00192
01:52:00	0.3960	0.0000	0.1514	0.0006	0.00141	0.00203
02:00:00	0.4470	0.0000	0.1714	0.0008	0.00141	0.00216
02:08:00	0.5041	0.0000	0.1939	0.0009	0.00141	0.00232
02:16:00	0.5678	0.0000	0.2192	0.0011	0.00141	0.00249
02:24:00	0.6383	0.0000	0.2474	0.0013	0.00141	0.0027
02:32:00	0.7159	0.0000	0.2787	0.0015	0.00141	0.00294
02:40:00	0.7994	0.0000	0.3129	0.0018	0.00142	0.00321
02:48:00	0.8839	0.0000	0.3479	0.0021	0.00142	0.00352
02:56:00	0.9240	0.0000	0.3658	0.0024	0.00142	0.00387
03:04:00	0.8839	0.0000	0.3520	0.0028	0.00143	0.00427
03:12:00	0.7994	0.0000	0.3202	0.0033	0.00144	0.00471
03:20:00	0.7159	0.0000	0.2881	0.0037	0.00145	0.0052
03:28:00	0.6383	0.0000	0.2581	0.0043	0.00147	0.00572
03:36:00	0.5678	0.0000	0.2304	0.0048	0.00148	0.00627
03:44:00	0.5041	0.0000	0.2053	0.0053	0.0015	0.00685
03:52:00	0.4470	0.0000	0.1826	0.0059	0.00152	0.00745
04:00:00	0.3960	0.0000	0.1622	0.0065	0.00155	0.00806
04:08:00	0.3505	0.0000	0.1439	0.0071	0.00157	0.00869
04:16:00	0.3100	0.0000	0.1276	0.0077	0.0016	0.00932
04:24:00	0.2741	0.0000	0.1130	0.0083	0.00164	0.00996
04:32:00	0.2422	0.0000	0.1000	0.0089	0.00167	0.0106

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
04:40:00	0.2139	0.0000	0.0884	0.0095	0.00171	0.0112
04:48:00	0.1888	0.0000	0.0782	0.0101	0.00175	0.0118
04:56:00	0.1666	0.0000	0.0691	0.0107	0.0018	0.0125
05:04:00	0.1470	0.0000	0.0610	0.0112	0.00184	0.013
05:12:00	0.1296	0.0000	0.0535	0.0117	0.00189	0.0136
05:20:00	0.1143	0.0000	0.0472	0.0122	0.00194	0.0141
05:28:00	0.1007	0.0000	0.0417	0.0126	0.002	0.0146
05:36:00	0.0888	0.0000	0.0367	0.0130	0.00205	0.0151
05:44:00	0.0782	0.0000	0.0324	0.0134	0.00211	0.0155
05:52:00	0.0689	0.0000	0.0285	0.0137	0.00217	0.0159
06:00:00	0.0000	0.0000	0.0000	0.0139	0.00224	0.0162
06:08:00	0.0000	0.0000	0.0000	0.0141	0.0023	0.0164
06:16:00	0.0000	0.0000	0.0000	0.0143	0.00236	0.0166
06:24:00	0.0000	0.0000	0.0000	0.0143	0.00243	0.0167
06:32:00	0.0000	0.0000	0.0000	0.0143	0.00249	0.0168
06:40:00	0.0000	0.0000	0.0000	0.0143	0.00256	0.0168
06:48:00	0.0000	0.0000	0.0000	0.0142	0.00262	0.0168
06:56:00	0.0000	0.0000	0.0000	0.0140	0.00269	0.0167
07:04:00	0.0000	0.0000	0.0000	0.0138	0.00275	0.0166
07:12:00	0.0000	0.0000	0.0000	0.0136	0.00281	0.0164
07:20:00	0.0000	0.0000	0.0000	0.0134	0.00287	0.0162
07:28:00	0.0000	0.0000	0.0000	0.0131	0.00293	0.016
07:36:00	0.0000	0.0000	0.0000	0.0128	0.00299	0.0158
07:44:00	0.0000	0.0000	0.0000	0.0125	0.00305	0.0155
07:52:00	0.0000	0.0000	0.0000	0.0122	0.0031	0.0153
08:00:00	0.0000	0.0000	0.0000	0.0118	0.00315	0.015
08:08:00	0.0000	0.0000	0.0000	0.0115	0.0032	0.0147
08:16:00	0.0000	0.0000	0.0000	0.0111	0.00325	0.0144
08:24:00	0.0000	0.0000	0.0000	0.0108	0.0033	0.0141
08:32:00	0.0000	0.0000	0.0000	0.0104	0.00335	0.0137
08:40:00	0.0000	0.0000	0.0000	0.0100	0.00339	0.0134
08:48:00	0.0000	0.0000	0.0000	0.0097	0.00343	0.0131
08:56:00	0.0000	0.0000	0.0000	0.0093	0.00347	0.0128
09:04:00	0.0000	0.0000	0.0000	0.0090	0.00351	0.0125
09:12:00	0.0000	0.0000	0.0000	0.0086	0.00354	0.0122
09:20:00	0.0000	0.0000	0.0000	0.0083	0.00358	0.0119

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
09:28:00	0.0000	0.0000	0.0000	0.0080	0.00361	0.0116
09:36:00	0.0000	0.0000	0.0000	0.0076	0.00364	0.0113
09:44:00	0.0000	0.0000	0.0000	0.0073	0.00367	0.011
09:52:00	0.0000	0.0000	0.0000	0.0070	0.0037	0.0107
10:00:00	0.0000	0.0000	0.0000	0.0068	0.00372	0.0105
10:08:00	0.0000	0.0000	0.0000	0.0065	0.00374	0.0102
10:16:00	0.0000	0.0000	0.0000	0.0062	0.00377	0.01
10:24:00	0.0000	0.0000	0.0000	0.0060	0.00379	0.00977
10:32:00	0.0000	0.0000	0.0000	0.0057	0.00381	0.00954
10:40:00	0.0000	0.0000	0.0000	0.0055	0.00383	0.00932
10:48:00	0.0000	0.0000	0.0000	0.0053	0.00384	0.00911
10:56:00	0.0000	0.0000	0.0000	0.0050	0.00386	0.0089
11:04:00	0.0000	0.0000	0.0000	0.0048	0.00387	0.00869
11:12:00	0.0000	0.0000	0.0000	0.0046	0.00389	0.00849
11:20:00	0.0000	0.0000	0.0000	0.0044	0.0039	0.00829
11:28:00	0.0000	0.0000	0.0000	0.0042	0.00391	0.0081
11:36:00	0.0000	0.0000	0.0000	0.0040	0.00392	0.0079
11:44:00	0.0000	0.0000	0.0000	0.0038	0.00393	0.00772
11:52:00	0.0000	0.0000	0.0000	0.0036	0.00394	0.00754
12:00:00	0.0000	0.0000	0.0000	0.0034	0.00395	0.00736
12:08:00	0.0000	0.0000	0.0000	0.0032	0.00395	0.00718
12:16:00	0.0000	0.0000	0.0000	0.0031	0.00396	0.00701
12:24:00	0.0000	0.0000	0.0000	0.0029	0.00396	0.00684
12:32:00	0.0000	0.0000	0.0000	0.0027	0.00397	0.00668
12:40:00	0.0000	0.0000	0.0000	0.0025	0.00397	0.00652
12:48:00	0.0000	0.0000	0.0000	0.0024	0.00397	0.00636
12:56:00	0.0000	0.0000	0.0000	0.0022	0.00397	0.0062
13:04:00	0.0000	0.0000	0.0000	0.0021	0.00397	0.00605
13:12:00	0.0000	0.0000	0.0000	0.0019	0.00397	0.00589
13:20:00	0.0000	0.0000	0.0000	0.0018	0.00397	0.00574
13:28:00	0.0000	0.0000	0.0000	0.0016	0.00396	0.00559
13:36:00	0.0000	0.0000	0.0000	0.0015	0.00396	0.00545
13:44:00	0.0000	0.0000	0.0000	0.0014	0.00395	0.00531
13:52:00	0.0000	0.0000	0.0000	0.0012	0.00395	0.00517
14:00:00	0.0000	0.0000	0.0000	0.0011	0.00394	0.00504
14:08:00	0.0000	0.0000	0.0000	0.0010	0.00393	0.00491



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
14:16:00	0.0000	0.0000	0.0000	0.0009	0.00393	0.00479
14:24:00	0.0000	0.0000	0.0000	0.0008	0.00392	0.00468
14:32:00	0.0000	0.0000	0.0000	0.0007	0.00391	0.00457
14:40:00	0.0000	0.0000	0.0000	0.0006	0.0039	0.00447
14:48:00	0.0000	0.0000	0.0000	0.0005	0.00389	0.00438
14:56:00	0.0000	0.0000	0.0000	0.0004	0.00388	0.0043
15:04:00	0.0000	0.0000	0.0000	0.0004	0.00387	0.00423
15:12:00	0.0000	0.0000	0.0000	0.0003	0.00386	0.00417
15:20:00	0.0000	0.0000	0.0000	0.0003	0.00385	0.00411
15:28:00	0.0000	0.0000	0.0000	0.0002	0.00383	0.00405
15:36:00	0.0000	0.0000	0.0000	0.0002	0.00382	0.00401
15:44:00	0.0000	0.0000	0.0000	0.0002	0.00381	0.00396
15:52:00	0.0000	0.0000	0.0000	0.0001	0.0038	0.00392
16:00:00	0.0000	0.0000	0.0000	0.0001	0.00379	0.00389
16:08:00	0.0000	0.0000	0.0000	0.0001	0.00377	0.00386
16:16:00	0.0000	0.0000	0.0000	0.0001	0.00376	0.00383
16:24:00	0.0000	0.0000	0.0000	0.0001	0.00375	0.0038
16:32:00	0.0000	0.0000	0.0000	0.0000	0.00374	0.00377
16:40:00	0.0000	0.0000	0.0000	0.0000	0.00372	0.00375
16:48:00	0.0000	0.0000	0.0000	0.0000	0.00371	0.00373
16:56:00	0.0000	0.0000	0.0000	0.0000	0.0037	0.00371
17:04:00	0.0000	0.0000	0.0000	0.0000	0.00369	0.00369
17:12:00	0.0000	0.0000	0.0000	0.0000	0.00367	0.00368
17:20:00	0.0000	0.0000	0.0000	0.0000	0.00366	0.00366
17:28:00	0.0000	0.0000	0.0000	0.0000	0.00365	0.00365
17:36:00	0.0000	0.0000	0.0000	0.0000	0.00363	0.00364
17:44:00	0.0000	0.0000	0.0000	0.0000	0.00362	0.00362
17:52:00	0.0000	0.0000	0.0000	0.0000	0.00361	0.00361
18:00:00	0.0000	0.0000	0.0000	0.0000	0.0036	0.0036
18:08:00	0.0000	0.0000	0.0000	0.0000	0.00359	0.00359
18:16:00	0.0000	0.0000	0.0000	0.0000	0.00357	0.00357
18:24:00	0.0000	0.0000	0.0000	0.0000	0.00356	0.00356
18:32:00	0.0000	0.0000	0.0000	0.0000	0.00355	0.00355
18:40:00	0.0000	0.0000	0.0000	0.0000	0.00354	0.00354
18:48:00	0.0000	0.0000	0.0000	0.0000	0.00352	0.00352
18:56:00	0.0000	0.0000	0.0000	0.0000	0.00351	0.00351

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
19:04:00	0.0000	0.0000	0.0000	0.0000	0.0035	0.0035
19:12:00	0.0000	0.0000	0.0000	0.0000	0.00349	0.00349
19:20:00	0.0000	0.0000	0.0000	0.0000	0.00348	0.00348
19:28:00	0.0000	0.0000	0.0000	0.0000	0.00346	0.00346
19:36:00	0.0000	0.0000	0.0000	0.0000	0.00345	0.00345
19:44:00	0.0000	0.0000	0.0000	0.0000	0.00344	0.00344
19:52:00	0.0000	0.0000	0.0000	0.0000	0.00343	0.00343
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00342	0.00342
20:08:00	0.0000	0.0000	0.0000	0.0000	0.00341	0.00341
20:16:00	0.0000	0.0000	0.0000	0.0000	0.00339	0.00339
20:24:00	0.0000	0.0000	0.0000	0.0000	0.00338	0.00338
20:32:00	0.0000	0.0000	0.0000	0.0000	0.00337	0.00337
20:40:00	0.0000	0.0000	0.0000	0.0000	0.00336	0.00336
20:48:00	0.0000	0.0000	0.0000	0.0000	0.00335	0.00335
20:56:00	0.0000	0.0000	0.0000	0.0000	0.00334	0.00334
21:04:00	0.0000	0.0000	0.0000	0.0000	0.00332	0.00332
21:12:00	0.0000	0.0000	0.0000	0.0000	0.00331	0.00331
21:20:00	0.0000	0.0000	0.0000	0.0000	0.0033	0.0033
21:28:00	0.0000	0.0000	0.0000	0.0000	0.00329	0.00329
21:36:00	0.0000	0.0000	0.0000	0.0000	0.00328	0.00328
21:44:00	0.0000	0.0000	0.0000	0.0000	0.00327	0.00327
21:52:00	0.0000	0.0000	0.0000	0.0000	0.00326	0.00326
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00325	0.00325
22:08:00	0.0000	0.0000	0.0000	0.0000	0.00323	0.00323
22:16:00	0.0000	0.0000	0.0000	0.0000	0.00322	0.00322
22:24:00	0.0000	0.0000	0.0000	0.0000	0.00321	0.00321
22:32:00	0.0000	0.0000	0.0000	0.0000	0.0032	0.0032
22:40:00	0.0000	0.0000	0.0000	0.0000	0.00319	0.00319
22:48:00	0.0000	0.0000	0.0000	0.0000	0.00318	0.00318
22:56:00	0.0000	0.0000	0.0000	0.0000	0.00317	0.00317
23:04:00	0.0000	0.0000	0.0000	0.0000	0.00316	0.00316
23:12:00	0.0000	0.0000	0.0000	0.0000	0.00315	0.00315
23:20:00	0.0000	0.0000	0.0000	0.0000	0.00314	0.00314
23:28:00	0.0000	0.0000	0.0000	0.0000	0.00313	0.00313
23:36:00	0.0000	0.0000	0.0000	0.0000	0.00312	0.00312
23:44:00	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
23:52:00	0.0000	0.0000	0.0000	0.0000	0.00309	0.00309
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00308	0.00308
24:08:00	0.0000	0.0000	0.0000	0.0000	0.00307	0.00307
24:16:00	0.0000	0.0000	0.0000	0.0000	0.00306	0.00306
24:24:00	0.0000	0.0000	0.0000	0.0000	0.00305	0.00305
24:32:00	0.0000	0.0000	0.0000	0.0000	0.00304	0.00304
24:40:00	0.0000	0.0000	0.0000	0.0000	0.00303	0.00303
24:48:00	0.0000	0.0000	0.0000	0.0000	0.00302	0.00302
24:56:00	0.0000	0.0000	0.0000	0.0000	0.00301	0.00301
25:04:00	0.0000	0.0000	0.0000	0.0000	0.003	0.003
25:12:00	0.0000	0.0000	0.0000	0.0000	0.00299	0.00299
25:20:00	0.0000	0.0000	0.0000	0.0000	0.00298	0.00298
25:28:00	0.0000	0.0000	0.0000	0.0000	0.00297	0.00297
25:36:00	0.0000	0.0000	0.0000	0.0000	0.00296	0.00296
25:44:00	0.0000	0.0000	0.0000	0.0000	0.00295	0.00295
25:52:00	0.0000	0.0000	0.0000	0.0000	0.00294	0.00294
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00293	0.00293
26:08:00	0.0000	0.0000	0.0000	0.0000	0.00292	0.00292
26:16:00	0.0000	0.0000	0.0000	0.0000	0.00291	0.00291
26:24:00	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029
26:32:00	0.0000	0.0000	0.0000	0.0000	0.00289	0.00289
26:40:00	0.0000	0.0000	0.0000	0.0000	0.00288	0.00288
26:48:00	0.0000	0.0000	0.0000	0.0000	0.00287	0.00287
26:56:00	0.0000	0.0000	0.0000	0.0000	0.00286	0.00286
27:04:00	0.0000	0.0000	0.0000	0.0000	0.00285	0.00285
27:12:00	0.0000	0.0000	0.0000	0.0000	0.00284	0.00284
27:20:00	0.0000	0.0000	0.0000	0.0000	0.00283	0.00283
27:28:00	0.0000	0.0000	0.0000	0.0000	0.00282	0.00282
27:36:00	0.0000	0.0000	0.0000	0.0000	0.00281	0.00281
27:44:00	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028
27:52:00	0.0000	0.0000	0.0000	0.0000	0.00279	0.00279
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00278	0.00278
28:08:00	0.0000	0.0000	0.0000	0.0000	0.00277	0.00277
28:16:00	0.0000	0.0000	0.0000	0.0000	0.00276	0.00276
28:24:00	0.0000	0.0000	0.0000	0.0000	0.00275	0.00275
28:32:00	0.0000	0.0000	0.0000	0.0000	0.00274	0.00274

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
28:40:00	0.0000	0.0000	0.0000	0.0000	0.00273	0.00273
28:48:00	0.0000	0.0000	0.0000	0.0000	0.00273	0.00273
28:56:00	0.0000	0.0000	0.0000	0.0000	0.00272	0.00272
29:04:00	0.0000	0.0000	0.0000	0.0000	0.00271	0.00271
29:12:00	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027
29:20:00	0.0000	0.0000	0.0000	0.0000	0.00269	0.00269
29:28:00	0.0000	0.0000	0.0000	0.0000	0.00268	0.00268
29:36:00	0.0000	0.0000	0.0000	0.0000	0.00267	0.00267
29:44:00	0.0000	0.0000	0.0000	0.0000	0.00266	0.00266
29:52:00	0.0000	0.0000	0.0000	0.0000	0.00265	0.00265
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00264	0.00264
30:08:00	0.0000	0.0000	0.0000	0.0000	0.00263	0.00263
30:16:00	0.0000	0.0000	0.0000	0.0000	0.00262	0.00262
30:24:00	0.0000	0.0000	0.0000	0.0000	0.00262	0.00262
30:32:00	0.0000	0.0000	0.0000	0.0000	0.00261	0.00261
30:40:00	0.0000	0.0000	0.0000	0.0000	0.0026	0.0026
30:48:00	0.0000	0.0000	0.0000	0.0000	0.00259	0.00259
30:56:00	0.0000	0.0000	0.0000	0.0000	0.00258	0.00258
31:04:00	0.0000	0.0000	0.0000	0.0000	0.00257	0.00257
31:12:00	0.0000	0.0000	0.0000	0.0000	0.00256	0.00256
31:20:00	0.0000	0.0000	0.0000	0.0000	0.00255	0.00255
31:28:00	0.0000	0.0000	0.0000	0.0000	0.00254	0.00254
31:36:00	0.0000	0.0000	0.0000	0.0000	0.00254	0.00254
31:44:00	0.0000	0.0000	0.0000	0.0000	0.00253	0.00253
31:52:00	0.0000	0.0000	0.0000	0.0000	0.00252	0.00252
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00251	0.00251
32:08:00	0.0000	0.0000	0.0000	0.0000	0.0025	0.0025
32:16:00	0.0000	0.0000	0.0000	0.0000	0.00249	0.00249
32:24:00	0.0000	0.0000	0.0000	0.0000	0.00248	0.00248
32:32:00	0.0000	0.0000	0.0000	0.0000	0.00248	0.00248
32:40:00	0.0000	0.0000	0.0000	0.0000	0.00247	0.00247
32:48:00	0.0000	0.0000	0.0000	0.0000	0.00246	0.00246
32:56:00	0.0000	0.0000	0.0000	0.0000	0.00245	0.00245
33:04:00	0.0000	0.0000	0.0000	0.0000	0.00244	0.00244
33:12:00	0.0000	0.0000	0.0000	0.0000	0.00243	0.00243
33:20:00	0.0000	0.0000	0.0000	0.0000	0.00243	0.00243

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
33:28:00	0.0000	0.0000	0.0000	0.0000	0.00242	0.00242
33:36:00	0.0000	0.0000	0.0000	0.0000	0.00241	0.00241
33:44:00	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024
33:52:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00238	0.00238
34:08:00	0.0000	0.0000	0.0000	0.0000	0.00238	0.00238
34:16:00	0.0000	0.0000	0.0000	0.0000	0.00237	0.00237
34:24:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
34:32:00	0.0000	0.0000	0.0000	0.0000	0.00235	0.00235
34:40:00	0.0000	0.0000	0.0000	0.0000	0.00234	0.00234
34:48:00	0.0000	0.0000	0.0000	0.0000	0.00234	0.00234
34:56:00	0.0000	0.0000	0.0000	0.0000	0.00233	0.00233
35:04:00	0.0000	0.0000	0.0000	0.0000	0.00232	0.00232
35:12:00	0.0000	0.0000	0.0000	0.0000	0.00231	0.00231
35:20:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
35:28:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
35:36:00	0.0000	0.0000	0.0000	0.0000	0.00229	0.00229
35:44:00	0.0000	0.0000	0.0000	0.0000	0.00228	0.00228
35:52:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00226	0.00226
36:08:00	0.0000	0.0000	0.0000	0.0000	0.00226	0.00226
36:16:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225
36:24:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
36:32:00	0.0000	0.0000	0.0000	0.0000	0.00223	0.00223
36:40:00	0.0000	0.0000	0.0000	0.0000	0.00223	0.00223
36:48:00	0.0000	0.0000	0.0000	0.0000	0.00222	0.00222
36:56:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221
37:04:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
37:12:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
37:20:00	0.0000	0.0000	0.0000	0.0000	0.00219	0.00219
37:28:00	0.0000	0.0000	0.0000	0.0000	0.00218	0.00218
37:36:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
37:44:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
37:52:00	0.0000	0.0000	0.0000	0.0000	0.00216	0.00216
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215
38:08:00	0.0000	0.0000	0.0000	0.0000	0.00214	0.00214

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
38:16:00	0.0000	0.0000	0.0000	0.0000	0.00214	0.00214
38:24:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
38:32:00	0.0000	0.0000	0.0000	0.0000	0.00212	0.00212
38:40:00	0.0000	0.0000	0.0000	0.0000	0.00211	0.00211
38:48:00	0.0000	0.0000	0.0000	0.0000	0.00211	0.00211
38:56:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
39:04:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
39:12:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
39:20:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
39:28:00	0.0000	0.0000	0.0000	0.0000	0.00207	0.00207
39:36:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
39:44:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
39:52:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
40:08:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
40:16:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
40:24:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
40:32:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
40:40:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
40:48:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
40:56:00	0.0000	0.0000	0.0000	0.0000	0.00199	0.00199
41:04:00	0.0000	0.0000	0.0000	0.0000	0.00199	0.00199
41:12:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
41:20:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
41:28:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
41:36:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
41:44:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195
41:52:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
42:08:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
42:16:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
42:24:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
42:32:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
42:40:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
42:48:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
42:56:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
43:04:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
43:12:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
43:20:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
43:28:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187
43:36:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
43:44:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
43:52:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
44:08:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
44:16:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
44:24:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
44:32:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
44:40:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
44:48:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
44:56:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
45:04:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
45:12:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
45:20:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
45:28:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
45:36:00	0.0000	0.0000	0.0000	0.0000	0.00177	0.00177
45:44:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
45:52:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
46:08:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
46:16:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
46:24:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
46:32:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
46:40:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
46:48:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
46:56:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
47:04:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
47:12:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
47:20:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
47:28:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
47:36:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
47:44:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
47:52:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
48:08:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
48:16:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
48:24:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
48:32:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
48:40:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
48:48:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
48:56:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
49:04:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
49:12:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
49:20:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
49:28:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
49:36:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
49:44:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
49:52:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
50:08:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
50:16:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
50:24:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
50:32:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
50:40:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
50:48:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
50:56:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
51:04:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
51:12:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
51:20:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
51:28:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
51:36:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
51:44:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
51:52:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
52:00:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
52:08:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
52:16:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
52:24:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
52:32:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148



## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*

# UK Design Flood Estimation

Generated on 05 May 2021 08:37:47 by User

Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: D841-68A2

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 30 year

### Summary of results

Rainfall - FEH 2013 model (mm):	49.60	Total runoff (ML):	0.68
Total Rainfall (mm):	32.12	Total flow (ML):	1.64
Peak Rainfall (mm):	1.88	Peak flow (m <sup>3</sup> /s):	0.03

### Parameters

Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.

\* Indicates that the user locked the duration/timestep

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	06:00:00 [05:30:00]	Yes
Timestep (hh:mm:ss)	00:08:00 [00:30:00]	Yes
SCF (Seasonal correction factor)	0.65	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.64	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.1402	0.0000	0.0526	0.0000	0.00147	0.00147
00:08:00	0.1592	0.0000	0.0598	0.0000	0.00147	0.00147
00:16:00	0.1807	0.0000	0.0680	0.0000	0.00146	0.00147
00:24:00	0.2051	0.0000	0.0773	0.0000	0.00146	0.00149
00:32:00	0.2327	0.0000	0.0878	0.0001	0.00145	0.00151
00:40:00	0.2639	0.0000	0.0998	0.0001	0.00145	0.00155
00:48:00	0.2993	0.0000	0.1133	0.0002	0.00144	0.0016
00:56:00	0.3392	0.0000	0.1288	0.0002	0.00144	0.00166
01:04:00	0.3844	0.0000	0.1463	0.0003	0.00143	0.00174
01:12:00	0.4354	0.0000	0.1662	0.0004	0.00143	0.00183
01:20:00	0.4931	0.0000	0.1888	0.0005	0.00143	0.00195
01:28:00	0.5580	0.0000	0.2144	0.0007	0.00143	0.00209
01:36:00	0.6313	0.0000	0.2435	0.0008	0.00142	0.00226
01:44:00	0.7137	0.0000	0.2766	0.0010	0.00142	0.00246
01:52:00	0.8063	0.0000	0.3141	0.0013	0.00142	0.00269
02:00:00	0.9102	0.0000	0.3566	0.0015	0.00142	0.00296
02:08:00	1.0264	0.0000	0.4047	0.0019	0.00143	0.00328
02:16:00	1.1560	0.0000	0.4591	0.0022	0.00143	0.00365
02:24:00	1.2997	0.0000	0.5204	0.0026	0.00143	0.00408
02:32:00	1.4576	0.0000	0.5889	0.0031	0.00144	0.00457
02:40:00	1.6277	0.0000	0.6642	0.0037	0.00145	0.00514
02:48:00	1.7995	0.0000	0.7424	0.0043	0.00146	0.00578
02:56:00	1.8813	0.0000	0.7852	0.0050	0.00148	0.00652
03:04:00	1.7995	0.0000	0.7598	0.0059	0.0015	0.00735
03:12:00	1.6277	0.0000	0.6945	0.0068	0.00152	0.00829
03:20:00	1.4576	0.0000	0.6279	0.0078	0.00154	0.00931
03:28:00	1.2997	0.0000	0.5645	0.0088	0.00157	0.0104
03:36:00	1.1560	0.0000	0.5059	0.0100	0.00161	0.0116
03:44:00	1.0264	0.0000	0.4521	0.0111	0.00165	0.0128
03:52:00	0.9102	0.0000	0.4032	0.0124	0.00169	0.0141
04:00:00	0.8063	0.0000	0.3590	0.0136	0.00174	0.0154
04:08:00	0.7137	0.0000	0.3192	0.0149	0.0018	0.0167
04:16:00	0.6313	0.0000	0.2834	0.0162	0.00186	0.018
04:24:00	0.5580	0.0000	0.2514	0.0175	0.00193	0.0194
04:32:00	0.4931	0.0000	0.2228	0.0188	0.002	0.0208

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
04:40:00	0.4354	0.0000	0.1973	0.0200	0.00208	0.0221
04:48:00	0.3844	0.0000	0.1746	0.0213	0.00216	0.0234
04:56:00	0.3392	0.0000	0.1544	0.0225	0.00225	0.0247
05:04:00	0.2993	0.0000	0.1365	0.0237	0.00235	0.026
05:12:00	0.2639	0.0000	0.1198	0.0248	0.00245	0.0272
05:20:00	0.2327	0.0000	0.1058	0.0258	0.00255	0.0284
05:28:00	0.2051	0.0000	0.0934	0.0268	0.00266	0.0295
05:36:00	0.1807	0.0000	0.0824	0.0277	0.00278	0.0305
05:44:00	0.1592	0.0000	0.0726	0.0285	0.0029	0.0314
05:52:00	0.1402	0.0000	0.0640	0.0292	0.00302	0.0322
06:00:00	0.0000	0.0000	0.0000	0.0297	0.00314	0.0329
06:08:00	0.0000	0.0000	0.0000	0.0302	0.00327	0.0334
06:16:00	0.0000	0.0000	0.0000	0.0305	0.0034	0.0339
06:24:00	0.0000	0.0000	0.0000	0.0306	0.00353	0.0342
06:32:00	0.0000	0.0000	0.0000	0.0307	0.00366	0.0343
06:40:00	0.0000	0.0000	0.0000	0.0306	0.0038	0.0344
06:48:00	0.0000	0.0000	0.0000	0.0304	0.00393	0.0343
06:56:00	0.0000	0.0000	0.0000	0.0301	0.00406	0.0342
07:04:00	0.0000	0.0000	0.0000	0.0297	0.00419	0.0339
07:12:00	0.0000	0.0000	0.0000	0.0293	0.00431	0.0336
07:20:00	0.0000	0.0000	0.0000	0.0288	0.00444	0.0332
07:28:00	0.0000	0.0000	0.0000	0.0282	0.00456	0.0328
07:36:00	0.0000	0.0000	0.0000	0.0276	0.00468	0.0323
07:44:00	0.0000	0.0000	0.0000	0.0270	0.00479	0.0317
07:52:00	0.0000	0.0000	0.0000	0.0263	0.00491	0.0312
08:00:00	0.0000	0.0000	0.0000	0.0256	0.00502	0.0306
08:08:00	0.0000	0.0000	0.0000	0.0248	0.00512	0.0299
08:16:00	0.0000	0.0000	0.0000	0.0241	0.00522	0.0293
08:24:00	0.0000	0.0000	0.0000	0.0233	0.00532	0.0286
08:32:00	0.0000	0.0000	0.0000	0.0225	0.00542	0.028
08:40:00	0.0000	0.0000	0.0000	0.0218	0.00551	0.0273
08:48:00	0.0000	0.0000	0.0000	0.0210	0.00559	0.0266
08:56:00	0.0000	0.0000	0.0000	0.0202	0.00567	0.0259
09:04:00	0.0000	0.0000	0.0000	0.0195	0.00575	0.0252
09:12:00	0.0000	0.0000	0.0000	0.0187	0.00583	0.0245
09:20:00	0.0000	0.0000	0.0000	0.0180	0.0059	0.0239

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
09:28:00	0.0000	0.0000	0.0000	0.0173	0.00597	0.0232
09:36:00	0.0000	0.0000	0.0000	0.0166	0.00603	0.0226
09:44:00	0.0000	0.0000	0.0000	0.0159	0.00609	0.022
09:52:00	0.0000	0.0000	0.0000	0.0153	0.00615	0.0214
10:00:00	0.0000	0.0000	0.0000	0.0147	0.0062	0.0209
10:08:00	0.0000	0.0000	0.0000	0.0141	0.00625	0.0204
10:16:00	0.0000	0.0000	0.0000	0.0135	0.0063	0.0198
10:24:00	0.0000	0.0000	0.0000	0.0130	0.00635	0.0193
10:32:00	0.0000	0.0000	0.0000	0.0125	0.00639	0.0189
10:40:00	0.0000	0.0000	0.0000	0.0120	0.00643	0.0184
10:48:00	0.0000	0.0000	0.0000	0.0115	0.00647	0.0179
10:56:00	0.0000	0.0000	0.0000	0.0110	0.0065	0.0175
11:04:00	0.0000	0.0000	0.0000	0.0105	0.00654	0.017
11:12:00	0.0000	0.0000	0.0000	0.0100	0.00657	0.0166
11:20:00	0.0000	0.0000	0.0000	0.0096	0.0066	0.0162
11:28:00	0.0000	0.0000	0.0000	0.0091	0.00662	0.0158
11:36:00	0.0000	0.0000	0.0000	0.0087	0.00665	0.0153
11:44:00	0.0000	0.0000	0.0000	0.0083	0.00667	0.0149
11:52:00	0.0000	0.0000	0.0000	0.0079	0.00669	0.0146
12:00:00	0.0000	0.0000	0.0000	0.0075	0.00671	0.0142
12:08:00	0.0000	0.0000	0.0000	0.0071	0.00672	0.0138
12:16:00	0.0000	0.0000	0.0000	0.0067	0.00674	0.0134
12:24:00	0.0000	0.0000	0.0000	0.0063	0.00675	0.0131
12:32:00	0.0000	0.0000	0.0000	0.0060	0.00676	0.0127
12:40:00	0.0000	0.0000	0.0000	0.0056	0.00677	0.0124
12:48:00	0.0000	0.0000	0.0000	0.0053	0.00678	0.012
12:56:00	0.0000	0.0000	0.0000	0.0049	0.00678	0.0117
13:04:00	0.0000	0.0000	0.0000	0.0046	0.00678	0.0114
13:12:00	0.0000	0.0000	0.0000	0.0043	0.00678	0.011
13:20:00	0.0000	0.0000	0.0000	0.0039	0.00678	0.0107
13:28:00	0.0000	0.0000	0.0000	0.0036	0.00678	0.0104
13:36:00	0.0000	0.0000	0.0000	0.0033	0.00678	0.0101
13:44:00	0.0000	0.0000	0.0000	0.0030	0.00677	0.00978
13:52:00	0.0000	0.0000	0.0000	0.0027	0.00676	0.00949
14:00:00	0.0000	0.0000	0.0000	0.0025	0.00675	0.00921
14:08:00	0.0000	0.0000	0.0000	0.0022	0.00674	0.00893

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
14:16:00	0.0000	0.0000	0.0000	0.0019	0.00673	0.00867
14:24:00	0.0000	0.0000	0.0000	0.0017	0.00672	0.00843
14:32:00	0.0000	0.0000	0.0000	0.0015	0.00671	0.0082
14:40:00	0.0000	0.0000	0.0000	0.0013	0.00669	0.00798
14:48:00	0.0000	0.0000	0.0000	0.0011	0.00667	0.00779
14:56:00	0.0000	0.0000	0.0000	0.0010	0.00666	0.00762
15:04:00	0.0000	0.0000	0.0000	0.0008	0.00664	0.00746
15:12:00	0.0000	0.0000	0.0000	0.0007	0.00662	0.00732
15:20:00	0.0000	0.0000	0.0000	0.0006	0.0066	0.00719
15:28:00	0.0000	0.0000	0.0000	0.0005	0.00658	0.00708
15:36:00	0.0000	0.0000	0.0000	0.0004	0.00656	0.00698
15:44:00	0.0000	0.0000	0.0000	0.0003	0.00654	0.00689
15:52:00	0.0000	0.0000	0.0000	0.0003	0.00652	0.0068
16:00:00	0.0000	0.0000	0.0000	0.0002	0.0065	0.00673
16:08:00	0.0000	0.0000	0.0000	0.0002	0.00648	0.00666
16:16:00	0.0000	0.0000	0.0000	0.0001	0.00646	0.0066
16:24:00	0.0000	0.0000	0.0000	0.0001	0.00643	0.00655
16:32:00	0.0000	0.0000	0.0000	0.0001	0.00641	0.0065
16:40:00	0.0000	0.0000	0.0000	0.0001	0.00639	0.00646
16:48:00	0.0000	0.0000	0.0000	0.0000	0.00637	0.00642
16:56:00	0.0000	0.0000	0.0000	0.0000	0.00635	0.00638
17:04:00	0.0000	0.0000	0.0000	0.0000	0.00633	0.00635
17:12:00	0.0000	0.0000	0.0000	0.0000	0.00631	0.00632
17:20:00	0.0000	0.0000	0.0000	0.0000	0.00628	0.00629
17:28:00	0.0000	0.0000	0.0000	0.0000	0.00626	0.00626
17:36:00	0.0000	0.0000	0.0000	0.0000	0.00624	0.00624
17:44:00	0.0000	0.0000	0.0000	0.0000	0.00622	0.00622
17:52:00	0.0000	0.0000	0.0000	0.0000	0.0062	0.0062
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00618	0.00618
18:08:00	0.0000	0.0000	0.0000	0.0000	0.00616	0.00616
18:16:00	0.0000	0.0000	0.0000	0.0000	0.00613	0.00613
18:24:00	0.0000	0.0000	0.0000	0.0000	0.00611	0.00611
18:32:00	0.0000	0.0000	0.0000	0.0000	0.00609	0.00609
18:40:00	0.0000	0.0000	0.0000	0.0000	0.00607	0.00607
18:48:00	0.0000	0.0000	0.0000	0.0000	0.00605	0.00605
18:56:00	0.0000	0.0000	0.0000	0.0000	0.00603	0.00603

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
19:04:00	0.0000	0.0000	0.0000	0.0000	0.00601	0.00601
19:12:00	0.0000	0.0000	0.0000	0.0000	0.00599	0.00599
19:20:00	0.0000	0.0000	0.0000	0.0000	0.00597	0.00597
19:28:00	0.0000	0.0000	0.0000	0.0000	0.00595	0.00595
19:36:00	0.0000	0.0000	0.0000	0.0000	0.00593	0.00593
19:44:00	0.0000	0.0000	0.0000	0.0000	0.00591	0.00591
19:52:00	0.0000	0.0000	0.0000	0.0000	0.00589	0.00589
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00587	0.00587
20:08:00	0.0000	0.0000	0.0000	0.0000	0.00585	0.00585
20:16:00	0.0000	0.0000	0.0000	0.0000	0.00583	0.00583
20:24:00	0.0000	0.0000	0.0000	0.0000	0.00581	0.00581
20:32:00	0.0000	0.0000	0.0000	0.0000	0.00579	0.00579
20:40:00	0.0000	0.0000	0.0000	0.0000	0.00577	0.00577
20:48:00	0.0000	0.0000	0.0000	0.0000	0.00575	0.00575
20:56:00	0.0000	0.0000	0.0000	0.0000	0.00573	0.00573
21:04:00	0.0000	0.0000	0.0000	0.0000	0.00571	0.00571
21:12:00	0.0000	0.0000	0.0000	0.0000	0.00569	0.00569
21:20:00	0.0000	0.0000	0.0000	0.0000	0.00567	0.00567
21:28:00	0.0000	0.0000	0.0000	0.0000	0.00565	0.00565
21:36:00	0.0000	0.0000	0.0000	0.0000	0.00563	0.00563
21:44:00	0.0000	0.0000	0.0000	0.0000	0.00561	0.00561
21:52:00	0.0000	0.0000	0.0000	0.0000	0.00559	0.00559
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00557	0.00557
22:08:00	0.0000	0.0000	0.0000	0.0000	0.00555	0.00555
22:16:00	0.0000	0.0000	0.0000	0.0000	0.00553	0.00553
22:24:00	0.0000	0.0000	0.0000	0.0000	0.00552	0.00552
22:32:00	0.0000	0.0000	0.0000	0.0000	0.0055	0.0055
22:40:00	0.0000	0.0000	0.0000	0.0000	0.00548	0.00548
22:48:00	0.0000	0.0000	0.0000	0.0000	0.00546	0.00546
22:56:00	0.0000	0.0000	0.0000	0.0000	0.00544	0.00544
23:04:00	0.0000	0.0000	0.0000	0.0000	0.00542	0.00542
23:12:00	0.0000	0.0000	0.0000	0.0000	0.0054	0.0054
23:20:00	0.0000	0.0000	0.0000	0.0000	0.00539	0.00539
23:28:00	0.0000	0.0000	0.0000	0.0000	0.00537	0.00537
23:36:00	0.0000	0.0000	0.0000	0.0000	0.00535	0.00535
23:44:00	0.0000	0.0000	0.0000	0.0000	0.00533	0.00533



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
23:52:00	0.0000	0.0000	0.0000	0.0000	0.00531	0.00531
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00529	0.00529
24:08:00	0.0000	0.0000	0.0000	0.0000	0.00528	0.00528
24:16:00	0.0000	0.0000	0.0000	0.0000	0.00526	0.00526
24:24:00	0.0000	0.0000	0.0000	0.0000	0.00524	0.00524
24:32:00	0.0000	0.0000	0.0000	0.0000	0.00522	0.00522
24:40:00	0.0000	0.0000	0.0000	0.0000	0.0052	0.0052
24:48:00	0.0000	0.0000	0.0000	0.0000	0.00519	0.00519
24:56:00	0.0000	0.0000	0.0000	0.0000	0.00517	0.00517
25:04:00	0.0000	0.0000	0.0000	0.0000	0.00515	0.00515
25:12:00	0.0000	0.0000	0.0000	0.0000	0.00513	0.00513
25:20:00	0.0000	0.0000	0.0000	0.0000	0.00512	0.00512
25:28:00	0.0000	0.0000	0.0000	0.0000	0.0051	0.0051
25:36:00	0.0000	0.0000	0.0000	0.0000	0.00508	0.00508
25:44:00	0.0000	0.0000	0.0000	0.0000	0.00506	0.00506
25:52:00	0.0000	0.0000	0.0000	0.0000	0.00505	0.00505
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00503	0.00503
26:08:00	0.0000	0.0000	0.0000	0.0000	0.00501	0.00501
26:16:00	0.0000	0.0000	0.0000	0.0000	0.00499	0.00499
26:24:00	0.0000	0.0000	0.0000	0.0000	0.00498	0.00498
26:32:00	0.0000	0.0000	0.0000	0.0000	0.00496	0.00496
26:40:00	0.0000	0.0000	0.0000	0.0000	0.00494	0.00494
26:48:00	0.0000	0.0000	0.0000	0.0000	0.00493	0.00493
26:56:00	0.0000	0.0000	0.0000	0.0000	0.00491	0.00491
27:04:00	0.0000	0.0000	0.0000	0.0000	0.00489	0.00489
27:12:00	0.0000	0.0000	0.0000	0.0000	0.00488	0.00488
27:20:00	0.0000	0.0000	0.0000	0.0000	0.00486	0.00486
27:28:00	0.0000	0.0000	0.0000	0.0000	0.00484	0.00484
27:36:00	0.0000	0.0000	0.0000	0.0000	0.00483	0.00483
27:44:00	0.0000	0.0000	0.0000	0.0000	0.00481	0.00481
27:52:00	0.0000	0.0000	0.0000	0.0000	0.00479	0.00479
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00478	0.00478
28:08:00	0.0000	0.0000	0.0000	0.0000	0.00476	0.00476
28:16:00	0.0000	0.0000	0.0000	0.0000	0.00474	0.00474
28:24:00	0.0000	0.0000	0.0000	0.0000	0.00473	0.00473
28:32:00	0.0000	0.0000	0.0000	0.0000	0.00471	0.00471

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
28:40:00	0.0000	0.0000	0.0000	0.0000	0.00469	0.00469
28:48:00	0.0000	0.0000	0.0000	0.0000	0.00468	0.00468
28:56:00	0.0000	0.0000	0.0000	0.0000	0.00466	0.00466
29:04:00	0.0000	0.0000	0.0000	0.0000	0.00465	0.00465
29:12:00	0.0000	0.0000	0.0000	0.0000	0.00463	0.00463
29:20:00	0.0000	0.0000	0.0000	0.0000	0.00462	0.00462
29:28:00	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046
29:36:00	0.0000	0.0000	0.0000	0.0000	0.00458	0.00458
29:44:00	0.0000	0.0000	0.0000	0.0000	0.00457	0.00457
29:52:00	0.0000	0.0000	0.0000	0.0000	0.00455	0.00455
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00454	0.00454
30:08:00	0.0000	0.0000	0.0000	0.0000	0.00452	0.00452
30:16:00	0.0000	0.0000	0.0000	0.0000	0.00451	0.00451
30:24:00	0.0000	0.0000	0.0000	0.0000	0.00449	0.00449
30:32:00	0.0000	0.0000	0.0000	0.0000	0.00447	0.00447
30:40:00	0.0000	0.0000	0.0000	0.0000	0.00446	0.00446
30:48:00	0.0000	0.0000	0.0000	0.0000	0.00444	0.00444
30:56:00	0.0000	0.0000	0.0000	0.0000	0.00443	0.00443
31:04:00	0.0000	0.0000	0.0000	0.0000	0.00441	0.00441
31:12:00	0.0000	0.0000	0.0000	0.0000	0.0044	0.0044
31:20:00	0.0000	0.0000	0.0000	0.0000	0.00438	0.00438
31:28:00	0.0000	0.0000	0.0000	0.0000	0.00437	0.00437
31:36:00	0.0000	0.0000	0.0000	0.0000	0.00435	0.00435
31:44:00	0.0000	0.0000	0.0000	0.0000	0.00434	0.00434
31:52:00	0.0000	0.0000	0.0000	0.0000	0.00432	0.00432
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00431	0.00431
32:08:00	0.0000	0.0000	0.0000	0.0000	0.00429	0.00429
32:16:00	0.0000	0.0000	0.0000	0.0000	0.00428	0.00428
32:24:00	0.0000	0.0000	0.0000	0.0000	0.00427	0.00427
32:32:00	0.0000	0.0000	0.0000	0.0000	0.00425	0.00425
32:40:00	0.0000	0.0000	0.0000	0.0000	0.00424	0.00424
32:48:00	0.0000	0.0000	0.0000	0.0000	0.00422	0.00422
32:56:00	0.0000	0.0000	0.0000	0.0000	0.00421	0.00421
33:04:00	0.0000	0.0000	0.0000	0.0000	0.00419	0.00419
33:12:00	0.0000	0.0000	0.0000	0.0000	0.00418	0.00418
33:20:00	0.0000	0.0000	0.0000	0.0000	0.00416	0.00416

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
33:28:00	0.0000	0.0000	0.0000	0.0000	0.00415	0.00415
33:36:00	0.0000	0.0000	0.0000	0.0000	0.00414	0.00414
33:44:00	0.0000	0.0000	0.0000	0.0000	0.00412	0.00412
33:52:00	0.0000	0.0000	0.0000	0.0000	0.00411	0.00411
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00409	0.00409
34:08:00	0.0000	0.0000	0.0000	0.0000	0.00408	0.00408
34:16:00	0.0000	0.0000	0.0000	0.0000	0.00407	0.00407
34:24:00	0.0000	0.0000	0.0000	0.0000	0.00405	0.00405
34:32:00	0.0000	0.0000	0.0000	0.0000	0.00404	0.00404
34:40:00	0.0000	0.0000	0.0000	0.0000	0.00402	0.00402
34:48:00	0.0000	0.0000	0.0000	0.0000	0.00401	0.00401
34:56:00	0.0000	0.0000	0.0000	0.0000	0.004	0.004
35:04:00	0.0000	0.0000	0.0000	0.0000	0.00398	0.00398
35:12:00	0.0000	0.0000	0.0000	0.0000	0.00397	0.00397
35:20:00	0.0000	0.0000	0.0000	0.0000	0.00396	0.00396
35:28:00	0.0000	0.0000	0.0000	0.0000	0.00394	0.00394
35:36:00	0.0000	0.0000	0.0000	0.0000	0.00393	0.00393
35:44:00	0.0000	0.0000	0.0000	0.0000	0.00391	0.00391
35:52:00	0.0000	0.0000	0.0000	0.0000	0.0039	0.0039
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00389	0.00389
36:08:00	0.0000	0.0000	0.0000	0.0000	0.00387	0.00387
36:16:00	0.0000	0.0000	0.0000	0.0000	0.00386	0.00386
36:24:00	0.0000	0.0000	0.0000	0.0000	0.00385	0.00385
36:32:00	0.0000	0.0000	0.0000	0.0000	0.00384	0.00384
36:40:00	0.0000	0.0000	0.0000	0.0000	0.00382	0.00382
36:48:00	0.0000	0.0000	0.0000	0.0000	0.00381	0.00381
36:56:00	0.0000	0.0000	0.0000	0.0000	0.0038	0.0038
37:04:00	0.0000	0.0000	0.0000	0.0000	0.00378	0.00378
37:12:00	0.0000	0.0000	0.0000	0.0000	0.00377	0.00377
37:20:00	0.0000	0.0000	0.0000	0.0000	0.00376	0.00376
37:28:00	0.0000	0.0000	0.0000	0.0000	0.00374	0.00374
37:36:00	0.0000	0.0000	0.0000	0.0000	0.00373	0.00373
37:44:00	0.0000	0.0000	0.0000	0.0000	0.00372	0.00372
37:52:00	0.0000	0.0000	0.0000	0.0000	0.00371	0.00371
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00369	0.00369
38:08:00	0.0000	0.0000	0.0000	0.0000	0.00368	0.00368

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
38:16:00	0.0000	0.0000	0.0000	0.0000	0.00367	0.00367
38:24:00	0.0000	0.0000	0.0000	0.0000	0.00366	0.00366
38:32:00	0.0000	0.0000	0.0000	0.0000	0.00364	0.00364
38:40:00	0.0000	0.0000	0.0000	0.0000	0.00363	0.00363
38:48:00	0.0000	0.0000	0.0000	0.0000	0.00362	0.00362
38:56:00	0.0000	0.0000	0.0000	0.0000	0.00361	0.00361
39:04:00	0.0000	0.0000	0.0000	0.0000	0.00359	0.00359
39:12:00	0.0000	0.0000	0.0000	0.0000	0.00358	0.00358
39:20:00	0.0000	0.0000	0.0000	0.0000	0.00357	0.00357
39:28:00	0.0000	0.0000	0.0000	0.0000	0.00356	0.00356
39:36:00	0.0000	0.0000	0.0000	0.0000	0.00354	0.00354
39:44:00	0.0000	0.0000	0.0000	0.0000	0.00353	0.00353
39:52:00	0.0000	0.0000	0.0000	0.0000	0.00352	0.00352
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00351	0.00351
40:08:00	0.0000	0.0000	0.0000	0.0000	0.0035	0.0035
40:16:00	0.0000	0.0000	0.0000	0.0000	0.00348	0.00348
40:24:00	0.0000	0.0000	0.0000	0.0000	0.00347	0.00347
40:32:00	0.0000	0.0000	0.0000	0.0000	0.00346	0.00346
40:40:00	0.0000	0.0000	0.0000	0.0000	0.00345	0.00345
40:48:00	0.0000	0.0000	0.0000	0.0000	0.00344	0.00344
40:56:00	0.0000	0.0000	0.0000	0.0000	0.00342	0.00342
41:04:00	0.0000	0.0000	0.0000	0.0000	0.00341	0.00341
41:12:00	0.0000	0.0000	0.0000	0.0000	0.0034	0.0034
41:20:00	0.0000	0.0000	0.0000	0.0000	0.00339	0.00339
41:28:00	0.0000	0.0000	0.0000	0.0000	0.00338	0.00338
41:36:00	0.0000	0.0000	0.0000	0.0000	0.00337	0.00337
41:44:00	0.0000	0.0000	0.0000	0.0000	0.00336	0.00336
41:52:00	0.0000	0.0000	0.0000	0.0000	0.00334	0.00334
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00333	0.00333
42:08:00	0.0000	0.0000	0.0000	0.0000	0.00332	0.00332
42:16:00	0.0000	0.0000	0.0000	0.0000	0.00331	0.00331
42:24:00	0.0000	0.0000	0.0000	0.0000	0.0033	0.0033
42:32:00	0.0000	0.0000	0.0000	0.0000	0.00329	0.00329
42:40:00	0.0000	0.0000	0.0000	0.0000	0.00328	0.00328
42:48:00	0.0000	0.0000	0.0000	0.0000	0.00326	0.00326
42:56:00	0.0000	0.0000	0.0000	0.0000	0.00325	0.00325

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
43:04:00	0.0000	0.0000	0.0000	0.0000	0.00324	0.00324
43:12:00	0.0000	0.0000	0.0000	0.0000	0.00323	0.00323
43:20:00	0.0000	0.0000	0.0000	0.0000	0.00322	0.00322
43:28:00	0.0000	0.0000	0.0000	0.0000	0.00321	0.00321
43:36:00	0.0000	0.0000	0.0000	0.0000	0.0032	0.0032
43:44:00	0.0000	0.0000	0.0000	0.0000	0.00319	0.00319
43:52:00	0.0000	0.0000	0.0000	0.0000	0.00318	0.00318
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00317	0.00317
44:08:00	0.0000	0.0000	0.0000	0.0000	0.00315	0.00315
44:16:00	0.0000	0.0000	0.0000	0.0000	0.00314	0.00314
44:24:00	0.0000	0.0000	0.0000	0.0000	0.00313	0.00313
44:32:00	0.0000	0.0000	0.0000	0.0000	0.00312	0.00312
44:40:00	0.0000	0.0000	0.0000	0.0000	0.00311	0.00311
44:48:00	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031
44:56:00	0.0000	0.0000	0.0000	0.0000	0.00309	0.00309
45:04:00	0.0000	0.0000	0.0000	0.0000	0.00308	0.00308
45:12:00	0.0000	0.0000	0.0000	0.0000	0.00307	0.00307
45:20:00	0.0000	0.0000	0.0000	0.0000	0.00306	0.00306
45:28:00	0.0000	0.0000	0.0000	0.0000	0.00305	0.00305
45:36:00	0.0000	0.0000	0.0000	0.0000	0.00304	0.00304
45:44:00	0.0000	0.0000	0.0000	0.0000	0.00303	0.00303
45:52:00	0.0000	0.0000	0.0000	0.0000	0.00302	0.00302
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00301	0.00301
46:08:00	0.0000	0.0000	0.0000	0.0000	0.003	0.003
46:16:00	0.0000	0.0000	0.0000	0.0000	0.00299	0.00299
46:24:00	0.0000	0.0000	0.0000	0.0000	0.00298	0.00298
46:32:00	0.0000	0.0000	0.0000	0.0000	0.00297	0.00297
46:40:00	0.0000	0.0000	0.0000	0.0000	0.00296	0.00296
46:48:00	0.0000	0.0000	0.0000	0.0000	0.00295	0.00295
46:56:00	0.0000	0.0000	0.0000	0.0000	0.00294	0.00294
47:04:00	0.0000	0.0000	0.0000	0.0000	0.00293	0.00293
47:12:00	0.0000	0.0000	0.0000	0.0000	0.00292	0.00292
47:20:00	0.0000	0.0000	0.0000	0.0000	0.00291	0.00291
47:28:00	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029
47:36:00	0.0000	0.0000	0.0000	0.0000	0.00289	0.00289
47:44:00	0.0000	0.0000	0.0000	0.0000	0.00288	0.00288

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
47:52:00	0.0000	0.0000	0.0000	0.0000	0.00287	0.00287
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00286	0.00286
48:08:00	0.0000	0.0000	0.0000	0.0000	0.00285	0.00285
48:16:00	0.0000	0.0000	0.0000	0.0000	0.00284	0.00284
48:24:00	0.0000	0.0000	0.0000	0.0000	0.00283	0.00283
48:32:00	0.0000	0.0000	0.0000	0.0000	0.00282	0.00282
48:40:00	0.0000	0.0000	0.0000	0.0000	0.00281	0.00281
48:48:00	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028
48:56:00	0.0000	0.0000	0.0000	0.0000	0.00279	0.00279
49:04:00	0.0000	0.0000	0.0000	0.0000	0.00278	0.00278
49:12:00	0.0000	0.0000	0.0000	0.0000	0.00277	0.00277
49:20:00	0.0000	0.0000	0.0000	0.0000	0.00276	0.00276
49:28:00	0.0000	0.0000	0.0000	0.0000	0.00275	0.00275
49:36:00	0.0000	0.0000	0.0000	0.0000	0.00274	0.00274
49:44:00	0.0000	0.0000	0.0000	0.0000	0.00273	0.00273
49:52:00	0.0000	0.0000	0.0000	0.0000	0.00272	0.00272
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00271	0.00271
50:08:00	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027
50:16:00	0.0000	0.0000	0.0000	0.0000	0.00269	0.00269
50:24:00	0.0000	0.0000	0.0000	0.0000	0.00268	0.00268
50:32:00	0.0000	0.0000	0.0000	0.0000	0.00268	0.00268
50:40:00	0.0000	0.0000	0.0000	0.0000	0.00267	0.00267
50:48:00	0.0000	0.0000	0.0000	0.0000	0.00266	0.00266
50:56:00	0.0000	0.0000	0.0000	0.0000	0.00265	0.00265
51:04:00	0.0000	0.0000	0.0000	0.0000	0.00264	0.00264
51:12:00	0.0000	0.0000	0.0000	0.0000	0.00263	0.00263
51:20:00	0.0000	0.0000	0.0000	0.0000	0.00262	0.00262
51:28:00	0.0000	0.0000	0.0000	0.0000	0.00261	0.00261
51:36:00	0.0000	0.0000	0.0000	0.0000	0.0026	0.0026
51:44:00	0.0000	0.0000	0.0000	0.0000	0.00259	0.00259
51:52:00	0.0000	0.0000	0.0000	0.0000	0.00259	0.00259
52:00:00	0.0000	0.0000	0.0000	0.0000	0.00258	0.00258
52:08:00	0.0000	0.0000	0.0000	0.0000	0.00257	0.00257
52:16:00	0.0000	0.0000	0.0000	0.0000	0.00256	0.00256
52:24:00	0.0000	0.0000	0.0000	0.0000	0.00255	0.00255
52:32:00	0.0000	0.0000	0.0000	0.0000	0.00254	0.00254

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
52:40:00	0.0000	0.0000	0.0000	0.0000	0.00253	0.00253
52:48:00	0.0000	0.0000	0.0000	0.0000	0.00252	0.00252
52:56:00	0.0000	0.0000	0.0000	0.0000	0.00252	0.00252
53:04:00	0.0000	0.0000	0.0000	0.0000	0.00251	0.00251
53:12:00	0.0000	0.0000	0.0000	0.0000	0.0025	0.0025
53:20:00	0.0000	0.0000	0.0000	0.0000	0.00249	0.00249
53:28:00	0.0000	0.0000	0.0000	0.0000	0.00248	0.00248
53:36:00	0.0000	0.0000	0.0000	0.0000	0.00247	0.00247
53:44:00	0.0000	0.0000	0.0000	0.0000	0.00246	0.00246
53:52:00	0.0000	0.0000	0.0000	0.0000	0.00246	0.00246
54:00:00	0.0000	0.0000	0.0000	0.0000	0.00245	0.00245
54:08:00	0.0000	0.0000	0.0000	0.0000	0.00244	0.00244
54:16:00	0.0000	0.0000	0.0000	0.0000	0.00243	0.00243
54:24:00	0.0000	0.0000	0.0000	0.0000	0.00242	0.00242
54:32:00	0.0000	0.0000	0.0000	0.0000	0.00241	0.00241
54:40:00	0.0000	0.0000	0.0000	0.0000	0.00241	0.00241
54:48:00	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024
54:56:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
55:04:00	0.0000	0.0000	0.0000	0.0000	0.00238	0.00238
55:12:00	0.0000	0.0000	0.0000	0.0000	0.00237	0.00237
55:20:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
55:28:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
55:36:00	0.0000	0.0000	0.0000	0.0000	0.00235	0.00235
55:44:00	0.0000	0.0000	0.0000	0.0000	0.00234	0.00234
55:52:00	0.0000	0.0000	0.0000	0.0000	0.00233	0.00233
56:00:00	0.0000	0.0000	0.0000	0.0000	0.00232	0.00232
56:08:00	0.0000	0.0000	0.0000	0.0000	0.00232	0.00232
56:16:00	0.0000	0.0000	0.0000	0.0000	0.00231	0.00231
56:24:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
56:32:00	0.0000	0.0000	0.0000	0.0000	0.00229	0.00229
56:40:00	0.0000	0.0000	0.0000	0.0000	0.00229	0.00229
56:48:00	0.0000	0.0000	0.0000	0.0000	0.00228	0.00228
56:56:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
57:04:00	0.0000	0.0000	0.0000	0.0000	0.00226	0.00226
57:12:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225
57:20:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
57:28:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
57:36:00	0.0000	0.0000	0.0000	0.0000	0.00223	0.00223
57:44:00	0.0000	0.0000	0.0000	0.0000	0.00222	0.00222
57:52:00	0.0000	0.0000	0.0000	0.0000	0.00222	0.00222
58:00:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221
58:08:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
58:16:00	0.0000	0.0000	0.0000	0.0000	0.00219	0.00219
58:24:00	0.0000	0.0000	0.0000	0.0000	0.00219	0.00219
58:32:00	0.0000	0.0000	0.0000	0.0000	0.00218	0.00218
58:40:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
58:48:00	0.0000	0.0000	0.0000	0.0000	0.00216	0.00216
58:56:00	0.0000	0.0000	0.0000	0.0000	0.00216	0.00216
59:04:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215
59:12:00	0.0000	0.0000	0.0000	0.0000	0.00214	0.00214
59:20:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
59:28:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
59:36:00	0.0000	0.0000	0.0000	0.0000	0.00212	0.00212
59:44:00	0.0000	0.0000	0.0000	0.0000	0.00211	0.00211
59:52:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
60:00:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
60:08:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
60:16:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
60:24:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
60:32:00	0.0000	0.0000	0.0000	0.0000	0.00207	0.00207
60:40:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
60:48:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
60:56:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
61:04:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
61:12:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
61:20:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
61:28:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
61:36:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
61:44:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
61:52:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
62:00:00	0.0000	0.0000	0.0000	0.0000	0.00199	0.00199
62:08:00	0.0000	0.0000	0.0000	0.0000	0.00199	0.00199



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
62:16:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
62:24:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
62:32:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
62:40:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
62:48:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195
62:56:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195
63:04:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
63:12:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
63:20:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
63:28:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
63:36:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
63:44:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
63:52:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
64:00:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
64:08:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
64:16:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
64:24:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187
64:32:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187
64:40:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
64:48:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
64:56:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
65:04:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
65:12:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
65:20:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
65:28:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
65:36:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
65:44:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
65:52:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
66:00:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
66:08:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
66:16:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
66:24:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
66:32:00	0.0000	0.0000	0.0000	0.0000	0.00177	0.00177
66:40:00	0.0000	0.0000	0.0000	0.0000	0.00177	0.00177
66:48:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
66:56:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
67:04:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
67:12:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
67:20:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
67:28:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
67:36:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
67:44:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
67:52:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
68:00:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
68:08:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
68:16:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
68:24:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
68:32:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
68:40:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
68:48:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
68:56:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
69:04:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
69:12:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
69:20:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
69:28:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
69:36:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
69:44:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
69:52:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
70:00:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
70:08:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
70:16:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
70:24:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
70:32:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
70:40:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
70:48:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
70:56:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
71:04:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
71:12:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
71:20:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
71:28:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
71:36:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
71:44:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
71:52:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
72:00:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
72:08:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
72:16:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
72:24:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
72:32:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
72:40:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
72:48:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
72:56:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
73:04:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
73:12:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
73:20:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
73:28:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148
73:36:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148

## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*

# UK Design Flood Estimation

Generated on 05 May 2021 08:38:13 by User

Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: D841-68A2

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 100 year

### Summary of results

Rainfall - FEH 2013 model (mm):	62.61	Total runoff (ML):	0.89
Total Rainfall (mm):	40.54	Total flow (ML):	2.07
Peak Rainfall (mm):	2.37	Peak flow (m <sup>3</sup> /s):	0.04

### Parameters

Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.

\* Indicates that the user locked the duration/timestep

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	06:00:00 [05:30:00]	Yes
Timestep (hh:mm:ss)	00:08:00 [00:30:00]	Yes
SCF (Seasonal correction factor)	0.65	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BF0 (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.56	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.1770	0.0000	0.0665	0.0000	0.00147	0.00147
00:08:00	0.2010	0.0000	0.0756	0.0000	0.00147	0.00147
00:16:00	0.2281	0.0000	0.0859	0.0000	0.00146	0.00148
00:24:00	0.2589	0.0000	0.0976	0.0000	0.00146	0.0015
00:32:00	0.2937	0.0000	0.1110	0.0001	0.00145	0.00153
00:40:00	0.3331	0.0000	0.1262	0.0001	0.00145	0.00158
00:48:00	0.3777	0.0000	0.1434	0.0002	0.00144	0.00164
00:56:00	0.4282	0.0000	0.1630	0.0003	0.00144	0.00172
01:04:00	0.4852	0.0000	0.1853	0.0004	0.00143	0.00182
01:12:00	0.5497	0.0000	0.2107	0.0005	0.00143	0.00194
01:20:00	0.6224	0.0000	0.2395	0.0007	0.00143	0.00209
01:28:00	0.7044	0.0000	0.2723	0.0008	0.00143	0.00227
01:36:00	0.7968	0.0000	0.3096	0.0011	0.00143	0.00248
01:44:00	0.9009	0.0000	0.3520	0.0013	0.00143	0.00273
01:52:00	1.0177	0.0000	0.4002	0.0016	0.00143	0.00303
02:00:00	1.1489	0.0000	0.4551	0.0020	0.00143	0.00338
02:08:00	1.2956	0.0000	0.5173	0.0024	0.00143	0.00378
02:16:00	1.4592	0.0000	0.5879	0.0028	0.00144	0.00425
02:24:00	1.6406	0.0000	0.6677	0.0034	0.00145	0.0048
02:32:00	1.8399	0.0000	0.7572	0.0040	0.00146	0.00543
02:40:00	2.0546	0.0000	0.8561	0.0047	0.00147	0.00615
02:48:00	2.2715	0.0000	0.9594	0.0055	0.00148	0.00697
02:56:00	2.3747	0.0000	1.0174	0.0064	0.0015	0.00791
03:04:00	2.2715	0.0000	0.9871	0.0074	0.00153	0.00897
03:12:00	2.0546	0.0000	0.9044	0.0086	0.00155	0.0102
03:20:00	1.8399	0.0000	0.8193	0.0099	0.00158	0.0115
03:28:00	1.6406	0.0000	0.7381	0.0113	0.00162	0.0129
03:36:00	1.4592	0.0000	0.6624	0.0127	0.00167	0.0144
03:44:00	1.2956	0.0000	0.5928	0.0142	0.00172	0.016
03:52:00	1.1489	0.0000	0.5294	0.0158	0.00177	0.0176
04:00:00	1.0177	0.0000	0.4718	0.0174	0.00184	0.0193
04:08:00	0.9009	0.0000	0.4199	0.0191	0.00191	0.021
04:16:00	0.7968	0.0000	0.3732	0.0207	0.00198	0.0227
04:24:00	0.7044	0.0000	0.3313	0.0224	0.00207	0.0245
04:32:00	0.6224	0.0000	0.2938	0.0241	0.00216	0.0262

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
04:40:00	0.5497	0.0000	0.2603	0.0257	0.00225	0.028
04:48:00	0.4852	0.0000	0.2305	0.0273	0.00236	0.0297
04:56:00	0.4282	0.0000	0.2039	0.0289	0.00247	0.0314
05:04:00	0.3777	0.0000	0.1803	0.0304	0.00259	0.033
05:12:00	0.3331	0.0000	0.1583	0.0319	0.00271	0.0346
05:20:00	0.2937	0.0000	0.1398	0.0333	0.00284	0.0361
05:28:00	0.2589	0.0000	0.1234	0.0345	0.00298	0.0375
05:36:00	0.2281	0.0000	0.1089	0.0357	0.00312	0.0388
05:44:00	0.2010	0.0000	0.0961	0.0367	0.00327	0.04
05:52:00	0.1770	0.0000	0.0847	0.0376	0.00342	0.0411
06:00:00	0.0000	0.0000	0.0000	0.0384	0.00358	0.042
06:08:00	0.0000	0.0000	0.0000	0.0390	0.00373	0.0427
06:16:00	0.0000	0.0000	0.0000	0.0394	0.0039	0.0433
06:24:00	0.0000	0.0000	0.0000	0.0397	0.00406	0.0437
06:32:00	0.0000	0.0000	0.0000	0.0397	0.00422	0.044
06:40:00	0.0000	0.0000	0.0000	0.0396	0.00439	0.044
06:48:00	0.0000	0.0000	0.0000	0.0394	0.00455	0.044
06:56:00	0.0000	0.0000	0.0000	0.0390	0.00472	0.0438
07:04:00	0.0000	0.0000	0.0000	0.0386	0.00488	0.0435
07:12:00	0.0000	0.0000	0.0000	0.0380	0.00504	0.0431
07:20:00	0.0000	0.0000	0.0000	0.0374	0.00519	0.0426
07:28:00	0.0000	0.0000	0.0000	0.0366	0.00534	0.042
07:36:00	0.0000	0.0000	0.0000	0.0359	0.00549	0.0414
07:44:00	0.0000	0.0000	0.0000	0.0350	0.00564	0.0407
07:52:00	0.0000	0.0000	0.0000	0.0341	0.00578	0.0399
08:00:00	0.0000	0.0000	0.0000	0.0332	0.00591	0.0391
08:08:00	0.0000	0.0000	0.0000	0.0323	0.00605	0.0383
08:16:00	0.0000	0.0000	0.0000	0.0313	0.00617	0.0375
08:24:00	0.0000	0.0000	0.0000	0.0303	0.0063	0.0366
08:32:00	0.0000	0.0000	0.0000	0.0293	0.00641	0.0358
08:40:00	0.0000	0.0000	0.0000	0.0283	0.00653	0.0349
08:48:00	0.0000	0.0000	0.0000	0.0273	0.00664	0.034
08:56:00	0.0000	0.0000	0.0000	0.0263	0.00674	0.0331
09:04:00	0.0000	0.0000	0.0000	0.0254	0.00684	0.0322
09:12:00	0.0000	0.0000	0.0000	0.0244	0.00693	0.0313
09:20:00	0.0000	0.0000	0.0000	0.0234	0.00702	0.0304



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
09:28:00	0.0000	0.0000	0.0000	0.0225	0.00711	0.0296
09:36:00	0.0000	0.0000	0.0000	0.0216	0.00719	0.0288
09:44:00	0.0000	0.0000	0.0000	0.0208	0.00726	0.028
09:52:00	0.0000	0.0000	0.0000	0.0199	0.00733	0.0273
10:00:00	0.0000	0.0000	0.0000	0.0192	0.0074	0.0266
10:08:00	0.0000	0.0000	0.0000	0.0184	0.00747	0.0259
10:16:00	0.0000	0.0000	0.0000	0.0177	0.00753	0.0252
10:24:00	0.0000	0.0000	0.0000	0.0169	0.00759	0.0245
10:32:00	0.0000	0.0000	0.0000	0.0163	0.00764	0.0239
10:40:00	0.0000	0.0000	0.0000	0.0156	0.00769	0.0233
10:48:00	0.0000	0.0000	0.0000	0.0149	0.00774	0.0227
10:56:00	0.0000	0.0000	0.0000	0.0143	0.00779	0.0221
11:04:00	0.0000	0.0000	0.0000	0.0137	0.00783	0.0215
11:12:00	0.0000	0.0000	0.0000	0.0131	0.00787	0.021
11:20:00	0.0000	0.0000	0.0000	0.0125	0.0079	0.0204
11:28:00	0.0000	0.0000	0.0000	0.0119	0.00794	0.0199
11:36:00	0.0000	0.0000	0.0000	0.0114	0.00797	0.0193
11:44:00	0.0000	0.0000	0.0000	0.0108	0.008	0.0188
11:52:00	0.0000	0.0000	0.0000	0.0103	0.00802	0.0183
12:00:00	0.0000	0.0000	0.0000	0.0098	0.00805	0.0178
12:08:00	0.0000	0.0000	0.0000	0.0093	0.00807	0.0173
12:16:00	0.0000	0.0000	0.0000	0.0088	0.00809	0.0169
12:24:00	0.0000	0.0000	0.0000	0.0083	0.0081	0.0164
12:32:00	0.0000	0.0000	0.0000	0.0078	0.00812	0.0159
12:40:00	0.0000	0.0000	0.0000	0.0073	0.00813	0.0155
12:48:00	0.0000	0.0000	0.0000	0.0069	0.00814	0.015
12:56:00	0.0000	0.0000	0.0000	0.0065	0.00815	0.0146
13:04:00	0.0000	0.0000	0.0000	0.0060	0.00815	0.0142
13:12:00	0.0000	0.0000	0.0000	0.0056	0.00815	0.0137
13:20:00	0.0000	0.0000	0.0000	0.0052	0.00815	0.0133
13:28:00	0.0000	0.0000	0.0000	0.0048	0.00815	0.0129
13:36:00	0.0000	0.0000	0.0000	0.0044	0.00815	0.0125
13:44:00	0.0000	0.0000	0.0000	0.0040	0.00814	0.0121
13:52:00	0.0000	0.0000	0.0000	0.0036	0.00813	0.0117
14:00:00	0.0000	0.0000	0.0000	0.0032	0.00812	0.0114
14:08:00	0.0000	0.0000	0.0000	0.0029	0.00811	0.011

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
14:16:00	0.0000	0.0000	0.0000	0.0026	0.0081	0.0107
14:24:00	0.0000	0.0000	0.0000	0.0023	0.00808	0.0103
14:32:00	0.0000	0.0000	0.0000	0.0020	0.00806	0.01
14:40:00	0.0000	0.0000	0.0000	0.0017	0.00805	0.00976
14:48:00	0.0000	0.0000	0.0000	0.0015	0.00803	0.00951
14:56:00	0.0000	0.0000	0.0000	0.0013	0.00801	0.00928
15:04:00	0.0000	0.0000	0.0000	0.0011	0.00799	0.00907
15:12:00	0.0000	0.0000	0.0000	0.0009	0.00796	0.00889
15:20:00	0.0000	0.0000	0.0000	0.0008	0.00794	0.00873
15:28:00	0.0000	0.0000	0.0000	0.0007	0.00792	0.00858
15:36:00	0.0000	0.0000	0.0000	0.0006	0.00789	0.00845
15:44:00	0.0000	0.0000	0.0000	0.0005	0.00787	0.00833
15:52:00	0.0000	0.0000	0.0000	0.0004	0.00784	0.00822
16:00:00	0.0000	0.0000	0.0000	0.0003	0.00782	0.00813
16:08:00	0.0000	0.0000	0.0000	0.0002	0.00779	0.00804
16:16:00	0.0000	0.0000	0.0000	0.0002	0.00777	0.00796
16:24:00	0.0000	0.0000	0.0000	0.0002	0.00774	0.00789
16:32:00	0.0000	0.0000	0.0000	0.0001	0.00771	0.00783
16:40:00	0.0000	0.0000	0.0000	0.0001	0.00769	0.00778
16:48:00	0.0000	0.0000	0.0000	0.0001	0.00766	0.00773
16:56:00	0.0000	0.0000	0.0000	0.0000	0.00764	0.00768
17:04:00	0.0000	0.0000	0.0000	0.0000	0.00761	0.00764
17:12:00	0.0000	0.0000	0.0000	0.0000	0.00759	0.0076
17:20:00	0.0000	0.0000	0.0000	0.0000	0.00756	0.00757
17:28:00	0.0000	0.0000	0.0000	0.0000	0.00753	0.00754
17:36:00	0.0000	0.0000	0.0000	0.0000	0.00751	0.00751
17:44:00	0.0000	0.0000	0.0000	0.0000	0.00748	0.00748
17:52:00	0.0000	0.0000	0.0000	0.0000	0.00746	0.00746
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00743	0.00743
18:08:00	0.0000	0.0000	0.0000	0.0000	0.00741	0.00741
18:16:00	0.0000	0.0000	0.0000	0.0000	0.00738	0.00738
18:24:00	0.0000	0.0000	0.0000	0.0000	0.00735	0.00735
18:32:00	0.0000	0.0000	0.0000	0.0000	0.00733	0.00733
18:40:00	0.0000	0.0000	0.0000	0.0000	0.0073	0.0073
18:48:00	0.0000	0.0000	0.0000	0.0000	0.00728	0.00728
18:56:00	0.0000	0.0000	0.0000	0.0000	0.00725	0.00725

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
19:04:00	0.0000	0.0000	0.0000	0.0000	0.00723	0.00723
19:12:00	0.0000	0.0000	0.0000	0.0000	0.0072	0.0072
19:20:00	0.0000	0.0000	0.0000	0.0000	0.00718	0.00718
19:28:00	0.0000	0.0000	0.0000	0.0000	0.00716	0.00716
19:36:00	0.0000	0.0000	0.0000	0.0000	0.00713	0.00713
19:44:00	0.0000	0.0000	0.0000	0.0000	0.00711	0.00711
19:52:00	0.0000	0.0000	0.0000	0.0000	0.00708	0.00708
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00706	0.00706
20:08:00	0.0000	0.0000	0.0000	0.0000	0.00703	0.00703
20:16:00	0.0000	0.0000	0.0000	0.0000	0.00701	0.00701
20:24:00	0.0000	0.0000	0.0000	0.0000	0.00699	0.00699
20:32:00	0.0000	0.0000	0.0000	0.0000	0.00696	0.00696
20:40:00	0.0000	0.0000	0.0000	0.0000	0.00694	0.00694
20:48:00	0.0000	0.0000	0.0000	0.0000	0.00691	0.00691
20:56:00	0.0000	0.0000	0.0000	0.0000	0.00689	0.00689
21:04:00	0.0000	0.0000	0.0000	0.0000	0.00687	0.00687
21:12:00	0.0000	0.0000	0.0000	0.0000	0.00684	0.00684
21:20:00	0.0000	0.0000	0.0000	0.0000	0.00682	0.00682
21:28:00	0.0000	0.0000	0.0000	0.0000	0.0068	0.0068
21:36:00	0.0000	0.0000	0.0000	0.0000	0.00677	0.00677
21:44:00	0.0000	0.0000	0.0000	0.0000	0.00675	0.00675
21:52:00	0.0000	0.0000	0.0000	0.0000	0.00673	0.00673
22:00:00	0.0000	0.0000	0.0000	0.0000	0.0067	0.0067
22:08:00	0.0000	0.0000	0.0000	0.0000	0.00668	0.00668
22:16:00	0.0000	0.0000	0.0000	0.0000	0.00666	0.00666
22:24:00	0.0000	0.0000	0.0000	0.0000	0.00664	0.00664
22:32:00	0.0000	0.0000	0.0000	0.0000	0.00661	0.00661
22:40:00	0.0000	0.0000	0.0000	0.0000	0.00659	0.00659
22:48:00	0.0000	0.0000	0.0000	0.0000	0.00657	0.00657
22:56:00	0.0000	0.0000	0.0000	0.0000	0.00655	0.00655
23:04:00	0.0000	0.0000	0.0000	0.0000	0.00652	0.00652
23:12:00	0.0000	0.0000	0.0000	0.0000	0.0065	0.0065
23:20:00	0.0000	0.0000	0.0000	0.0000	0.00648	0.00648
23:28:00	0.0000	0.0000	0.0000	0.0000	0.00646	0.00646
23:36:00	0.0000	0.0000	0.0000	0.0000	0.00643	0.00643
23:44:00	0.0000	0.0000	0.0000	0.0000	0.00641	0.00641

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
23:52:00	0.0000	0.0000	0.0000	0.0000	0.00639	0.00639
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00637	0.00637
24:08:00	0.0000	0.0000	0.0000	0.0000	0.00635	0.00635
24:16:00	0.0000	0.0000	0.0000	0.0000	0.00632	0.00632
24:24:00	0.0000	0.0000	0.0000	0.0000	0.0063	0.0063
24:32:00	0.0000	0.0000	0.0000	0.0000	0.00628	0.00628
24:40:00	0.0000	0.0000	0.0000	0.0000	0.00626	0.00626
24:48:00	0.0000	0.0000	0.0000	0.0000	0.00624	0.00624
24:56:00	0.0000	0.0000	0.0000	0.0000	0.00622	0.00622
25:04:00	0.0000	0.0000	0.0000	0.0000	0.0062	0.0062
25:12:00	0.0000	0.0000	0.0000	0.0000	0.00617	0.00617
25:20:00	0.0000	0.0000	0.0000	0.0000	0.00615	0.00615
25:28:00	0.0000	0.0000	0.0000	0.0000	0.00613	0.00613
25:36:00	0.0000	0.0000	0.0000	0.0000	0.00611	0.00611
25:44:00	0.0000	0.0000	0.0000	0.0000	0.00609	0.00609
25:52:00	0.0000	0.0000	0.0000	0.0000	0.00607	0.00607
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00605	0.00605
26:08:00	0.0000	0.0000	0.0000	0.0000	0.00603	0.00603
26:16:00	0.0000	0.0000	0.0000	0.0000	0.00601	0.00601
26:24:00	0.0000	0.0000	0.0000	0.0000	0.00599	0.00599
26:32:00	0.0000	0.0000	0.0000	0.0000	0.00597	0.00597
26:40:00	0.0000	0.0000	0.0000	0.0000	0.00595	0.00595
26:48:00	0.0000	0.0000	0.0000	0.0000	0.00593	0.00593
26:56:00	0.0000	0.0000	0.0000	0.0000	0.00591	0.00591
27:04:00	0.0000	0.0000	0.0000	0.0000	0.00589	0.00589
27:12:00	0.0000	0.0000	0.0000	0.0000	0.00587	0.00587
27:20:00	0.0000	0.0000	0.0000	0.0000	0.00585	0.00585
27:28:00	0.0000	0.0000	0.0000	0.0000	0.00583	0.00583
27:36:00	0.0000	0.0000	0.0000	0.0000	0.00581	0.00581
27:44:00	0.0000	0.0000	0.0000	0.0000	0.00579	0.00579
27:52:00	0.0000	0.0000	0.0000	0.0000	0.00577	0.00577
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00575	0.00575
28:08:00	0.0000	0.0000	0.0000	0.0000	0.00573	0.00573
28:16:00	0.0000	0.0000	0.0000	0.0000	0.00571	0.00571
28:24:00	0.0000	0.0000	0.0000	0.0000	0.00569	0.00569
28:32:00	0.0000	0.0000	0.0000	0.0000	0.00567	0.00567

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
28:40:00	0.0000	0.0000	0.0000	0.0000	0.00565	0.00565
28:48:00	0.0000	0.0000	0.0000	0.0000	0.00563	0.00563
28:56:00	0.0000	0.0000	0.0000	0.0000	0.00561	0.00561
29:04:00	0.0000	0.0000	0.0000	0.0000	0.00559	0.00559
29:12:00	0.0000	0.0000	0.0000	0.0000	0.00557	0.00557
29:20:00	0.0000	0.0000	0.0000	0.0000	0.00555	0.00555
29:28:00	0.0000	0.0000	0.0000	0.0000	0.00553	0.00553
29:36:00	0.0000	0.0000	0.0000	0.0000	0.00551	0.00551
29:44:00	0.0000	0.0000	0.0000	0.0000	0.0055	0.0055
29:52:00	0.0000	0.0000	0.0000	0.0000	0.00548	0.00548
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00546	0.00546
30:08:00	0.0000	0.0000	0.0000	0.0000	0.00544	0.00544
30:16:00	0.0000	0.0000	0.0000	0.0000	0.00542	0.00542
30:24:00	0.0000	0.0000	0.0000	0.0000	0.0054	0.0054
30:32:00	0.0000	0.0000	0.0000	0.0000	0.00538	0.00538
30:40:00	0.0000	0.0000	0.0000	0.0000	0.00536	0.00536
30:48:00	0.0000	0.0000	0.0000	0.0000	0.00535	0.00535
30:56:00	0.0000	0.0000	0.0000	0.0000	0.00533	0.00533
31:04:00	0.0000	0.0000	0.0000	0.0000	0.00531	0.00531
31:12:00	0.0000	0.0000	0.0000	0.0000	0.00529	0.00529
31:20:00	0.0000	0.0000	0.0000	0.0000	0.00527	0.00527
31:28:00	0.0000	0.0000	0.0000	0.0000	0.00526	0.00526
31:36:00	0.0000	0.0000	0.0000	0.0000	0.00524	0.00524
31:44:00	0.0000	0.0000	0.0000	0.0000	0.00522	0.00522
31:52:00	0.0000	0.0000	0.0000	0.0000	0.0052	0.0052
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00518	0.00518
32:08:00	0.0000	0.0000	0.0000	0.0000	0.00517	0.00517
32:16:00	0.0000	0.0000	0.0000	0.0000	0.00515	0.00515
32:24:00	0.0000	0.0000	0.0000	0.0000	0.00513	0.00513
32:32:00	0.0000	0.0000	0.0000	0.0000	0.00511	0.00511
32:40:00	0.0000	0.0000	0.0000	0.0000	0.0051	0.0051
32:48:00	0.0000	0.0000	0.0000	0.0000	0.00508	0.00508
32:56:00	0.0000	0.0000	0.0000	0.0000	0.00506	0.00506
33:04:00	0.0000	0.0000	0.0000	0.0000	0.00504	0.00504
33:12:00	0.0000	0.0000	0.0000	0.0000	0.00503	0.00503
33:20:00	0.0000	0.0000	0.0000	0.0000	0.00501	0.00501

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
33:28:00	0.0000	0.0000	0.0000	0.0000	0.00499	0.00499
33:36:00	0.0000	0.0000	0.0000	0.0000	0.00498	0.00498
33:44:00	0.0000	0.0000	0.0000	0.0000	0.00496	0.00496
33:52:00	0.0000	0.0000	0.0000	0.0000	0.00494	0.00494
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00492	0.00492
34:08:00	0.0000	0.0000	0.0000	0.0000	0.00491	0.00491
34:16:00	0.0000	0.0000	0.0000	0.0000	0.00489	0.00489
34:24:00	0.0000	0.0000	0.0000	0.0000	0.00487	0.00487
34:32:00	0.0000	0.0000	0.0000	0.0000	0.00486	0.00486
34:40:00	0.0000	0.0000	0.0000	0.0000	0.00484	0.00484
34:48:00	0.0000	0.0000	0.0000	0.0000	0.00482	0.00482
34:56:00	0.0000	0.0000	0.0000	0.0000	0.00481	0.00481
35:04:00	0.0000	0.0000	0.0000	0.0000	0.00479	0.00479
35:12:00	0.0000	0.0000	0.0000	0.0000	0.00477	0.00477
35:20:00	0.0000	0.0000	0.0000	0.0000	0.00476	0.00476
35:28:00	0.0000	0.0000	0.0000	0.0000	0.00474	0.00474
35:36:00	0.0000	0.0000	0.0000	0.0000	0.00473	0.00473
35:44:00	0.0000	0.0000	0.0000	0.0000	0.00471	0.00471
35:52:00	0.0000	0.0000	0.0000	0.0000	0.00469	0.00469
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00468	0.00468
36:08:00	0.0000	0.0000	0.0000	0.0000	0.00466	0.00466
36:16:00	0.0000	0.0000	0.0000	0.0000	0.00465	0.00465
36:24:00	0.0000	0.0000	0.0000	0.0000	0.00463	0.00463
36:32:00	0.0000	0.0000	0.0000	0.0000	0.00461	0.00461
36:40:00	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046
36:48:00	0.0000	0.0000	0.0000	0.0000	0.00458	0.00458
36:56:00	0.0000	0.0000	0.0000	0.0000	0.00457	0.00457
37:04:00	0.0000	0.0000	0.0000	0.0000	0.00455	0.00455
37:12:00	0.0000	0.0000	0.0000	0.0000	0.00454	0.00454
37:20:00	0.0000	0.0000	0.0000	0.0000	0.00452	0.00452
37:28:00	0.0000	0.0000	0.0000	0.0000	0.0045	0.0045
37:36:00	0.0000	0.0000	0.0000	0.0000	0.00449	0.00449
37:44:00	0.0000	0.0000	0.0000	0.0000	0.00447	0.00447
37:52:00	0.0000	0.0000	0.0000	0.0000	0.00446	0.00446
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00444	0.00444
38:08:00	0.0000	0.0000	0.0000	0.0000	0.00443	0.00443

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
38:16:00	0.0000	0.0000	0.0000	0.0000	0.00441	0.00441
38:24:00	0.0000	0.0000	0.0000	0.0000	0.0044	0.0044
38:32:00	0.0000	0.0000	0.0000	0.0000	0.00438	0.00438
38:40:00	0.0000	0.0000	0.0000	0.0000	0.00437	0.00437
38:48:00	0.0000	0.0000	0.0000	0.0000	0.00435	0.00435
38:56:00	0.0000	0.0000	0.0000	0.0000	0.00434	0.00434
39:04:00	0.0000	0.0000	0.0000	0.0000	0.00432	0.00432
39:12:00	0.0000	0.0000	0.0000	0.0000	0.00431	0.00431
39:20:00	0.0000	0.0000	0.0000	0.0000	0.00429	0.00429
39:28:00	0.0000	0.0000	0.0000	0.0000	0.00428	0.00428
39:36:00	0.0000	0.0000	0.0000	0.0000	0.00426	0.00426
39:44:00	0.0000	0.0000	0.0000	0.0000	0.00425	0.00425
39:52:00	0.0000	0.0000	0.0000	0.0000	0.00423	0.00423
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00422	0.00422
40:08:00	0.0000	0.0000	0.0000	0.0000	0.00421	0.00421
40:16:00	0.0000	0.0000	0.0000	0.0000	0.00419	0.00419
40:24:00	0.0000	0.0000	0.0000	0.0000	0.00418	0.00418
40:32:00	0.0000	0.0000	0.0000	0.0000	0.00416	0.00416
40:40:00	0.0000	0.0000	0.0000	0.0000	0.00415	0.00415
40:48:00	0.0000	0.0000	0.0000	0.0000	0.00413	0.00413
40:56:00	0.0000	0.0000	0.0000	0.0000	0.00412	0.00412
41:04:00	0.0000	0.0000	0.0000	0.0000	0.00411	0.00411
41:12:00	0.0000	0.0000	0.0000	0.0000	0.00409	0.00409
41:20:00	0.0000	0.0000	0.0000	0.0000	0.00408	0.00408
41:28:00	0.0000	0.0000	0.0000	0.0000	0.00406	0.00406
41:36:00	0.0000	0.0000	0.0000	0.0000	0.00405	0.00405
41:44:00	0.0000	0.0000	0.0000	0.0000	0.00404	0.00404
41:52:00	0.0000	0.0000	0.0000	0.0000	0.00402	0.00402
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00401	0.00401
42:08:00	0.0000	0.0000	0.0000	0.0000	0.00399	0.00399
42:16:00	0.0000	0.0000	0.0000	0.0000	0.00398	0.00398
42:24:00	0.0000	0.0000	0.0000	0.0000	0.00397	0.00397
42:32:00	0.0000	0.0000	0.0000	0.0000	0.00395	0.00395
42:40:00	0.0000	0.0000	0.0000	0.0000	0.00394	0.00394
42:48:00	0.0000	0.0000	0.0000	0.0000	0.00393	0.00393
42:56:00	0.0000	0.0000	0.0000	0.0000	0.00391	0.00391

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
43:04:00	0.0000	0.0000	0.0000	0.0000	0.0039	0.0039
43:12:00	0.0000	0.0000	0.0000	0.0000	0.00389	0.00389
43:20:00	0.0000	0.0000	0.0000	0.0000	0.00387	0.00387
43:28:00	0.0000	0.0000	0.0000	0.0000	0.00386	0.00386
43:36:00	0.0000	0.0000	0.0000	0.0000	0.00385	0.00385
43:44:00	0.0000	0.0000	0.0000	0.0000	0.00383	0.00383
43:52:00	0.0000	0.0000	0.0000	0.0000	0.00382	0.00382
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00381	0.00381
44:08:00	0.0000	0.0000	0.0000	0.0000	0.00379	0.00379
44:16:00	0.0000	0.0000	0.0000	0.0000	0.00378	0.00378
44:24:00	0.0000	0.0000	0.0000	0.0000	0.00377	0.00377
44:32:00	0.0000	0.0000	0.0000	0.0000	0.00376	0.00376
44:40:00	0.0000	0.0000	0.0000	0.0000	0.00374	0.00374
44:48:00	0.0000	0.0000	0.0000	0.0000	0.00373	0.00373
44:56:00	0.0000	0.0000	0.0000	0.0000	0.00372	0.00372
45:04:00	0.0000	0.0000	0.0000	0.0000	0.0037	0.0037
45:12:00	0.0000	0.0000	0.0000	0.0000	0.00369	0.00369
45:20:00	0.0000	0.0000	0.0000	0.0000	0.00368	0.00368
45:28:00	0.0000	0.0000	0.0000	0.0000	0.00367	0.00367
45:36:00	0.0000	0.0000	0.0000	0.0000	0.00365	0.00365
45:44:00	0.0000	0.0000	0.0000	0.0000	0.00364	0.00364
45:52:00	0.0000	0.0000	0.0000	0.0000	0.00363	0.00363
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00362	0.00362
46:08:00	0.0000	0.0000	0.0000	0.0000	0.0036	0.0036
46:16:00	0.0000	0.0000	0.0000	0.0000	0.00359	0.00359
46:24:00	0.0000	0.0000	0.0000	0.0000	0.00358	0.00358
46:32:00	0.0000	0.0000	0.0000	0.0000	0.00357	0.00357
46:40:00	0.0000	0.0000	0.0000	0.0000	0.00356	0.00356
46:48:00	0.0000	0.0000	0.0000	0.0000	0.00354	0.00354
46:56:00	0.0000	0.0000	0.0000	0.0000	0.00353	0.00353
47:04:00	0.0000	0.0000	0.0000	0.0000	0.00352	0.00352
47:12:00	0.0000	0.0000	0.0000	0.0000	0.00351	0.00351
47:20:00	0.0000	0.0000	0.0000	0.0000	0.00349	0.00349
47:28:00	0.0000	0.0000	0.0000	0.0000	0.00348	0.00348
47:36:00	0.0000	0.0000	0.0000	0.0000	0.00347	0.00347
47:44:00	0.0000	0.0000	0.0000	0.0000	0.00346	0.00346



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
47:52:00	0.0000	0.0000	0.0000	0.0000	0.00345	0.00345
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00344	0.00344
48:08:00	0.0000	0.0000	0.0000	0.0000	0.00342	0.00342
48:16:00	0.0000	0.0000	0.0000	0.0000	0.00341	0.00341
48:24:00	0.0000	0.0000	0.0000	0.0000	0.0034	0.0034
48:32:00	0.0000	0.0000	0.0000	0.0000	0.00339	0.00339
48:40:00	0.0000	0.0000	0.0000	0.0000	0.00338	0.00338
48:48:00	0.0000	0.0000	0.0000	0.0000	0.00337	0.00337
48:56:00	0.0000	0.0000	0.0000	0.0000	0.00335	0.00335
49:04:00	0.0000	0.0000	0.0000	0.0000	0.00334	0.00334
49:12:00	0.0000	0.0000	0.0000	0.0000	0.00333	0.00333
49:20:00	0.0000	0.0000	0.0000	0.0000	0.00332	0.00332
49:28:00	0.0000	0.0000	0.0000	0.0000	0.00331	0.00331
49:36:00	0.0000	0.0000	0.0000	0.0000	0.0033	0.0033
49:44:00	0.0000	0.0000	0.0000	0.0000	0.00329	0.00329
49:52:00	0.0000	0.0000	0.0000	0.0000	0.00327	0.00327
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00326	0.00326
50:08:00	0.0000	0.0000	0.0000	0.0000	0.00325	0.00325
50:16:00	0.0000	0.0000	0.0000	0.0000	0.00324	0.00324
50:24:00	0.0000	0.0000	0.0000	0.0000	0.00323	0.00323
50:32:00	0.0000	0.0000	0.0000	0.0000	0.00322	0.00322
50:40:00	0.0000	0.0000	0.0000	0.0000	0.00321	0.00321
50:48:00	0.0000	0.0000	0.0000	0.0000	0.0032	0.0032
50:56:00	0.0000	0.0000	0.0000	0.0000	0.00319	0.00319
51:04:00	0.0000	0.0000	0.0000	0.0000	0.00317	0.00317
51:12:00	0.0000	0.0000	0.0000	0.0000	0.00316	0.00316
51:20:00	0.0000	0.0000	0.0000	0.0000	0.00315	0.00315
51:28:00	0.0000	0.0000	0.0000	0.0000	0.00314	0.00314
51:36:00	0.0000	0.0000	0.0000	0.0000	0.00313	0.00313
51:44:00	0.0000	0.0000	0.0000	0.0000	0.00312	0.00312
51:52:00	0.0000	0.0000	0.0000	0.0000	0.00311	0.00311
52:00:00	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031
52:08:00	0.0000	0.0000	0.0000	0.0000	0.00309	0.00309
52:16:00	0.0000	0.0000	0.0000	0.0000	0.00308	0.00308
52:24:00	0.0000	0.0000	0.0000	0.0000	0.00307	0.00307
52:32:00	0.0000	0.0000	0.0000	0.0000	0.00306	0.00306

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
52:40:00	0.0000	0.0000	0.0000	0.0000	0.00305	0.00305
52:48:00	0.0000	0.0000	0.0000	0.0000	0.00304	0.00304
52:56:00	0.0000	0.0000	0.0000	0.0000	0.00303	0.00303
53:04:00	0.0000	0.0000	0.0000	0.0000	0.00302	0.00302
53:12:00	0.0000	0.0000	0.0000	0.0000	0.00301	0.00301
53:20:00	0.0000	0.0000	0.0000	0.0000	0.003	0.003
53:28:00	0.0000	0.0000	0.0000	0.0000	0.00298	0.00298
53:36:00	0.0000	0.0000	0.0000	0.0000	0.00297	0.00297
53:44:00	0.0000	0.0000	0.0000	0.0000	0.00296	0.00296
53:52:00	0.0000	0.0000	0.0000	0.0000	0.00295	0.00295
54:00:00	0.0000	0.0000	0.0000	0.0000	0.00294	0.00294
54:08:00	0.0000	0.0000	0.0000	0.0000	0.00293	0.00293
54:16:00	0.0000	0.0000	0.0000	0.0000	0.00292	0.00292
54:24:00	0.0000	0.0000	0.0000	0.0000	0.00291	0.00291
54:32:00	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029
54:40:00	0.0000	0.0000	0.0000	0.0000	0.00289	0.00289
54:48:00	0.0000	0.0000	0.0000	0.0000	0.00288	0.00288
54:56:00	0.0000	0.0000	0.0000	0.0000	0.00287	0.00287
55:04:00	0.0000	0.0000	0.0000	0.0000	0.00286	0.00286
55:12:00	0.0000	0.0000	0.0000	0.0000	0.00285	0.00285
55:20:00	0.0000	0.0000	0.0000	0.0000	0.00284	0.00284
55:28:00	0.0000	0.0000	0.0000	0.0000	0.00284	0.00284
55:36:00	0.0000	0.0000	0.0000	0.0000	0.00283	0.00283
55:44:00	0.0000	0.0000	0.0000	0.0000	0.00282	0.00282
55:52:00	0.0000	0.0000	0.0000	0.0000	0.00281	0.00281
56:00:00	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028
56:08:00	0.0000	0.0000	0.0000	0.0000	0.00279	0.00279
56:16:00	0.0000	0.0000	0.0000	0.0000	0.00278	0.00278
56:24:00	0.0000	0.0000	0.0000	0.0000	0.00277	0.00277
56:32:00	0.0000	0.0000	0.0000	0.0000	0.00276	0.00276
56:40:00	0.0000	0.0000	0.0000	0.0000	0.00275	0.00275
56:48:00	0.0000	0.0000	0.0000	0.0000	0.00274	0.00274
56:56:00	0.0000	0.0000	0.0000	0.0000	0.00273	0.00273
57:04:00	0.0000	0.0000	0.0000	0.0000	0.00272	0.00272
57:12:00	0.0000	0.0000	0.0000	0.0000	0.00271	0.00271
57:20:00	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
57:28:00	0.0000	0.0000	0.0000	0.0000	0.00269	0.00269
57:36:00	0.0000	0.0000	0.0000	0.0000	0.00268	0.00268
57:44:00	0.0000	0.0000	0.0000	0.0000	0.00267	0.00267
57:52:00	0.0000	0.0000	0.0000	0.0000	0.00267	0.00267
58:00:00	0.0000	0.0000	0.0000	0.0000	0.00266	0.00266
58:08:00	0.0000	0.0000	0.0000	0.0000	0.00265	0.00265
58:16:00	0.0000	0.0000	0.0000	0.0000	0.00264	0.00264
58:24:00	0.0000	0.0000	0.0000	0.0000	0.00263	0.00263
58:32:00	0.0000	0.0000	0.0000	0.0000	0.00262	0.00262
58:40:00	0.0000	0.0000	0.0000	0.0000	0.00261	0.00261
58:48:00	0.0000	0.0000	0.0000	0.0000	0.0026	0.0026
58:56:00	0.0000	0.0000	0.0000	0.0000	0.00259	0.00259
59:04:00	0.0000	0.0000	0.0000	0.0000	0.00258	0.00258
59:12:00	0.0000	0.0000	0.0000	0.0000	0.00258	0.00258
59:20:00	0.0000	0.0000	0.0000	0.0000	0.00257	0.00257
59:28:00	0.0000	0.0000	0.0000	0.0000	0.00256	0.00256
59:36:00	0.0000	0.0000	0.0000	0.0000	0.00255	0.00255
59:44:00	0.0000	0.0000	0.0000	0.0000	0.00254	0.00254
59:52:00	0.0000	0.0000	0.0000	0.0000	0.00253	0.00253
60:00:00	0.0000	0.0000	0.0000	0.0000	0.00252	0.00252
60:08:00	0.0000	0.0000	0.0000	0.0000	0.00251	0.00251
60:16:00	0.0000	0.0000	0.0000	0.0000	0.00251	0.00251
60:24:00	0.0000	0.0000	0.0000	0.0000	0.0025	0.0025
60:32:00	0.0000	0.0000	0.0000	0.0000	0.00249	0.00249
60:40:00	0.0000	0.0000	0.0000	0.0000	0.00248	0.00248
60:48:00	0.0000	0.0000	0.0000	0.0000	0.00247	0.00247
60:56:00	0.0000	0.0000	0.0000	0.0000	0.00246	0.00246
61:04:00	0.0000	0.0000	0.0000	0.0000	0.00245	0.00245
61:12:00	0.0000	0.0000	0.0000	0.0000	0.00245	0.00245
61:20:00	0.0000	0.0000	0.0000	0.0000	0.00244	0.00244
61:28:00	0.0000	0.0000	0.0000	0.0000	0.00243	0.00243
61:36:00	0.0000	0.0000	0.0000	0.0000	0.00242	0.00242
61:44:00	0.0000	0.0000	0.0000	0.0000	0.00241	0.00241
61:52:00	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024
62:00:00	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024
62:08:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
62:16:00	0.0000	0.0000	0.0000	0.0000	0.00238	0.00238
62:24:00	0.0000	0.0000	0.0000	0.0000	0.00237	0.00237
62:32:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
62:40:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
62:48:00	0.0000	0.0000	0.0000	0.0000	0.00235	0.00235
62:56:00	0.0000	0.0000	0.0000	0.0000	0.00234	0.00234
63:04:00	0.0000	0.0000	0.0000	0.0000	0.00233	0.00233
63:12:00	0.0000	0.0000	0.0000	0.0000	0.00232	0.00232
63:20:00	0.0000	0.0000	0.0000	0.0000	0.00232	0.00232
63:28:00	0.0000	0.0000	0.0000	0.0000	0.00231	0.00231
63:36:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
63:44:00	0.0000	0.0000	0.0000	0.0000	0.00229	0.00229
63:52:00	0.0000	0.0000	0.0000	0.0000	0.00228	0.00228
64:00:00	0.0000	0.0000	0.0000	0.0000	0.00228	0.00228
64:08:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
64:16:00	0.0000	0.0000	0.0000	0.0000	0.00226	0.00226
64:24:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225
64:32:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225
64:40:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
64:48:00	0.0000	0.0000	0.0000	0.0000	0.00223	0.00223
64:56:00	0.0000	0.0000	0.0000	0.0000	0.00222	0.00222
65:04:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221
65:12:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221
65:20:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
65:28:00	0.0000	0.0000	0.0000	0.0000	0.00219	0.00219
65:36:00	0.0000	0.0000	0.0000	0.0000	0.00218	0.00218
65:44:00	0.0000	0.0000	0.0000	0.0000	0.00218	0.00218
65:52:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
66:00:00	0.0000	0.0000	0.0000	0.0000	0.00216	0.00216
66:08:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215
66:16:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215
66:24:00	0.0000	0.0000	0.0000	0.0000	0.00214	0.00214
66:32:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
66:40:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
66:48:00	0.0000	0.0000	0.0000	0.0000	0.00212	0.00212
66:56:00	0.0000	0.0000	0.0000	0.0000	0.00211	0.00211

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
67:04:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
67:12:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
67:20:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
67:28:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
67:36:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
67:44:00	0.0000	0.0000	0.0000	0.0000	0.00207	0.00207
67:52:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
68:00:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
68:08:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
68:16:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
68:24:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
68:32:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
68:40:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
68:48:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
68:56:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
69:04:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
69:12:00	0.0000	0.0000	0.0000	0.0000	0.00199	0.00199
69:20:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
69:28:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
69:36:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
69:44:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
69:52:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
70:00:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195
70:08:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
70:16:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
70:24:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
70:32:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
70:40:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
70:48:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
70:56:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
71:04:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
71:12:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
71:20:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
71:28:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
71:36:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187
71:44:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
71:52:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
72:00:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
72:08:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
72:16:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
72:24:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
72:32:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
72:40:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
72:48:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
72:56:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
73:04:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
73:12:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
73:20:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
73:28:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
73:36:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
73:44:00	0.0000	0.0000	0.0000	0.0000	0.00177	0.00177
73:52:00	0.0000	0.0000	0.0000	0.0000	0.00177	0.00177
74:00:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
74:08:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
74:16:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
74:24:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
74:32:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
74:40:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
74:48:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
74:56:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
75:04:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
75:12:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
75:20:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
75:28:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
75:36:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
75:44:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
75:52:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
76:00:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
76:08:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
76:16:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
76:24:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
76:32:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
76:40:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
76:48:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
76:56:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
77:04:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
77:12:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
77:20:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
77:28:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
77:36:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
77:44:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
77:52:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
78:00:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
78:08:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
78:16:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
78:24:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
78:32:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
78:40:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
78:48:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
78:56:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
79:04:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
79:12:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
79:20:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
79:28:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
79:36:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
79:44:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
79:52:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
80:00:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
80:08:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
80:16:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
80:24:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
80:32:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
80:40:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148

## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*



# UK Design Flood Estimation

Generated on 05 May 2021 08:38:39 by User  
Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: D841-68A2

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.05

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 100 year 1.4 CC

### Summary of results

Rainfall - FEH 2013 model (mm):	87.65	Total runoff (ML):	1.30
Total Rainfall (mm):	56.76	Total flow (ML):	2.90
Peak Rainfall (mm):	3.32	Peak flow (m <sup>3</sup> /s):	0.06

### Parameters

*Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.*

*\* Indicates that the user locked the duration/timestep*

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	06:00:00 [05:30:00]	Yes
Timestep (hh:mm:ss)	00:08:00 [00:30:00]	Yes
SCF (Seasonal correction factor)	0.65	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No
Climate change factor	1.40	Yes

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.71]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [34.57]	Yes
BR	1.42	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0 [0]	Yes
Urbext 2000	0.04 [0]	Yes
Impervious runoff factor	1 [0.7]	Yes
Imperviousness factor	1 [0.4]	Yes
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.2478	0.0000	0.0931	0.0000	0.00147	0.00147
00:08:00	0.2814	0.0000	0.1059	0.0000	0.00147	0.00147
00:16:00	0.3194	0.0000	0.1204	0.0000	0.00146	0.00149
00:24:00	0.3624	0.0000	0.1370	0.0001	0.00146	0.00152
00:32:00	0.4112	0.0000	0.1558	0.0001	0.00145	0.00156
00:40:00	0.4664	0.0000	0.1773	0.0002	0.00145	0.00163
00:48:00	0.5288	0.0000	0.2017	0.0003	0.00144	0.00171
00:56:00	0.5995	0.0000	0.2295	0.0004	0.00144	0.00183
01:04:00	0.6793	0.0000	0.2612	0.0005	0.00144	0.00197
01:12:00	0.7695	0.0000	0.2974	0.0007	0.00143	0.00214
01:20:00	0.8713	0.0000	0.3386	0.0009	0.00143	0.00236
01:28:00	0.9862	0.0000	0.3857	0.0012	0.00143	0.00261
01:36:00	1.1156	0.0000	0.4393	0.0015	0.00143	0.00291
01:44:00	1.2612	0.0000	0.5006	0.0018	0.00143	0.00327
01:52:00	1.4248	0.0000	0.5706	0.0023	0.00143	0.00369
02:00:00	1.6084	0.0000	0.6505	0.0027	0.00144	0.00418
02:08:00	1.8138	0.0000	0.7417	0.0033	0.00144	0.00476
02:16:00	2.0428	0.0000	0.8457	0.0040	0.00145	0.00542
02:24:00	2.2968	0.0000	0.9639	0.0047	0.00146	0.00619
02:32:00	2.5758	0.0000	1.0975	0.0056	0.00148	0.00709
02:40:00	2.8764	0.0000	1.2462	0.0066	0.0015	0.00811
02:48:00	3.1801	0.0000	1.4030	0.0078	0.00152	0.00928
02:56:00	3.3246	0.0000	1.4951	0.0091	0.00154	0.0106
03:04:00	3.1801	0.0000	1.4573	0.0106	0.00157	0.0122
03:12:00	2.8764	0.0000	1.3410	0.0123	0.00161	0.0139
03:20:00	2.5758	0.0000	1.2193	0.0141	0.00165	0.0158
03:28:00	2.2968	0.0000	1.1019	0.0161	0.00171	0.0178
03:36:00	2.0428	0.0000	0.9917	0.0182	0.00176	0.0199
03:44:00	1.8138	0.0000	0.8897	0.0204	0.00183	0.0222
03:52:00	1.6084	0.0000	0.7962	0.0227	0.00191	0.0246
04:00:00	1.4248	0.0000	0.7110	0.0250	0.00199	0.027
04:08:00	1.2612	0.0000	0.6337	0.0274	0.00209	0.0295
04:16:00	1.1156	0.0000	0.5640	0.0299	0.00219	0.032
04:24:00	0.9862	0.0000	0.5013	0.0323	0.0023	0.0346
04:32:00	0.8713	0.0000	0.4451	0.0347	0.00242	0.0372

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
04:40:00	0.7695	0.0000	0.3947	0.0372	0.00255	0.0397
04:48:00	0.6793	0.0000	0.3498	0.0395	0.00269	0.0422
04:56:00	0.5995	0.0000	0.3097	0.0419	0.00284	0.0447
05:04:00	0.5288	0.0000	0.2740	0.0441	0.003	0.0471
05:12:00	0.4664	0.0000	0.2407	0.0463	0.00317	0.0495
05:20:00	0.4112	0.0000	0.2127	0.0483	0.00335	0.0517
05:28:00	0.3624	0.0000	0.1878	0.0502	0.00353	0.0538
05:36:00	0.3194	0.0000	0.1658	0.0520	0.00372	0.0557
05:44:00	0.2814	0.0000	0.1463	0.0536	0.00392	0.0575
05:52:00	0.2478	0.0000	0.1290	0.0549	0.00413	0.0591
06:00:00	0.0000	0.0000	0.0000	0.0561	0.00434	0.0605
06:08:00	0.0000	0.0000	0.0000	0.0571	0.00456	0.0616
06:16:00	0.0000	0.0000	0.0000	0.0577	0.00478	0.0625
06:24:00	0.0000	0.0000	0.0000	0.0581	0.005	0.0631
06:32:00	0.0000	0.0000	0.0000	0.0583	0.00522	0.0635
06:40:00	0.0000	0.0000	0.0000	0.0582	0.00545	0.0637
06:48:00	0.0000	0.0000	0.0000	0.0579	0.00567	0.0636
06:56:00	0.0000	0.0000	0.0000	0.0575	0.00589	0.0634
07:04:00	0.0000	0.0000	0.0000	0.0568	0.00611	0.0629
07:12:00	0.0000	0.0000	0.0000	0.0560	0.00633	0.0624
07:20:00	0.0000	0.0000	0.0000	0.0551	0.00654	0.0616
07:28:00	0.0000	0.0000	0.0000	0.0541	0.00675	0.0608
07:36:00	0.0000	0.0000	0.0000	0.0530	0.00695	0.0599
07:44:00	0.0000	0.0000	0.0000	0.0518	0.00715	0.0589
07:52:00	0.0000	0.0000	0.0000	0.0505	0.00734	0.0578
08:00:00	0.0000	0.0000	0.0000	0.0492	0.00753	0.0567
08:08:00	0.0000	0.0000	0.0000	0.0478	0.00771	0.0555
08:16:00	0.0000	0.0000	0.0000	0.0464	0.00788	0.0542
08:24:00	0.0000	0.0000	0.0000	0.0449	0.00805	0.053
08:32:00	0.0000	0.0000	0.0000	0.0435	0.00821	0.0517
08:40:00	0.0000	0.0000	0.0000	0.0420	0.00837	0.0504
08:48:00	0.0000	0.0000	0.0000	0.0405	0.00852	0.049
08:56:00	0.0000	0.0000	0.0000	0.0391	0.00866	0.0477
09:04:00	0.0000	0.0000	0.0000	0.0376	0.00879	0.0464
09:12:00	0.0000	0.0000	0.0000	0.0362	0.00892	0.0451
09:20:00	0.0000	0.0000	0.0000	0.0347	0.00904	0.0438

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
09:28:00	0.0000	0.0000	0.0000	0.0334	0.00916	0.0425
09:36:00	0.0000	0.0000	0.0000	0.0321	0.00927	0.0413
09:44:00	0.0000	0.0000	0.0000	0.0308	0.00938	0.0402
09:52:00	0.0000	0.0000	0.0000	0.0296	0.00947	0.0391
10:00:00	0.0000	0.0000	0.0000	0.0284	0.00957	0.038
10:08:00	0.0000	0.0000	0.0000	0.0273	0.00966	0.037
10:16:00	0.0000	0.0000	0.0000	0.0262	0.00974	0.036
10:24:00	0.0000	0.0000	0.0000	0.0252	0.00982	0.035
10:32:00	0.0000	0.0000	0.0000	0.0242	0.0099	0.0341
10:40:00	0.0000	0.0000	0.0000	0.0232	0.00997	0.0331
10:48:00	0.0000	0.0000	0.0000	0.0222	0.01	0.0323
10:56:00	0.0000	0.0000	0.0000	0.0213	0.0101	0.0314
11:04:00	0.0000	0.0000	0.0000	0.0204	0.0102	0.0305
11:12:00	0.0000	0.0000	0.0000	0.0195	0.0102	0.0297
11:20:00	0.0000	0.0000	0.0000	0.0186	0.0103	0.0289
11:28:00	0.0000	0.0000	0.0000	0.0178	0.0103	0.0281
11:36:00	0.0000	0.0000	0.0000	0.0169	0.0104	0.0273
11:44:00	0.0000	0.0000	0.0000	0.0161	0.0104	0.0265
11:52:00	0.0000	0.0000	0.0000	0.0153	0.0104	0.0258
12:00:00	0.0000	0.0000	0.0000	0.0146	0.0105	0.0251
12:08:00	0.0000	0.0000	0.0000	0.0138	0.0105	0.0243
12:16:00	0.0000	0.0000	0.0000	0.0131	0.0105	0.0236
12:24:00	0.0000	0.0000	0.0000	0.0124	0.0105	0.0229
12:32:00	0.0000	0.0000	0.0000	0.0117	0.0106	0.0223
12:40:00	0.0000	0.0000	0.0000	0.0110	0.0106	0.0216
12:48:00	0.0000	0.0000	0.0000	0.0103	0.0106	0.021
12:56:00	0.0000	0.0000	0.0000	0.0097	0.0106	0.0203
13:04:00	0.0000	0.0000	0.0000	0.0090	0.0106	0.0197
13:12:00	0.0000	0.0000	0.0000	0.0084	0.0106	0.019
13:20:00	0.0000	0.0000	0.0000	0.0078	0.0106	0.0184
13:28:00	0.0000	0.0000	0.0000	0.0072	0.0106	0.0178
13:36:00	0.0000	0.0000	0.0000	0.0066	0.0106	0.0172
13:44:00	0.0000	0.0000	0.0000	0.0060	0.0106	0.0166
13:52:00	0.0000	0.0000	0.0000	0.0054	0.0106	0.016
14:00:00	0.0000	0.0000	0.0000	0.0049	0.0106	0.0155
14:08:00	0.0000	0.0000	0.0000	0.0044	0.0106	0.015

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
14:16:00	0.0000	0.0000	0.0000	0.0039	0.0106	0.0145
14:24:00	0.0000	0.0000	0.0000	0.0034	0.0105	0.014
14:32:00	0.0000	0.0000	0.0000	0.0030	0.0105	0.0135
14:40:00	0.0000	0.0000	0.0000	0.0026	0.0105	0.0131
14:48:00	0.0000	0.0000	0.0000	0.0023	0.0105	0.0127
14:56:00	0.0000	0.0000	0.0000	0.0019	0.0104	0.0124
15:04:00	0.0000	0.0000	0.0000	0.0017	0.0104	0.0121
15:12:00	0.0000	0.0000	0.0000	0.0014	0.0104	0.0118
15:20:00	0.0000	0.0000	0.0000	0.0012	0.0104	0.0116
15:28:00	0.0000	0.0000	0.0000	0.0010	0.0103	0.0113
15:36:00	0.0000	0.0000	0.0000	0.0009	0.0103	0.0112
15:44:00	0.0000	0.0000	0.0000	0.0007	0.0103	0.011
15:52:00	0.0000	0.0000	0.0000	0.0006	0.0102	0.0108
16:00:00	0.0000	0.0000	0.0000	0.0005	0.0102	0.0107
16:08:00	0.0000	0.0000	0.0000	0.0004	0.0102	0.0106
16:16:00	0.0000	0.0000	0.0000	0.0003	0.0101	0.0104
16:24:00	0.0000	0.0000	0.0000	0.0002	0.0101	0.0103
16:32:00	0.0000	0.0000	0.0000	0.0002	0.0101	0.0103
16:40:00	0.0000	0.0000	0.0000	0.0001	0.01	0.0102
16:48:00	0.0000	0.0000	0.0000	0.0001	0.01	0.0101
16:56:00	0.0000	0.0000	0.0000	0.0001	0.00997	0.01
17:04:00	0.0000	0.0000	0.0000	0.0000	0.00993	0.00998
17:12:00	0.0000	0.0000	0.0000	0.0000	0.0099	0.00993
17:20:00	0.0000	0.0000	0.0000	0.0000	0.00987	0.00988
17:28:00	0.0000	0.0000	0.0000	0.0000	0.00983	0.00984
17:36:00	0.0000	0.0000	0.0000	0.0000	0.0098	0.0098
17:44:00	0.0000	0.0000	0.0000	0.0000	0.00977	0.00977
17:52:00	0.0000	0.0000	0.0000	0.0000	0.00973	0.00973
18:00:00	0.0000	0.0000	0.0000	0.0000	0.0097	0.0097
18:08:00	0.0000	0.0000	0.0000	0.0000	0.00967	0.00967
18:16:00	0.0000	0.0000	0.0000	0.0000	0.00963	0.00963
18:24:00	0.0000	0.0000	0.0000	0.0000	0.0096	0.0096
18:32:00	0.0000	0.0000	0.0000	0.0000	0.00957	0.00957
18:40:00	0.0000	0.0000	0.0000	0.0000	0.00953	0.00953
18:48:00	0.0000	0.0000	0.0000	0.0000	0.0095	0.0095
18:56:00	0.0000	0.0000	0.0000	0.0000	0.00947	0.00947

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
19:04:00	0.0000	0.0000	0.0000	0.0000	0.00944	0.00944
19:12:00	0.0000	0.0000	0.0000	0.0000	0.0094	0.0094
19:20:00	0.0000	0.0000	0.0000	0.0000	0.00937	0.00937
19:28:00	0.0000	0.0000	0.0000	0.0000	0.00934	0.00934
19:36:00	0.0000	0.0000	0.0000	0.0000	0.00931	0.00931
19:44:00	0.0000	0.0000	0.0000	0.0000	0.00928	0.00928
19:52:00	0.0000	0.0000	0.0000	0.0000	0.00924	0.00924
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00921	0.00921
20:08:00	0.0000	0.0000	0.0000	0.0000	0.00918	0.00918
20:16:00	0.0000	0.0000	0.0000	0.0000	0.00915	0.00915
20:24:00	0.0000	0.0000	0.0000	0.0000	0.00912	0.00912
20:32:00	0.0000	0.0000	0.0000	0.0000	0.00909	0.00909
20:40:00	0.0000	0.0000	0.0000	0.0000	0.00906	0.00906
20:48:00	0.0000	0.0000	0.0000	0.0000	0.00903	0.00903
20:56:00	0.0000	0.0000	0.0000	0.0000	0.00899	0.00899
21:04:00	0.0000	0.0000	0.0000	0.0000	0.00896	0.00896
21:12:00	0.0000	0.0000	0.0000	0.0000	0.00893	0.00893
21:20:00	0.0000	0.0000	0.0000	0.0000	0.0089	0.0089
21:28:00	0.0000	0.0000	0.0000	0.0000	0.00887	0.00887
21:36:00	0.0000	0.0000	0.0000	0.0000	0.00884	0.00884
21:44:00	0.0000	0.0000	0.0000	0.0000	0.00881	0.00881
21:52:00	0.0000	0.0000	0.0000	0.0000	0.00878	0.00878
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00875	0.00875
22:08:00	0.0000	0.0000	0.0000	0.0000	0.00872	0.00872
22:16:00	0.0000	0.0000	0.0000	0.0000	0.00869	0.00869
22:24:00	0.0000	0.0000	0.0000	0.0000	0.00866	0.00866
22:32:00	0.0000	0.0000	0.0000	0.0000	0.00863	0.00863
22:40:00	0.0000	0.0000	0.0000	0.0000	0.0086	0.0086
22:48:00	0.0000	0.0000	0.0000	0.0000	0.00857	0.00857
22:56:00	0.0000	0.0000	0.0000	0.0000	0.00854	0.00854
23:04:00	0.0000	0.0000	0.0000	0.0000	0.00851	0.00851
23:12:00	0.0000	0.0000	0.0000	0.0000	0.00848	0.00848
23:20:00	0.0000	0.0000	0.0000	0.0000	0.00846	0.00846
23:28:00	0.0000	0.0000	0.0000	0.0000	0.00843	0.00843
23:36:00	0.0000	0.0000	0.0000	0.0000	0.0084	0.0084
23:44:00	0.0000	0.0000	0.0000	0.0000	0.00837	0.00837

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
23:52:00	0.0000	0.0000	0.0000	0.0000	0.00834	0.00834
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00831	0.00831
24:08:00	0.0000	0.0000	0.0000	0.0000	0.00828	0.00828
24:16:00	0.0000	0.0000	0.0000	0.0000	0.00826	0.00826
24:24:00	0.0000	0.0000	0.0000	0.0000	0.00823	0.00823
24:32:00	0.0000	0.0000	0.0000	0.0000	0.0082	0.0082
24:40:00	0.0000	0.0000	0.0000	0.0000	0.00817	0.00817
24:48:00	0.0000	0.0000	0.0000	0.0000	0.00814	0.00814
24:56:00	0.0000	0.0000	0.0000	0.0000	0.00811	0.00811
25:04:00	0.0000	0.0000	0.0000	0.0000	0.00809	0.00809
25:12:00	0.0000	0.0000	0.0000	0.0000	0.00806	0.00806
25:20:00	0.0000	0.0000	0.0000	0.0000	0.00803	0.00803
25:28:00	0.0000	0.0000	0.0000	0.0000	0.008	0.008
25:36:00	0.0000	0.0000	0.0000	0.0000	0.00798	0.00798
25:44:00	0.0000	0.0000	0.0000	0.0000	0.00795	0.00795
25:52:00	0.0000	0.0000	0.0000	0.0000	0.00792	0.00792
26:00:00	0.0000	0.0000	0.0000	0.0000	0.0079	0.0079
26:08:00	0.0000	0.0000	0.0000	0.0000	0.00787	0.00787
26:16:00	0.0000	0.0000	0.0000	0.0000	0.00784	0.00784
26:24:00	0.0000	0.0000	0.0000	0.0000	0.00781	0.00781
26:32:00	0.0000	0.0000	0.0000	0.0000	0.00779	0.00779
26:40:00	0.0000	0.0000	0.0000	0.0000	0.00776	0.00776
26:48:00	0.0000	0.0000	0.0000	0.0000	0.00773	0.00773
26:56:00	0.0000	0.0000	0.0000	0.0000	0.00771	0.00771
27:04:00	0.0000	0.0000	0.0000	0.0000	0.00768	0.00768
27:12:00	0.0000	0.0000	0.0000	0.0000	0.00766	0.00766
27:20:00	0.0000	0.0000	0.0000	0.0000	0.00763	0.00763
27:28:00	0.0000	0.0000	0.0000	0.0000	0.0076	0.0076
27:36:00	0.0000	0.0000	0.0000	0.0000	0.00758	0.00758
27:44:00	0.0000	0.0000	0.0000	0.0000	0.00755	0.00755
27:52:00	0.0000	0.0000	0.0000	0.0000	0.00753	0.00753
28:00:00	0.0000	0.0000	0.0000	0.0000	0.0075	0.0075
28:08:00	0.0000	0.0000	0.0000	0.0000	0.00747	0.00747
28:16:00	0.0000	0.0000	0.0000	0.0000	0.00745	0.00745
28:24:00	0.0000	0.0000	0.0000	0.0000	0.00742	0.00742
28:32:00	0.0000	0.0000	0.0000	0.0000	0.0074	0.0074



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
28:40:00	0.0000	0.0000	0.0000	0.0000	0.00737	0.00737
28:48:00	0.0000	0.0000	0.0000	0.0000	0.00735	0.00735
28:56:00	0.0000	0.0000	0.0000	0.0000	0.00732	0.00732
29:04:00	0.0000	0.0000	0.0000	0.0000	0.0073	0.0073
29:12:00	0.0000	0.0000	0.0000	0.0000	0.00727	0.00727
29:20:00	0.0000	0.0000	0.0000	0.0000	0.00725	0.00725
29:28:00	0.0000	0.0000	0.0000	0.0000	0.00722	0.00722
29:36:00	0.0000	0.0000	0.0000	0.0000	0.0072	0.0072
29:44:00	0.0000	0.0000	0.0000	0.0000	0.00717	0.00717
29:52:00	0.0000	0.0000	0.0000	0.0000	0.00715	0.00715
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00712	0.00712
30:08:00	0.0000	0.0000	0.0000	0.0000	0.0071	0.0071
30:16:00	0.0000	0.0000	0.0000	0.0000	0.00707	0.00707
30:24:00	0.0000	0.0000	0.0000	0.0000	0.00705	0.00705
30:32:00	0.0000	0.0000	0.0000	0.0000	0.00703	0.00703
30:40:00	0.0000	0.0000	0.0000	0.0000	0.007	0.007
30:48:00	0.0000	0.0000	0.0000	0.0000	0.00698	0.00698
30:56:00	0.0000	0.0000	0.0000	0.0000	0.00695	0.00695
31:04:00	0.0000	0.0000	0.0000	0.0000	0.00693	0.00693
31:12:00	0.0000	0.0000	0.0000	0.0000	0.00691	0.00691
31:20:00	0.0000	0.0000	0.0000	0.0000	0.00688	0.00688
31:28:00	0.0000	0.0000	0.0000	0.0000	0.00686	0.00686
31:36:00	0.0000	0.0000	0.0000	0.0000	0.00684	0.00684
31:44:00	0.0000	0.0000	0.0000	0.0000	0.00681	0.00681
31:52:00	0.0000	0.0000	0.0000	0.0000	0.00679	0.00679
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00677	0.00677
32:08:00	0.0000	0.0000	0.0000	0.0000	0.00674	0.00674
32:16:00	0.0000	0.0000	0.0000	0.0000	0.00672	0.00672
32:24:00	0.0000	0.0000	0.0000	0.0000	0.0067	0.0067
32:32:00	0.0000	0.0000	0.0000	0.0000	0.00667	0.00667
32:40:00	0.0000	0.0000	0.0000	0.0000	0.00665	0.00665
32:48:00	0.0000	0.0000	0.0000	0.0000	0.00663	0.00663
32:56:00	0.0000	0.0000	0.0000	0.0000	0.00661	0.00661
33:04:00	0.0000	0.0000	0.0000	0.0000	0.00658	0.00658
33:12:00	0.0000	0.0000	0.0000	0.0000	0.00656	0.00656
33:20:00	0.0000	0.0000	0.0000	0.0000	0.00654	0.00654

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
33:28:00	0.0000	0.0000	0.0000	0.0000	0.00652	0.00652
33:36:00	0.0000	0.0000	0.0000	0.0000	0.00649	0.00649
33:44:00	0.0000	0.0000	0.0000	0.0000	0.00647	0.00647
33:52:00	0.0000	0.0000	0.0000	0.0000	0.00645	0.00645
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00643	0.00643
34:08:00	0.0000	0.0000	0.0000	0.0000	0.00641	0.00641
34:16:00	0.0000	0.0000	0.0000	0.0000	0.00638	0.00638
34:24:00	0.0000	0.0000	0.0000	0.0000	0.00636	0.00636
34:32:00	0.0000	0.0000	0.0000	0.0000	0.00634	0.00634
34:40:00	0.0000	0.0000	0.0000	0.0000	0.00632	0.00632
34:48:00	0.0000	0.0000	0.0000	0.0000	0.0063	0.0063
34:56:00	0.0000	0.0000	0.0000	0.0000	0.00627	0.00627
35:04:00	0.0000	0.0000	0.0000	0.0000	0.00625	0.00625
35:12:00	0.0000	0.0000	0.0000	0.0000	0.00623	0.00623
35:20:00	0.0000	0.0000	0.0000	0.0000	0.00621	0.00621
35:28:00	0.0000	0.0000	0.0000	0.0000	0.00619	0.00619
35:36:00	0.0000	0.0000	0.0000	0.0000	0.00617	0.00617
35:44:00	0.0000	0.0000	0.0000	0.0000	0.00615	0.00615
35:52:00	0.0000	0.0000	0.0000	0.0000	0.00613	0.00613
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00611	0.00611
36:08:00	0.0000	0.0000	0.0000	0.0000	0.00608	0.00608
36:16:00	0.0000	0.0000	0.0000	0.0000	0.00606	0.00606
36:24:00	0.0000	0.0000	0.0000	0.0000	0.00604	0.00604
36:32:00	0.0000	0.0000	0.0000	0.0000	0.00602	0.00602
36:40:00	0.0000	0.0000	0.0000	0.0000	0.006	0.006
36:48:00	0.0000	0.0000	0.0000	0.0000	0.00598	0.00598
36:56:00	0.0000	0.0000	0.0000	0.0000	0.00596	0.00596
37:04:00	0.0000	0.0000	0.0000	0.0000	0.00594	0.00594
37:12:00	0.0000	0.0000	0.0000	0.0000	0.00592	0.00592
37:20:00	0.0000	0.0000	0.0000	0.0000	0.0059	0.0059
37:28:00	0.0000	0.0000	0.0000	0.0000	0.00588	0.00588
37:36:00	0.0000	0.0000	0.0000	0.0000	0.00586	0.00586
37:44:00	0.0000	0.0000	0.0000	0.0000	0.00584	0.00584
37:52:00	0.0000	0.0000	0.0000	0.0000	0.00582	0.00582
38:00:00	0.0000	0.0000	0.0000	0.0000	0.0058	0.0058
38:08:00	0.0000	0.0000	0.0000	0.0000	0.00578	0.00578

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
38:16:00	0.0000	0.0000	0.0000	0.0000	0.00576	0.00576
38:24:00	0.0000	0.0000	0.0000	0.0000	0.00574	0.00574
38:32:00	0.0000	0.0000	0.0000	0.0000	0.00572	0.00572
38:40:00	0.0000	0.0000	0.0000	0.0000	0.0057	0.0057
38:48:00	0.0000	0.0000	0.0000	0.0000	0.00568	0.00568
38:56:00	0.0000	0.0000	0.0000	0.0000	0.00566	0.00566
39:04:00	0.0000	0.0000	0.0000	0.0000	0.00564	0.00564
39:12:00	0.0000	0.0000	0.0000	0.0000	0.00562	0.00562
39:20:00	0.0000	0.0000	0.0000	0.0000	0.0056	0.0056
39:28:00	0.0000	0.0000	0.0000	0.0000	0.00558	0.00558
39:36:00	0.0000	0.0000	0.0000	0.0000	0.00557	0.00557
39:44:00	0.0000	0.0000	0.0000	0.0000	0.00555	0.00555
39:52:00	0.0000	0.0000	0.0000	0.0000	0.00553	0.00553
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00551	0.00551
40:08:00	0.0000	0.0000	0.0000	0.0000	0.00549	0.00549
40:16:00	0.0000	0.0000	0.0000	0.0000	0.00547	0.00547
40:24:00	0.0000	0.0000	0.0000	0.0000	0.00545	0.00545
40:32:00	0.0000	0.0000	0.0000	0.0000	0.00543	0.00543
40:40:00	0.0000	0.0000	0.0000	0.0000	0.00541	0.00541
40:48:00	0.0000	0.0000	0.0000	0.0000	0.0054	0.0054
40:56:00	0.0000	0.0000	0.0000	0.0000	0.00538	0.00538
41:04:00	0.0000	0.0000	0.0000	0.0000	0.00536	0.00536
41:12:00	0.0000	0.0000	0.0000	0.0000	0.00534	0.00534
41:20:00	0.0000	0.0000	0.0000	0.0000	0.00532	0.00532
41:28:00	0.0000	0.0000	0.0000	0.0000	0.0053	0.0053
41:36:00	0.0000	0.0000	0.0000	0.0000	0.00529	0.00529
41:44:00	0.0000	0.0000	0.0000	0.0000	0.00527	0.00527
41:52:00	0.0000	0.0000	0.0000	0.0000	0.00525	0.00525
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00523	0.00523
42:08:00	0.0000	0.0000	0.0000	0.0000	0.00521	0.00521
42:16:00	0.0000	0.0000	0.0000	0.0000	0.0052	0.0052
42:24:00	0.0000	0.0000	0.0000	0.0000	0.00518	0.00518
42:32:00	0.0000	0.0000	0.0000	0.0000	0.00516	0.00516
42:40:00	0.0000	0.0000	0.0000	0.0000	0.00514	0.00514
42:48:00	0.0000	0.0000	0.0000	0.0000	0.00513	0.00513
42:56:00	0.0000	0.0000	0.0000	0.0000	0.00511	0.00511

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
43:04:00	0.0000	0.0000	0.0000	0.0000	0.00509	0.00509
43:12:00	0.0000	0.0000	0.0000	0.0000	0.00507	0.00507
43:20:00	0.0000	0.0000	0.0000	0.0000	0.00506	0.00506
43:28:00	0.0000	0.0000	0.0000	0.0000	0.00504	0.00504
43:36:00	0.0000	0.0000	0.0000	0.0000	0.00502	0.00502
43:44:00	0.0000	0.0000	0.0000	0.0000	0.005	0.005
43:52:00	0.0000	0.0000	0.0000	0.0000	0.00499	0.00499
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00497	0.00497
44:08:00	0.0000	0.0000	0.0000	0.0000	0.00495	0.00495
44:16:00	0.0000	0.0000	0.0000	0.0000	0.00494	0.00494
44:24:00	0.0000	0.0000	0.0000	0.0000	0.00492	0.00492
44:32:00	0.0000	0.0000	0.0000	0.0000	0.0049	0.0049
44:40:00	0.0000	0.0000	0.0000	0.0000	0.00489	0.00489
44:48:00	0.0000	0.0000	0.0000	0.0000	0.00487	0.00487
44:56:00	0.0000	0.0000	0.0000	0.0000	0.00485	0.00485
45:04:00	0.0000	0.0000	0.0000	0.0000	0.00484	0.00484
45:12:00	0.0000	0.0000	0.0000	0.0000	0.00482	0.00482
45:20:00	0.0000	0.0000	0.0000	0.0000	0.0048	0.0048
45:28:00	0.0000	0.0000	0.0000	0.0000	0.00479	0.00479
45:36:00	0.0000	0.0000	0.0000	0.0000	0.00477	0.00477
45:44:00	0.0000	0.0000	0.0000	0.0000	0.00475	0.00475
45:52:00	0.0000	0.0000	0.0000	0.0000	0.00474	0.00474
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00472	0.00472
46:08:00	0.0000	0.0000	0.0000	0.0000	0.0047	0.0047
46:16:00	0.0000	0.0000	0.0000	0.0000	0.00469	0.00469
46:24:00	0.0000	0.0000	0.0000	0.0000	0.00467	0.00467
46:32:00	0.0000	0.0000	0.0000	0.0000	0.00466	0.00466
46:40:00	0.0000	0.0000	0.0000	0.0000	0.00464	0.00464
46:48:00	0.0000	0.0000	0.0000	0.0000	0.00462	0.00462
46:56:00	0.0000	0.0000	0.0000	0.0000	0.00461	0.00461
47:04:00	0.0000	0.0000	0.0000	0.0000	0.00459	0.00459
47:12:00	0.0000	0.0000	0.0000	0.0000	0.00458	0.00458
47:20:00	0.0000	0.0000	0.0000	0.0000	0.00456	0.00456
47:28:00	0.0000	0.0000	0.0000	0.0000	0.00455	0.00455
47:36:00	0.0000	0.0000	0.0000	0.0000	0.00453	0.00453
47:44:00	0.0000	0.0000	0.0000	0.0000	0.00451	0.00451

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
47:52:00	0.0000	0.0000	0.0000	0.0000	0.0045	0.0045
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00448	0.00448
48:08:00	0.0000	0.0000	0.0000	0.0000	0.00447	0.00447
48:16:00	0.0000	0.0000	0.0000	0.0000	0.00445	0.00445
48:24:00	0.0000	0.0000	0.0000	0.0000	0.00444	0.00444
48:32:00	0.0000	0.0000	0.0000	0.0000	0.00442	0.00442
48:40:00	0.0000	0.0000	0.0000	0.0000	0.00441	0.00441
48:48:00	0.0000	0.0000	0.0000	0.0000	0.00439	0.00439
48:56:00	0.0000	0.0000	0.0000	0.0000	0.00438	0.00438
49:04:00	0.0000	0.0000	0.0000	0.0000	0.00436	0.00436
49:12:00	0.0000	0.0000	0.0000	0.0000	0.00435	0.00435
49:20:00	0.0000	0.0000	0.0000	0.0000	0.00433	0.00433
49:28:00	0.0000	0.0000	0.0000	0.0000	0.00432	0.00432
49:36:00	0.0000	0.0000	0.0000	0.0000	0.0043	0.0043
49:44:00	0.0000	0.0000	0.0000	0.0000	0.00429	0.00429
49:52:00	0.0000	0.0000	0.0000	0.0000	0.00427	0.00427
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00426	0.00426
50:08:00	0.0000	0.0000	0.0000	0.0000	0.00424	0.00424
50:16:00	0.0000	0.0000	0.0000	0.0000	0.00423	0.00423
50:24:00	0.0000	0.0000	0.0000	0.0000	0.00422	0.00422
50:32:00	0.0000	0.0000	0.0000	0.0000	0.0042	0.0042
50:40:00	0.0000	0.0000	0.0000	0.0000	0.00419	0.00419
50:48:00	0.0000	0.0000	0.0000	0.0000	0.00417	0.00417
50:56:00	0.0000	0.0000	0.0000	0.0000	0.00416	0.00416
51:04:00	0.0000	0.0000	0.0000	0.0000	0.00414	0.00414
51:12:00	0.0000	0.0000	0.0000	0.0000	0.00413	0.00413
51:20:00	0.0000	0.0000	0.0000	0.0000	0.00412	0.00412
51:28:00	0.0000	0.0000	0.0000	0.0000	0.0041	0.0041
51:36:00	0.0000	0.0000	0.0000	0.0000	0.00409	0.00409
51:44:00	0.0000	0.0000	0.0000	0.0000	0.00407	0.00407
51:52:00	0.0000	0.0000	0.0000	0.0000	0.00406	0.00406
52:00:00	0.0000	0.0000	0.0000	0.0000	0.00405	0.00405
52:08:00	0.0000	0.0000	0.0000	0.0000	0.00403	0.00403
52:16:00	0.0000	0.0000	0.0000	0.0000	0.00402	0.00402
52:24:00	0.0000	0.0000	0.0000	0.0000	0.004	0.004
52:32:00	0.0000	0.0000	0.0000	0.0000	0.00399	0.00399

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
52:40:00	0.0000	0.0000	0.0000	0.0000	0.00398	0.00398
52:48:00	0.0000	0.0000	0.0000	0.0000	0.00396	0.00396
52:56:00	0.0000	0.0000	0.0000	0.0000	0.00395	0.00395
53:04:00	0.0000	0.0000	0.0000	0.0000	0.00394	0.00394
53:12:00	0.0000	0.0000	0.0000	0.0000	0.00392	0.00392
53:20:00	0.0000	0.0000	0.0000	0.0000	0.00391	0.00391
53:28:00	0.0000	0.0000	0.0000	0.0000	0.0039	0.0039
53:36:00	0.0000	0.0000	0.0000	0.0000	0.00388	0.00388
53:44:00	0.0000	0.0000	0.0000	0.0000	0.00387	0.00387
53:52:00	0.0000	0.0000	0.0000	0.0000	0.00386	0.00386
54:00:00	0.0000	0.0000	0.0000	0.0000	0.00384	0.00384
54:08:00	0.0000	0.0000	0.0000	0.0000	0.00383	0.00383
54:16:00	0.0000	0.0000	0.0000	0.0000	0.00382	0.00382
54:24:00	0.0000	0.0000	0.0000	0.0000	0.0038	0.0038
54:32:00	0.0000	0.0000	0.0000	0.0000	0.00379	0.00379
54:40:00	0.0000	0.0000	0.0000	0.0000	0.00378	0.00378
54:48:00	0.0000	0.0000	0.0000	0.0000	0.00376	0.00376
54:56:00	0.0000	0.0000	0.0000	0.0000	0.00375	0.00375
55:04:00	0.0000	0.0000	0.0000	0.0000	0.00374	0.00374
55:12:00	0.0000	0.0000	0.0000	0.0000	0.00373	0.00373
55:20:00	0.0000	0.0000	0.0000	0.0000	0.00371	0.00371
55:28:00	0.0000	0.0000	0.0000	0.0000	0.0037	0.0037
55:36:00	0.0000	0.0000	0.0000	0.0000	0.00369	0.00369
55:44:00	0.0000	0.0000	0.0000	0.0000	0.00368	0.00368
55:52:00	0.0000	0.0000	0.0000	0.0000	0.00366	0.00366
56:00:00	0.0000	0.0000	0.0000	0.0000	0.00365	0.00365
56:08:00	0.0000	0.0000	0.0000	0.0000	0.00364	0.00364
56:16:00	0.0000	0.0000	0.0000	0.0000	0.00363	0.00363
56:24:00	0.0000	0.0000	0.0000	0.0000	0.00361	0.00361
56:32:00	0.0000	0.0000	0.0000	0.0000	0.0036	0.0036
56:40:00	0.0000	0.0000	0.0000	0.0000	0.00359	0.00359
56:48:00	0.0000	0.0000	0.0000	0.0000	0.00358	0.00358
56:56:00	0.0000	0.0000	0.0000	0.0000	0.00356	0.00356
57:04:00	0.0000	0.0000	0.0000	0.0000	0.00355	0.00355
57:12:00	0.0000	0.0000	0.0000	0.0000	0.00354	0.00354
57:20:00	0.0000	0.0000	0.0000	0.0000	0.00353	0.00353

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
57:28:00	0.0000	0.0000	0.0000	0.0000	0.00352	0.00352
57:36:00	0.0000	0.0000	0.0000	0.0000	0.0035	0.0035
57:44:00	0.0000	0.0000	0.0000	0.0000	0.00349	0.00349
57:52:00	0.0000	0.0000	0.0000	0.0000	0.00348	0.00348
58:00:00	0.0000	0.0000	0.0000	0.0000	0.00347	0.00347
58:08:00	0.0000	0.0000	0.0000	0.0000	0.00346	0.00346
58:16:00	0.0000	0.0000	0.0000	0.0000	0.00344	0.00344
58:24:00	0.0000	0.0000	0.0000	0.0000	0.00343	0.00343
58:32:00	0.0000	0.0000	0.0000	0.0000	0.00342	0.00342
58:40:00	0.0000	0.0000	0.0000	0.0000	0.00341	0.00341
58:48:00	0.0000	0.0000	0.0000	0.0000	0.0034	0.0034
58:56:00	0.0000	0.0000	0.0000	0.0000	0.00338	0.00338
59:04:00	0.0000	0.0000	0.0000	0.0000	0.00337	0.00337
59:12:00	0.0000	0.0000	0.0000	0.0000	0.00336	0.00336
59:20:00	0.0000	0.0000	0.0000	0.0000	0.00335	0.00335
59:28:00	0.0000	0.0000	0.0000	0.0000	0.00334	0.00334
59:36:00	0.0000	0.0000	0.0000	0.0000	0.00333	0.00333
59:44:00	0.0000	0.0000	0.0000	0.0000	0.00332	0.00332
59:52:00	0.0000	0.0000	0.0000	0.0000	0.0033	0.0033
60:00:00	0.0000	0.0000	0.0000	0.0000	0.00329	0.00329
60:08:00	0.0000	0.0000	0.0000	0.0000	0.00328	0.00328
60:16:00	0.0000	0.0000	0.0000	0.0000	0.00327	0.00327
60:24:00	0.0000	0.0000	0.0000	0.0000	0.00326	0.00326
60:32:00	0.0000	0.0000	0.0000	0.0000	0.00325	0.00325
60:40:00	0.0000	0.0000	0.0000	0.0000	0.00324	0.00324
60:48:00	0.0000	0.0000	0.0000	0.0000	0.00323	0.00323
60:56:00	0.0000	0.0000	0.0000	0.0000	0.00322	0.00322
61:04:00	0.0000	0.0000	0.0000	0.0000	0.0032	0.0032
61:12:00	0.0000	0.0000	0.0000	0.0000	0.00319	0.00319
61:20:00	0.0000	0.0000	0.0000	0.0000	0.00318	0.00318
61:28:00	0.0000	0.0000	0.0000	0.0000	0.00317	0.00317
61:36:00	0.0000	0.0000	0.0000	0.0000	0.00316	0.00316
61:44:00	0.0000	0.0000	0.0000	0.0000	0.00315	0.00315
61:52:00	0.0000	0.0000	0.0000	0.0000	0.00314	0.00314
62:00:00	0.0000	0.0000	0.0000	0.0000	0.00313	0.00313
62:08:00	0.0000	0.0000	0.0000	0.0000	0.00312	0.00312

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
62:16:00	0.0000	0.0000	0.0000	0.0000	0.00311	0.00311
62:24:00	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031
62:32:00	0.0000	0.0000	0.0000	0.0000	0.00309	0.00309
62:40:00	0.0000	0.0000	0.0000	0.0000	0.00308	0.00308
62:48:00	0.0000	0.0000	0.0000	0.0000	0.00306	0.00306
62:56:00	0.0000	0.0000	0.0000	0.0000	0.00305	0.00305
63:04:00	0.0000	0.0000	0.0000	0.0000	0.00304	0.00304
63:12:00	0.0000	0.0000	0.0000	0.0000	0.00303	0.00303
63:20:00	0.0000	0.0000	0.0000	0.0000	0.00302	0.00302
63:28:00	0.0000	0.0000	0.0000	0.0000	0.00301	0.00301
63:36:00	0.0000	0.0000	0.0000	0.0000	0.003	0.003
63:44:00	0.0000	0.0000	0.0000	0.0000	0.00299	0.00299
63:52:00	0.0000	0.0000	0.0000	0.0000	0.00298	0.00298
64:00:00	0.0000	0.0000	0.0000	0.0000	0.00297	0.00297
64:08:00	0.0000	0.0000	0.0000	0.0000	0.00296	0.00296
64:16:00	0.0000	0.0000	0.0000	0.0000	0.00295	0.00295
64:24:00	0.0000	0.0000	0.0000	0.0000	0.00294	0.00294
64:32:00	0.0000	0.0000	0.0000	0.0000	0.00293	0.00293
64:40:00	0.0000	0.0000	0.0000	0.0000	0.00292	0.00292
64:48:00	0.0000	0.0000	0.0000	0.0000	0.00291	0.00291
64:56:00	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029
65:04:00	0.0000	0.0000	0.0000	0.0000	0.00289	0.00289
65:12:00	0.0000	0.0000	0.0000	0.0000	0.00288	0.00288
65:20:00	0.0000	0.0000	0.0000	0.0000	0.00287	0.00287
65:28:00	0.0000	0.0000	0.0000	0.0000	0.00286	0.00286
65:36:00	0.0000	0.0000	0.0000	0.0000	0.00285	0.00285
65:44:00	0.0000	0.0000	0.0000	0.0000	0.00284	0.00284
65:52:00	0.0000	0.0000	0.0000	0.0000	0.00283	0.00283
66:00:00	0.0000	0.0000	0.0000	0.0000	0.00282	0.00282
66:08:00	0.0000	0.0000	0.0000	0.0000	0.00281	0.00281
66:16:00	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028
66:24:00	0.0000	0.0000	0.0000	0.0000	0.00279	0.00279
66:32:00	0.0000	0.0000	0.0000	0.0000	0.00278	0.00278
66:40:00	0.0000	0.0000	0.0000	0.0000	0.00277	0.00277
66:48:00	0.0000	0.0000	0.0000	0.0000	0.00276	0.00276
66:56:00	0.0000	0.0000	0.0000	0.0000	0.00276	0.00276



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
67:04:00	0.0000	0.0000	0.0000	0.0000	0.00275	0.00275
67:12:00	0.0000	0.0000	0.0000	0.0000	0.00274	0.00274
67:20:00	0.0000	0.0000	0.0000	0.0000	0.00273	0.00273
67:28:00	0.0000	0.0000	0.0000	0.0000	0.00272	0.00272
67:36:00	0.0000	0.0000	0.0000	0.0000	0.00271	0.00271
67:44:00	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027
67:52:00	0.0000	0.0000	0.0000	0.0000	0.00269	0.00269
68:00:00	0.0000	0.0000	0.0000	0.0000	0.00268	0.00268
68:08:00	0.0000	0.0000	0.0000	0.0000	0.00267	0.00267
68:16:00	0.0000	0.0000	0.0000	0.0000	0.00266	0.00266
68:24:00	0.0000	0.0000	0.0000	0.0000	0.00265	0.00265
68:32:00	0.0000	0.0000	0.0000	0.0000	0.00264	0.00264
68:40:00	0.0000	0.0000	0.0000	0.0000	0.00264	0.00264
68:48:00	0.0000	0.0000	0.0000	0.0000	0.00263	0.00263
68:56:00	0.0000	0.0000	0.0000	0.0000	0.00262	0.00262
69:04:00	0.0000	0.0000	0.0000	0.0000	0.00261	0.00261
69:12:00	0.0000	0.0000	0.0000	0.0000	0.0026	0.0026
69:20:00	0.0000	0.0000	0.0000	0.0000	0.00259	0.00259
69:28:00	0.0000	0.0000	0.0000	0.0000	0.00258	0.00258
69:36:00	0.0000	0.0000	0.0000	0.0000	0.00257	0.00257
69:44:00	0.0000	0.0000	0.0000	0.0000	0.00256	0.00256
69:52:00	0.0000	0.0000	0.0000	0.0000	0.00256	0.00256
70:00:00	0.0000	0.0000	0.0000	0.0000	0.00255	0.00255
70:08:00	0.0000	0.0000	0.0000	0.0000	0.00254	0.00254
70:16:00	0.0000	0.0000	0.0000	0.0000	0.00253	0.00253
70:24:00	0.0000	0.0000	0.0000	0.0000	0.00252	0.00252
70:32:00	0.0000	0.0000	0.0000	0.0000	0.00251	0.00251
70:40:00	0.0000	0.0000	0.0000	0.0000	0.0025	0.0025
70:48:00	0.0000	0.0000	0.0000	0.0000	0.00249	0.00249
70:56:00	0.0000	0.0000	0.0000	0.0000	0.00249	0.00249
71:04:00	0.0000	0.0000	0.0000	0.0000	0.00248	0.00248
71:12:00	0.0000	0.0000	0.0000	0.0000	0.00247	0.00247
71:20:00	0.0000	0.0000	0.0000	0.0000	0.00246	0.00246
71:28:00	0.0000	0.0000	0.0000	0.0000	0.00245	0.00245
71:36:00	0.0000	0.0000	0.0000	0.0000	0.00244	0.00244
71:44:00	0.0000	0.0000	0.0000	0.0000	0.00244	0.00244

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
71:52:00	0.0000	0.0000	0.0000	0.0000	0.00243	0.00243
72:00:00	0.0000	0.0000	0.0000	0.0000	0.00242	0.00242
72:08:00	0.0000	0.0000	0.0000	0.0000	0.00241	0.00241
72:16:00	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024
72:24:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
72:32:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
72:40:00	0.0000	0.0000	0.0000	0.0000	0.00238	0.00238
72:48:00	0.0000	0.0000	0.0000	0.0000	0.00237	0.00237
72:56:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
73:04:00	0.0000	0.0000	0.0000	0.0000	0.00235	0.00235
73:12:00	0.0000	0.0000	0.0000	0.0000	0.00235	0.00235
73:20:00	0.0000	0.0000	0.0000	0.0000	0.00234	0.00234
73:28:00	0.0000	0.0000	0.0000	0.0000	0.00233	0.00233
73:36:00	0.0000	0.0000	0.0000	0.0000	0.00232	0.00232
73:44:00	0.0000	0.0000	0.0000	0.0000	0.00231	0.00231
73:52:00	0.0000	0.0000	0.0000	0.0000	0.00231	0.00231
74:00:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
74:08:00	0.0000	0.0000	0.0000	0.0000	0.00229	0.00229
74:16:00	0.0000	0.0000	0.0000	0.0000	0.00228	0.00228
74:24:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
74:32:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
74:40:00	0.0000	0.0000	0.0000	0.0000	0.00226	0.00226
74:48:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225
74:56:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
75:04:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
75:12:00	0.0000	0.0000	0.0000	0.0000	0.00223	0.00223
75:20:00	0.0000	0.0000	0.0000	0.0000	0.00222	0.00222
75:28:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221
75:36:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
75:44:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
75:52:00	0.0000	0.0000	0.0000	0.0000	0.00219	0.00219
76:00:00	0.0000	0.0000	0.0000	0.0000	0.00218	0.00218
76:08:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
76:16:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
76:24:00	0.0000	0.0000	0.0000	0.0000	0.00216	0.00216
76:32:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
76:40:00	0.0000	0.0000	0.0000	0.0000	0.00215	0.00215
76:48:00	0.0000	0.0000	0.0000	0.0000	0.00214	0.00214
76:56:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
77:04:00	0.0000	0.0000	0.0000	0.0000	0.00212	0.00212
77:12:00	0.0000	0.0000	0.0000	0.0000	0.00212	0.00212
77:20:00	0.0000	0.0000	0.0000	0.0000	0.00211	0.00211
77:28:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
77:36:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
77:44:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209
77:52:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
78:00:00	0.0000	0.0000	0.0000	0.0000	0.00207	0.00207
78:08:00	0.0000	0.0000	0.0000	0.0000	0.00207	0.00207
78:16:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
78:24:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
78:32:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
78:40:00	0.0000	0.0000	0.0000	0.0000	0.00204	0.00204
78:48:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
78:56:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
79:04:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
79:12:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
79:20:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
79:28:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
79:36:00	0.0000	0.0000	0.0000	0.0000	0.00199	0.00199
79:44:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
79:52:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
80:00:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
80:08:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
80:16:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
80:24:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195
80:32:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
80:40:00	0.0000	0.0000	0.0000	0.0000	0.00194	0.00194
80:48:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
80:56:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
81:04:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
81:12:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
81:20:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
81:28:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
81:36:00	0.0000	0.0000	0.0000	0.0000	0.00189	0.00189
81:44:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
81:52:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
82:00:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187
82:08:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
82:16:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
82:24:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
82:32:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
82:40:00	0.0000	0.0000	0.0000	0.0000	0.00184	0.00184
82:48:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
82:56:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
83:04:00	0.0000	0.0000	0.0000	0.0000	0.00182	0.00182
83:12:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
83:20:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
83:28:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
83:36:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
83:44:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
83:52:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
84:00:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
84:08:00	0.0000	0.0000	0.0000	0.0000	0.00177	0.00177
84:16:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
84:24:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
84:32:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
84:40:00	0.0000	0.0000	0.0000	0.0000	0.00175	0.00175
84:48:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
84:56:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
85:04:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173
85:12:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
85:20:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
85:28:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
85:36:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
85:44:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
85:52:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
86:00:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
86:08:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
86:16:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
86:24:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
86:32:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
86:40:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
86:48:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
86:56:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
87:04:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
87:12:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00164
87:20:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
87:28:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
87:36:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00162
87:44:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
87:52:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
88:00:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
88:08:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016
88:16:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
88:24:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
88:32:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
88:40:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
88:48:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
88:56:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
89:04:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
89:12:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
89:20:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
89:28:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
89:36:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
89:44:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
89:52:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
90:00:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
90:08:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
90:16:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
90:24:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
90:32:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
90:40:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
90:48:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
90:56:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
91:04:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148

## Appendix

### Catchment descriptors \*

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

*Values in square brackets are the original values loaded from the FEH Web Service or FEH CD-ROM*

# UK Design Flood Estimation

Generated on 05 May 2021 08:40:01 by User

Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: C338-6498

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.02

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 1 year

### Summary of results

Rainfall - FEH 2013 model (mm):	20.75	Total runoff (ML):	0.10
Total Rainfall (mm):	13.29	Total flow (ML):	0.29
Peak Rainfall (mm):	3.02	Peak flow (m <sup>3</sup> /s):	0.01

### Parameters

Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.

\* Indicates that the user locked the duration/timestep

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters



Name	Value	User-defined?
Tp (hr)	3.25 [1.34]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BF0 (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [32.37]	Yes
BR	1.84	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0	No
Urbext 2000	0	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.2918	0.0000	0.0976	0.0000	0.000658	0.000658
00:30:00	0.4888	0.0000	0.1641	0.0000	0.000649	0.000658
01:00:00	0.8147	0.0000	0.2749	0.0000	0.000642	0.000683
01:30:00	1.3471	0.0000	0.4587	0.0001	0.000635	0.00075
02:00:00	2.1923	0.0000	0.7573	0.0003	0.000631	0.000887
02:30:00	3.0201	0.0000	1.0652	0.0005	0.000632	0.00114
03:00:00	2.1923	0.0000	0.7892	0.0009	0.000641	0.00157
03:30:00	1.3471	0.0000	0.4916	0.0015	0.000661	0.00217
04:00:00	0.8147	0.0000	0.2998	0.0022	0.000696	0.00288
04:30:00	0.4888	0.0000	0.1808	0.0029	0.000747	0.00363
05:00:00	0.2918	0.0000	0.1082	0.0035	0.000813	0.00436
05:30:00	0.0000	0.0000	0.0000	0.0041	0.000892	0.00498
06:00:00	0.0000	0.0000	0.0000	0.0044	0.00098	0.00541
06:30:00	0.0000	0.0000	0.0000	0.0045	0.00107	0.00555
07:00:00	0.0000	0.0000	0.0000	0.0043	0.00116	0.00547
07:30:00	0.0000	0.0000	0.0000	0.0040	0.00124	0.00524
08:00:00	0.0000	0.0000	0.0000	0.0036	0.00132	0.00492
08:30:00	0.0000	0.0000	0.0000	0.0032	0.00138	0.00456
09:00:00	0.0000	0.0000	0.0000	0.0028	0.00143	0.0042
09:30:00	0.0000	0.0000	0.0000	0.0024	0.00147	0.00387
10:00:00	0.0000	0.0000	0.0000	0.0021	0.00151	0.00359
10:30:00	0.0000	0.0000	0.0000	0.0018	0.00153	0.00335
11:00:00	0.0000	0.0000	0.0000	0.0016	0.00155	0.00312
11:30:00	0.0000	0.0000	0.0000	0.0013	0.00157	0.0029
12:00:00	0.0000	0.0000	0.0000	0.0011	0.00158	0.00268
12:30:00	0.0000	0.0000	0.0000	0.0009	0.00158	0.00247
13:00:00	0.0000	0.0000	0.0000	0.0007	0.00158	0.00226
13:30:00	0.0000	0.0000	0.0000	0.0005	0.00157	0.00206
14:00:00	0.0000	0.0000	0.0000	0.0003	0.00156	0.00187
14:30:00	0.0000	0.0000	0.0000	0.0002	0.00155	0.00173
15:00:00	0.0000	0.0000	0.0000	0.0001	0.00153	0.00163
15:30:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00156
16:00:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00151
16:30:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148
17:00:00	0.0000	0.0000	0.0000	0.0000	0.00146	0.00146

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.00144	0.00144
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00142	0.00142
18:30:00	0.0000	0.0000	0.0000	0.0000	0.0014	0.0014
19:00:00	0.0000	0.0000	0.0000	0.0000	0.00138	0.00138
19:30:00	0.0000	0.0000	0.0000	0.0000	0.00137	0.00137
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00135	0.00135
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00133	0.00133
21:00:00	0.0000	0.0000	0.0000	0.0000	0.00131	0.00131
21:30:00	0.0000	0.0000	0.0000	0.0000	0.0013	0.0013
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00128	0.00128
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00126	0.00126
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00125	0.00125
23:30:00	0.0000	0.0000	0.0000	0.0000	0.00123	0.00123
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00122	0.00122
24:30:00	0.0000	0.0000	0.0000	0.0000	0.0012	0.0012
25:00:00	0.0000	0.0000	0.0000	0.0000	0.00119	0.00119
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00117	0.00117
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00116	0.00116
26:30:00	0.0000	0.0000	0.0000	0.0000	0.00114	0.00114
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00113	0.00113
27:30:00	0.0000	0.0000	0.0000	0.0000	0.00111	0.00111
28:00:00	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011
28:30:00	0.0000	0.0000	0.0000	0.0000	0.00108	0.00108
29:00:00	0.0000	0.0000	0.0000	0.0000	0.00107	0.00107
29:30:00	0.0000	0.0000	0.0000	0.0000	0.00106	0.00106
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00104	0.00104
30:30:00	0.0000	0.0000	0.0000	0.0000	0.00103	0.00103
31:00:00	0.0000	0.0000	0.0000	0.0000	0.00102	0.00102
31:30:00	0.0000	0.0000	0.0000	0.0000	0.001	0.001
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00099	0.00099
32:30:00	0.0000	0.0000	0.0000	0.0000	0.000978	0.000978
33:00:00	0.0000	0.0000	0.0000	0.0000	0.000965	0.000965
33:30:00	0.0000	0.0000	0.0000	0.0000	0.000953	0.000953
34:00:00	0.0000	0.0000	0.0000	0.0000	0.000941	0.000941
34:30:00	0.0000	0.0000	0.0000	0.0000	0.000929	0.000929
35:00:00	0.0000	0.0000	0.0000	0.0000	0.000917	0.000917

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.000905	0.000905
36:00:00	0.0000	0.0000	0.0000	0.0000	0.000893	0.000893
36:30:00	0.0000	0.0000	0.0000	0.0000	0.000882	0.000882
37:00:00	0.0000	0.0000	0.0000	0.0000	0.000871	0.000871
37:30:00	0.0000	0.0000	0.0000	0.0000	0.00086	0.00086
38:00:00	0.0000	0.0000	0.0000	0.0000	0.000849	0.000849
38:30:00	0.0000	0.0000	0.0000	0.0000	0.000838	0.000838
39:00:00	0.0000	0.0000	0.0000	0.0000	0.000827	0.000827
39:30:00	0.0000	0.0000	0.0000	0.0000	0.000816	0.000816
40:00:00	0.0000	0.0000	0.0000	0.0000	0.000806	0.000806
40:30:00	0.0000	0.0000	0.0000	0.0000	0.000796	0.000796
41:00:00	0.0000	0.0000	0.0000	0.0000	0.000786	0.000786
41:30:00	0.0000	0.0000	0.0000	0.0000	0.000776	0.000776
42:00:00	0.0000	0.0000	0.0000	0.0000	0.000766	0.000766
42:30:00	0.0000	0.0000	0.0000	0.0000	0.000756	0.000756
43:00:00	0.0000	0.0000	0.0000	0.0000	0.000746	0.000746
43:30:00	0.0000	0.0000	0.0000	0.0000	0.000737	0.000737
44:00:00	0.0000	0.0000	0.0000	0.0000	0.000727	0.000727
44:30:00	0.0000	0.0000	0.0000	0.0000	0.000718	0.000718
45:00:00	0.0000	0.0000	0.0000	0.0000	0.000709	0.000709
45:30:00	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007
46:00:00	0.0000	0.0000	0.0000	0.0000	0.000691	0.000691
46:30:00	0.0000	0.0000	0.0000	0.0000	0.000682	0.000682
47:00:00	0.0000	0.0000	0.0000	0.0000	0.000673	0.000673
47:30:00	0.0000	0.0000	0.0000	0.0000	0.000665	0.000665

## Appendix

### Catchment descriptors

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

# UK Design Flood Estimation

Generated on 05 May 2021 08:43:00 by User

Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: C338-6498

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.02

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 2 year

### Summary of results

Rainfall - FEH 2013 model (mm):	23.78	Total runoff (ML):	0.12
Total Rainfall (mm):	15.23	Total flow (ML):	0.33
Peak Rainfall (mm):	3.46	Peak flow (m <sup>3</sup> /s):	0.01

### Parameters

*Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.*

*\* Indicates that the user locked the duration/timestep*

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.34]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [32.37]	Yes
BR	1.81	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0	No
Urbext 2000	0	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.3344	0.0000	0.1119	0.0000	0.000658	0.000658
00:30:00	0.5602	0.0000	0.1881	0.0000	0.000649	0.00066
01:00:00	0.9337	0.0000	0.3155	0.0000	0.000642	0.00069
01:30:00	1.5438	0.0000	0.5271	0.0001	0.000636	0.000767
02:00:00	2.5124	0.0000	0.8720	0.0003	0.000632	0.000925
02:30:00	3.4610	0.0000	1.2301	0.0006	0.000634	0.00122
03:00:00	2.5124	0.0000	0.9140	0.0011	0.000645	0.00171
03:30:00	1.5438	0.0000	0.5704	0.0017	0.00067	0.00241
04:00:00	0.9337	0.0000	0.3482	0.0025	0.00071	0.00323
04:30:00	0.5602	0.0000	0.2101	0.0033	0.000769	0.00409
05:00:00	0.3344	0.0000	0.1258	0.0041	0.000845	0.00493
05:30:00	0.0000	0.0000	0.0000	0.0047	0.000936	0.00566
06:00:00	0.0000	0.0000	0.0000	0.0051	0.00104	0.00615
06:30:00	0.0000	0.0000	0.0000	0.0052	0.00114	0.00632
07:00:00	0.0000	0.0000	0.0000	0.0050	0.00125	0.00622
07:30:00	0.0000	0.0000	0.0000	0.0046	0.00134	0.00596
08:00:00	0.0000	0.0000	0.0000	0.0042	0.00143	0.00559
08:30:00	0.0000	0.0000	0.0000	0.0037	0.0015	0.00518
09:00:00	0.0000	0.0000	0.0000	0.0032	0.00156	0.00476
09:30:00	0.0000	0.0000	0.0000	0.0028	0.00161	0.00438
10:00:00	0.0000	0.0000	0.0000	0.0024	0.00165	0.00406
10:30:00	0.0000	0.0000	0.0000	0.0021	0.00168	0.00378
11:00:00	0.0000	0.0000	0.0000	0.0018	0.0017	0.00351
11:30:00	0.0000	0.0000	0.0000	0.0015	0.00172	0.00326
12:00:00	0.0000	0.0000	0.0000	0.0013	0.00173	0.00301
12:30:00	0.0000	0.0000	0.0000	0.0010	0.00174	0.00276
13:00:00	0.0000	0.0000	0.0000	0.0008	0.00173	0.00252
13:30:00	0.0000	0.0000	0.0000	0.0006	0.00173	0.00229
14:00:00	0.0000	0.0000	0.0000	0.0004	0.00172	0.00208
14:30:00	0.0000	0.0000	0.0000	0.0002	0.0017	0.00191
15:00:00	0.0000	0.0000	0.0000	0.0001	0.00168	0.00179
15:30:00	0.0000	0.0000	0.0000	0.0001	0.00166	0.00172
16:00:00	0.0000	0.0000	0.0000	0.0000	0.00164	0.00166
16:30:00	0.0000	0.0000	0.0000	0.0000	0.00162	0.00163
17:00:00	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.00158	0.00158
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00156	0.00156
18:30:00	0.0000	0.0000	0.0000	0.0000	0.00154	0.00154
19:00:00	0.0000	0.0000	0.0000	0.0000	0.00152	0.00152
19:30:00	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00148	0.00148
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00146	0.00146
21:00:00	0.0000	0.0000	0.0000	0.0000	0.00145	0.00145
21:30:00	0.0000	0.0000	0.0000	0.0000	0.00143	0.00143
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00141	0.00141
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00139	0.00139
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00137	0.00137
23:30:00	0.0000	0.0000	0.0000	0.0000	0.00136	0.00136
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00134	0.00134
24:30:00	0.0000	0.0000	0.0000	0.0000	0.00132	0.00132
25:00:00	0.0000	0.0000	0.0000	0.0000	0.0013	0.0013
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00129	0.00129
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00127	0.00127
26:30:00	0.0000	0.0000	0.0000	0.0000	0.00125	0.00125
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00124	0.00124
27:30:00	0.0000	0.0000	0.0000	0.0000	0.00122	0.00122
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00121	0.00121
28:30:00	0.0000	0.0000	0.0000	0.0000	0.00119	0.00119
29:00:00	0.0000	0.0000	0.0000	0.0000	0.00118	0.00118
29:30:00	0.0000	0.0000	0.0000	0.0000	0.00116	0.00116
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00115	0.00115
30:30:00	0.0000	0.0000	0.0000	0.0000	0.00113	0.00113
31:00:00	0.0000	0.0000	0.0000	0.0000	0.00112	0.00112
31:30:00	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00109	0.00109
32:30:00	0.0000	0.0000	0.0000	0.0000	0.00108	0.00108
33:00:00	0.0000	0.0000	0.0000	0.0000	0.00106	0.00106
33:30:00	0.0000	0.0000	0.0000	0.0000	0.00105	0.00105
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00103	0.00103
34:30:00	0.0000	0.0000	0.0000	0.0000	0.00102	0.00102
35:00:00	0.0000	0.0000	0.0000	0.0000	0.00101	0.00101

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.000996	0.000996
36:00:00	0.0000	0.0000	0.0000	0.0000	0.000983	0.000983
36:30:00	0.0000	0.0000	0.0000	0.0000	0.00097	0.00097
37:00:00	0.0000	0.0000	0.0000	0.0000	0.000958	0.000958
37:30:00	0.0000	0.0000	0.0000	0.0000	0.000946	0.000946
38:00:00	0.0000	0.0000	0.0000	0.0000	0.000934	0.000934
38:30:00	0.0000	0.0000	0.0000	0.0000	0.000922	0.000922
39:00:00	0.0000	0.0000	0.0000	0.0000	0.00091	0.00091
39:30:00	0.0000	0.0000	0.0000	0.0000	0.000898	0.000898
40:00:00	0.0000	0.0000	0.0000	0.0000	0.000887	0.000887
40:30:00	0.0000	0.0000	0.0000	0.0000	0.000875	0.000875
41:00:00	0.0000	0.0000	0.0000	0.0000	0.000864	0.000864
41:30:00	0.0000	0.0000	0.0000	0.0000	0.000853	0.000853
42:00:00	0.0000	0.0000	0.0000	0.0000	0.000842	0.000842
42:30:00	0.0000	0.0000	0.0000	0.0000	0.000832	0.000832
43:00:00	0.0000	0.0000	0.0000	0.0000	0.000821	0.000821
43:30:00	0.0000	0.0000	0.0000	0.0000	0.00081	0.00081
44:00:00	0.0000	0.0000	0.0000	0.0000	0.0008	0.0008
44:30:00	0.0000	0.0000	0.0000	0.0000	0.00079	0.00079
45:00:00	0.0000	0.0000	0.0000	0.0000	0.00078	0.00078
45:30:00	0.0000	0.0000	0.0000	0.0000	0.00077	0.00077
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00076	0.00076
46:30:00	0.0000	0.0000	0.0000	0.0000	0.00075	0.00075
47:00:00	0.0000	0.0000	0.0000	0.0000	0.000741	0.000741
47:30:00	0.0000	0.0000	0.0000	0.0000	0.000731	0.000731
48:00:00	0.0000	0.0000	0.0000	0.0000	0.000722	0.000722
48:30:00	0.0000	0.0000	0.0000	0.0000	0.000713	0.000713
49:00:00	0.0000	0.0000	0.0000	0.0000	0.000704	0.000704
49:30:00	0.0000	0.0000	0.0000	0.0000	0.000695	0.000695
50:00:00	0.0000	0.0000	0.0000	0.0000	0.000686	0.000686
50:30:00	0.0000	0.0000	0.0000	0.0000	0.000677	0.000677
51:00:00	0.0000	0.0000	0.0000	0.0000	0.000668	0.000668

## Appendix

### Catchment descriptors

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

# UK Design Flood Estimation

Generated on 05 May 2021 08:45:56 by User

Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: C338-6498

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.02

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 30 year

### Summary of results

Rainfall - FEH 2013 model (mm):	48.74	Total runoff (ML):	0.25
Total Rainfall (mm):	31.22	Total flow (ML):	0.67
Peak Rainfall (mm):	7.09	Peak flow (m <sup>3</sup> /s):	0.01

### Parameters

Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.

\* Indicates that the user locked the duration/timestep

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.34]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [32.37]	Yes
BR	1.65	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0	No
Urbext 2000	0	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.6854	0.0000	0.2297	0.0000	0.000658	0.000658
00:30:00	1.1483	0.0000	0.3877	0.0000	0.000649	0.00067
01:00:00	1.9138	0.0000	0.6544	0.0001	0.000642	0.000741
01:30:00	3.1644	0.0000	1.1045	0.0003	0.000638	0.00091
02:00:00	5.1498	0.0000	1.8573	0.0006	0.000639	0.00124
02:30:00	7.0941	0.0000	2.6800	0.0012	0.00065	0.00186
03:00:00	5.1498	0.0000	2.0337	0.0022	0.000678	0.00291
03:30:00	3.1644	0.0000	1.2864	0.0037	0.000732	0.00441
04:00:00	1.9138	0.0000	0.7916	0.0054	0.000817	0.00618
04:30:00	1.1483	0.0000	0.4799	0.0071	0.000938	0.00806
05:00:00	0.6854	0.0000	0.2882	0.0088	0.00109	0.00989
05:30:00	0.0000	0.0000	0.0000	0.0102	0.00128	0.0115
06:00:00	0.0000	0.0000	0.0000	0.0111	0.00149	0.0126
06:30:00	0.0000	0.0000	0.0000	0.0113	0.0017	0.013
07:00:00	0.0000	0.0000	0.0000	0.0109	0.00192	0.0128
07:30:00	0.0000	0.0000	0.0000	0.0101	0.00211	0.0122
08:00:00	0.0000	0.0000	0.0000	0.0091	0.00229	0.0114
08:30:00	0.0000	0.0000	0.0000	0.0081	0.00244	0.0105
09:00:00	0.0000	0.0000	0.0000	0.0070	0.00257	0.0096
09:30:00	0.0000	0.0000	0.0000	0.0061	0.00267	0.00877
10:00:00	0.0000	0.0000	0.0000	0.0053	0.00276	0.00806
10:30:00	0.0000	0.0000	0.0000	0.0046	0.00283	0.00744
11:00:00	0.0000	0.0000	0.0000	0.0040	0.00288	0.00686
11:30:00	0.0000	0.0000	0.0000	0.0034	0.00292	0.00631
12:00:00	0.0000	0.0000	0.0000	0.0028	0.00295	0.00577
12:30:00	0.0000	0.0000	0.0000	0.0023	0.00297	0.00524
13:00:00	0.0000	0.0000	0.0000	0.0017	0.00297	0.00472
13:30:00	0.0000	0.0000	0.0000	0.0013	0.00296	0.00422
14:00:00	0.0000	0.0000	0.0000	0.0008	0.00295	0.00376
14:30:00	0.0000	0.0000	0.0000	0.0005	0.00292	0.0034
15:00:00	0.0000	0.0000	0.0000	0.0003	0.0029	0.00315
15:30:00	0.0000	0.0000	0.0000	0.0001	0.00286	0.00298
16:00:00	0.0000	0.0000	0.0000	0.0000	0.00283	0.00288
16:30:00	0.0000	0.0000	0.0000	0.0000	0.00279	0.00281
17:00:00	0.0000	0.0000	0.0000	0.0000	0.00276	0.00276

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.00272	0.00272
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00269	0.00269
18:30:00	0.0000	0.0000	0.0000	0.0000	0.00265	0.00265
19:00:00	0.0000	0.0000	0.0000	0.0000	0.00262	0.00262
19:30:00	0.0000	0.0000	0.0000	0.0000	0.00258	0.00258
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00255	0.00255
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00252	0.00252
21:00:00	0.0000	0.0000	0.0000	0.0000	0.00249	0.00249
21:30:00	0.0000	0.0000	0.0000	0.0000	0.00245	0.00245
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00242	0.00242
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
23:30:00	0.0000	0.0000	0.0000	0.0000	0.00233	0.00233
24:00:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
24:30:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
25:00:00	0.0000	0.0000	0.0000	0.0000	0.00224	0.00224
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00221	0.00221
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00219	0.00219
26:30:00	0.0000	0.0000	0.0000	0.0000	0.00216	0.00216
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
27:30:00	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
28:30:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
29:00:00	0.0000	0.0000	0.0000	0.0000	0.00202	0.00202
29:30:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
30:30:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195
31:00:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
31:30:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00187	0.00187
32:30:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
33:00:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
33:30:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
34:30:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
35:00:00	0.0000	0.0000	0.0000	0.0000	0.00173	0.00173

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
36:30:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
37:00:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
37:30:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
38:30:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
39:00:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
39:30:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
40:30:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
41:00:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
41:30:00	0.0000	0.0000	0.0000	0.0000	0.00147	0.00147
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00145	0.00145
42:30:00	0.0000	0.0000	0.0000	0.0000	0.00143	0.00143
43:00:00	0.0000	0.0000	0.0000	0.0000	0.00141	0.00141
43:30:00	0.0000	0.0000	0.0000	0.0000	0.00139	0.00139
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00138	0.00138
44:30:00	0.0000	0.0000	0.0000	0.0000	0.00136	0.00136
45:00:00	0.0000	0.0000	0.0000	0.0000	0.00134	0.00134
45:30:00	0.0000	0.0000	0.0000	0.0000	0.00132	0.00132
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00131	0.00131
46:30:00	0.0000	0.0000	0.0000	0.0000	0.00129	0.00129
47:00:00	0.0000	0.0000	0.0000	0.0000	0.00127	0.00127
47:30:00	0.0000	0.0000	0.0000	0.0000	0.00126	0.00126
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00124	0.00124
48:30:00	0.0000	0.0000	0.0000	0.0000	0.00123	0.00123
49:00:00	0.0000	0.0000	0.0000	0.0000	0.00121	0.00121
49:30:00	0.0000	0.0000	0.0000	0.0000	0.00119	0.00119
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00118	0.00118
50:30:00	0.0000	0.0000	0.0000	0.0000	0.00116	0.00116
51:00:00	0.0000	0.0000	0.0000	0.0000	0.00115	0.00115
51:30:00	0.0000	0.0000	0.0000	0.0000	0.00113	0.00113
52:00:00	0.0000	0.0000	0.0000	0.0000	0.00112	0.00112
52:30:00	0.0000	0.0000	0.0000	0.0000	0.00111	0.00111
53:00:00	0.0000	0.0000	0.0000	0.0000	0.00109	0.00109



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
53:30:00	0.0000	0.0000	0.0000	0.0000	0.00108	0.00108
54:00:00	0.0000	0.0000	0.0000	0.0000	0.00106	0.00106
54:30:00	0.0000	0.0000	0.0000	0.0000	0.00105	0.00105
55:00:00	0.0000	0.0000	0.0000	0.0000	0.00104	0.00104
55:30:00	0.0000	0.0000	0.0000	0.0000	0.00102	0.00102
56:00:00	0.0000	0.0000	0.0000	0.0000	0.00101	0.00101
56:30:00	0.0000	0.0000	0.0000	0.0000	0.000998	0.000998
57:00:00	0.0000	0.0000	0.0000	0.0000	0.000985	0.000985
57:30:00	0.0000	0.0000	0.0000	0.0000	0.000973	0.000973
58:00:00	0.0000	0.0000	0.0000	0.0000	0.00096	0.00096
58:30:00	0.0000	0.0000	0.0000	0.0000	0.000948	0.000948
59:00:00	0.0000	0.0000	0.0000	0.0000	0.000936	0.000936
59:30:00	0.0000	0.0000	0.0000	0.0000	0.000924	0.000924
60:00:00	0.0000	0.0000	0.0000	0.0000	0.000912	0.000912
60:30:00	0.0000	0.0000	0.0000	0.0000	0.0009	0.0009
61:00:00	0.0000	0.0000	0.0000	0.0000	0.000889	0.000889
61:30:00	0.0000	0.0000	0.0000	0.0000	0.000878	0.000878
62:00:00	0.0000	0.0000	0.0000	0.0000	0.000866	0.000866
62:30:00	0.0000	0.0000	0.0000	0.0000	0.000855	0.000855
63:00:00	0.0000	0.0000	0.0000	0.0000	0.000844	0.000844
63:30:00	0.0000	0.0000	0.0000	0.0000	0.000834	0.000834
64:00:00	0.0000	0.0000	0.0000	0.0000	0.000823	0.000823
64:30:00	0.0000	0.0000	0.0000	0.0000	0.000812	0.000812
65:00:00	0.0000	0.0000	0.0000	0.0000	0.000802	0.000802
65:30:00	0.0000	0.0000	0.0000	0.0000	0.000792	0.000792
66:00:00	0.0000	0.0000	0.0000	0.0000	0.000782	0.000782
66:30:00	0.0000	0.0000	0.0000	0.0000	0.000772	0.000772
67:00:00	0.0000	0.0000	0.0000	0.0000	0.000762	0.000762
67:30:00	0.0000	0.0000	0.0000	0.0000	0.000752	0.000752
68:00:00	0.0000	0.0000	0.0000	0.0000	0.000743	0.000743
68:30:00	0.0000	0.0000	0.0000	0.0000	0.000733	0.000733
69:00:00	0.0000	0.0000	0.0000	0.0000	0.000724	0.000724
69:30:00	0.0000	0.0000	0.0000	0.0000	0.000714	0.000714
70:00:00	0.0000	0.0000	0.0000	0.0000	0.000705	0.000705
70:30:00	0.0000	0.0000	0.0000	0.0000	0.000696	0.000696
71:00:00	0.0000	0.0000	0.0000	0.0000	0.000687	0.000687

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
71:30:00	0.0000	0.0000	0.0000	0.0000	0.000679	0.000679
72:00:00	0.0000	0.0000	0.0000	0.0000	0.00067	0.00067
72:30:00	0.0000	0.0000	0.0000	0.0000	0.000661	0.000661

## Appendix

### Catchment descriptors

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

# UK Design Flood Estimation

Generated on 05 May 2021 08:47:59 by User

Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: C338-6498

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.02

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 100 year

### Summary of results

Rainfall - FEH 2013 model (mm):	61.50	Total runoff (ML):	0.33
Total Rainfall (mm):	39.40	Total flow (ML):	0.84
Peak Rainfall (mm):	8.95	Peak flow (m <sup>3</sup> /s):	0.02

### Parameters

Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.

\* Indicates that the user locked the duration/timestep

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.34]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [32.37]	Yes
BR	1.57	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0	No
Urbext 2000	0	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	0.8649	0.0000	0.2900	0.0000	0.000658	0.000658
00:30:00	1.4491	0.0000	0.4906	0.0000	0.000649	0.000676
01:00:00	2.4151	0.0000	0.8307	0.0001	0.000643	0.000767
01:30:00	3.9934	0.0000	1.4094	0.0003	0.000639	0.000983
02:00:00	6.4989	0.0000	2.3891	0.0008	0.000642	0.00141
02:30:00	8.9525	0.0000	3.4845	0.0015	0.000657	0.0022
03:00:00	6.4989	0.0000	2.6699	0.0028	0.000693	0.00354
03:30:00	3.9934	0.0000	1.6992	0.0047	0.00076	0.00547
04:00:00	2.4151	0.0000	1.0493	0.0069	0.000866	0.00776
04:30:00	1.4491	0.0000	0.6374	0.0092	0.00102	0.0102
05:00:00	0.8649	0.0000	0.3833	0.0114	0.00121	0.0126
05:30:00	0.0000	0.0000	0.0000	0.0132	0.00144	0.0147
06:00:00	0.0000	0.0000	0.0000	0.0144	0.0017	0.0161
06:30:00	0.0000	0.0000	0.0000	0.0147	0.00197	0.0167
07:00:00	0.0000	0.0000	0.0000	0.0142	0.00223	0.0164
07:30:00	0.0000	0.0000	0.0000	0.0132	0.00248	0.0157
08:00:00	0.0000	0.0000	0.0000	0.0119	0.0027	0.0146
08:30:00	0.0000	0.0000	0.0000	0.0106	0.00289	0.0134
09:00:00	0.0000	0.0000	0.0000	0.0092	0.00305	0.0122
09:30:00	0.0000	0.0000	0.0000	0.0080	0.00319	0.0111
10:00:00	0.0000	0.0000	0.0000	0.0069	0.00329	0.0102
10:30:00	0.0000	0.0000	0.0000	0.0060	0.00338	0.0094
11:00:00	0.0000	0.0000	0.0000	0.0052	0.00345	0.00865
11:30:00	0.0000	0.0000	0.0000	0.0044	0.0035	0.00793
12:00:00	0.0000	0.0000	0.0000	0.0037	0.00354	0.00723
12:30:00	0.0000	0.0000	0.0000	0.0030	0.00356	0.00654
13:00:00	0.0000	0.0000	0.0000	0.0023	0.00357	0.00586
13:30:00	0.0000	0.0000	0.0000	0.0016	0.00356	0.00521
14:00:00	0.0000	0.0000	0.0000	0.0011	0.00354	0.00462
14:30:00	0.0000	0.0000	0.0000	0.0006	0.00352	0.00414
15:00:00	0.0000	0.0000	0.0000	0.0003	0.00348	0.00381
15:30:00	0.0000	0.0000	0.0000	0.0002	0.00344	0.0036
16:00:00	0.0000	0.0000	0.0000	0.0001	0.0034	0.00346
16:30:00	0.0000	0.0000	0.0000	0.0000	0.00336	0.00337
17:00:00	0.0000	0.0000	0.0000	0.0000	0.00331	0.00332

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.00327	0.00327
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00323	0.00323
18:30:00	0.0000	0.0000	0.0000	0.0000	0.00319	0.00319
19:00:00	0.0000	0.0000	0.0000	0.0000	0.00315	0.00315
19:30:00	0.0000	0.0000	0.0000	0.0000	0.00311	0.00311
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00307	0.00307
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00303	0.00303
21:00:00	0.0000	0.0000	0.0000	0.0000	0.00299	0.00299
21:30:00	0.0000	0.0000	0.0000	0.0000	0.00295	0.00295
22:00:00	0.0000	0.0000	0.0000	0.0000	0.00291	0.00291
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00288	0.00288
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00284	0.00284
23:30:00	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00277	0.00277
24:30:00	0.0000	0.0000	0.0000	0.0000	0.00273	0.00273
25:00:00	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00266	0.00266
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00263	0.00263
26:30:00	0.0000	0.0000	0.0000	0.0000	0.0026	0.0026
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00256	0.00256
27:30:00	0.0000	0.0000	0.0000	0.0000	0.00253	0.00253
28:00:00	0.0000	0.0000	0.0000	0.0000	0.0025	0.0025
28:30:00	0.0000	0.0000	0.0000	0.0000	0.00247	0.00247
29:00:00	0.0000	0.0000	0.0000	0.0000	0.00243	0.00243
29:30:00	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024
30:00:00	0.0000	0.0000	0.0000	0.0000	0.00237	0.00237
30:30:00	0.0000	0.0000	0.0000	0.0000	0.00234	0.00234
31:00:00	0.0000	0.0000	0.0000	0.0000	0.00231	0.00231
31:30:00	0.0000	0.0000	0.0000	0.0000	0.00228	0.00228
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225
32:30:00	0.0000	0.0000	0.0000	0.0000	0.00222	0.00222
33:00:00	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022
33:30:00	0.0000	0.0000	0.0000	0.0000	0.00217	0.00217
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00214	0.00214
34:30:00	0.0000	0.0000	0.0000	0.0000	0.00211	0.00211
35:00:00	0.0000	0.0000	0.0000	0.0000	0.00209	0.00209

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.00206	0.00206
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
36:30:00	0.0000	0.0000	0.0000	0.0000	0.00201	0.00201
37:00:00	0.0000	0.0000	0.0000	0.0000	0.00198	0.00198
37:30:00	0.0000	0.0000	0.0000	0.0000	0.00196	0.00196
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00193	0.00193
38:30:00	0.0000	0.0000	0.0000	0.0000	0.00191	0.00191
39:00:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
39:30:00	0.0000	0.0000	0.0000	0.0000	0.00186	0.00186
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
40:30:00	0.0000	0.0000	0.0000	0.0000	0.00181	0.00181
41:00:00	0.0000	0.0000	0.0000	0.0000	0.00179	0.00179
41:30:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
42:30:00	0.0000	0.0000	0.0000	0.0000	0.00172	0.00172
43:00:00	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017
43:30:00	0.0000	0.0000	0.0000	0.0000	0.00168	0.00168
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00166	0.00166
44:30:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
45:00:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
45:30:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
46:30:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
47:00:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
47:30:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
48:30:00	0.0000	0.0000	0.0000	0.0000	0.00147	0.00147
49:00:00	0.0000	0.0000	0.0000	0.0000	0.00146	0.00146
49:30:00	0.0000	0.0000	0.0000	0.0000	0.00144	0.00144
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00142	0.00142
50:30:00	0.0000	0.0000	0.0000	0.0000	0.0014	0.0014
51:00:00	0.0000	0.0000	0.0000	0.0000	0.00138	0.00138
51:30:00	0.0000	0.0000	0.0000	0.0000	0.00136	0.00136
52:00:00	0.0000	0.0000	0.0000	0.0000	0.00135	0.00135
52:30:00	0.0000	0.0000	0.0000	0.0000	0.00133	0.00133
53:00:00	0.0000	0.0000	0.0000	0.0000	0.00131	0.00131



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
53:30:00	0.0000	0.0000	0.0000	0.0000	0.0013	0.0013
54:00:00	0.0000	0.0000	0.0000	0.0000	0.00128	0.00128
54:30:00	0.0000	0.0000	0.0000	0.0000	0.00126	0.00126
55:00:00	0.0000	0.0000	0.0000	0.0000	0.00125	0.00125
55:30:00	0.0000	0.0000	0.0000	0.0000	0.00123	0.00123
56:00:00	0.0000	0.0000	0.0000	0.0000	0.00122	0.00122
56:30:00	0.0000	0.0000	0.0000	0.0000	0.0012	0.0012
57:00:00	0.0000	0.0000	0.0000	0.0000	0.00118	0.00118
57:30:00	0.0000	0.0000	0.0000	0.0000	0.00117	0.00117
58:00:00	0.0000	0.0000	0.0000	0.0000	0.00115	0.00115
58:30:00	0.0000	0.0000	0.0000	0.0000	0.00114	0.00114
59:00:00	0.0000	0.0000	0.0000	0.0000	0.00113	0.00113
59:30:00	0.0000	0.0000	0.0000	0.0000	0.00111	0.00111
60:00:00	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011
60:30:00	0.0000	0.0000	0.0000	0.0000	0.00108	0.00108
61:00:00	0.0000	0.0000	0.0000	0.0000	0.00107	0.00107
61:30:00	0.0000	0.0000	0.0000	0.0000	0.00106	0.00106
62:00:00	0.0000	0.0000	0.0000	0.0000	0.00104	0.00104
62:30:00	0.0000	0.0000	0.0000	0.0000	0.00103	0.00103
63:00:00	0.0000	0.0000	0.0000	0.0000	0.00102	0.00102
63:30:00	0.0000	0.0000	0.0000	0.0000	0.001	0.001
64:00:00	0.0000	0.0000	0.0000	0.0000	0.00099	0.00099
64:30:00	0.0000	0.0000	0.0000	0.0000	0.000977	0.000977
65:00:00	0.0000	0.0000	0.0000	0.0000	0.000964	0.000964
65:30:00	0.0000	0.0000	0.0000	0.0000	0.000952	0.000952
66:00:00	0.0000	0.0000	0.0000	0.0000	0.00094	0.00094
66:30:00	0.0000	0.0000	0.0000	0.0000	0.000928	0.000928
67:00:00	0.0000	0.0000	0.0000	0.0000	0.000916	0.000916
67:30:00	0.0000	0.0000	0.0000	0.0000	0.000904	0.000904
68:00:00	0.0000	0.0000	0.0000	0.0000	0.000893	0.000893
68:30:00	0.0000	0.0000	0.0000	0.0000	0.000881	0.000881
69:00:00	0.0000	0.0000	0.0000	0.0000	0.00087	0.00087
69:30:00	0.0000	0.0000	0.0000	0.0000	0.000859	0.000859
70:00:00	0.0000	0.0000	0.0000	0.0000	0.000848	0.000848
70:30:00	0.0000	0.0000	0.0000	0.0000	0.000837	0.000837
71:00:00	0.0000	0.0000	0.0000	0.0000	0.000827	0.000827

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
71:30:00	0.0000	0.0000	0.0000	0.0000	0.000816	0.000816
72:00:00	0.0000	0.0000	0.0000	0.0000	0.000806	0.000806
72:30:00	0.0000	0.0000	0.0000	0.0000	0.000795	0.000795
73:00:00	0.0000	0.0000	0.0000	0.0000	0.000785	0.000785
73:30:00	0.0000	0.0000	0.0000	0.0000	0.000775	0.000775
74:00:00	0.0000	0.0000	0.0000	0.0000	0.000765	0.000765
74:30:00	0.0000	0.0000	0.0000	0.0000	0.000755	0.000755
75:00:00	0.0000	0.0000	0.0000	0.0000	0.000746	0.000746
75:30:00	0.0000	0.0000	0.0000	0.0000	0.000736	0.000736
76:00:00	0.0000	0.0000	0.0000	0.0000	0.000727	0.000727
76:30:00	0.0000	0.0000	0.0000	0.0000	0.000717	0.000717
77:00:00	0.0000	0.0000	0.0000	0.0000	0.000708	0.000708
77:30:00	0.0000	0.0000	0.0000	0.0000	0.000699	0.000699
78:00:00	0.0000	0.0000	0.0000	0.0000	0.00069	0.00069
78:30:00	0.0000	0.0000	0.0000	0.0000	0.000682	0.000682
79:00:00	0.0000	0.0000	0.0000	0.0000	0.000673	0.000673
79:30:00	0.0000	0.0000	0.0000	0.0000	0.000664	0.000664

## Appendix

### Catchment descriptors

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No

# UK Design Flood Estimation

Generated on 05 May 2021 08:51:45 by User  
Printed from the ReFH2 Flood Modelling software package, version 3.1.7439.12207

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

### Site details

Checksum: C338-6498

Site name: FEH\_Point\_Descriptors\_588788\_217031

Easting: 588788

Northing: 217031

Country: England, Wales or Northern Ireland

Catchment Area (km<sup>2</sup>): 0.02

Using plot scale calculations: Yes

Model: ReFH2.3

Site description: None

## Model run: 100 year 1.4 CC

### Summary of results

Rainfall - FEH 2013 model (mm):	86.11	Total runoff (ML):	0.49
Total Rainfall (mm):	55.15	Total flow (ML):	1.18
Peak Rainfall (mm):	12.53	Peak flow (m <sup>3</sup> /s):	0.02

### Parameters

*Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.*

*\* Indicates that the user locked the duration/timestep*

#### Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	05:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.64	No
ARF (Areal reduction factor)	0.99	No
Seasonality	Winter	No
Climate change factor	1.40	Yes

#### Loss model parameters

Name	Value	User-defined?
Cini (mm)	119.46	No
Cmax (mm)	357.53	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

#### Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.25 [1.34]	Yes
Up	0.65	No
Uk	0.8	No

#### Baseflow model parameters

Name	Value	User-defined?
BFO (m <sup>3</sup> /s)	0	No
BL (hr)	38.89 [32.37]	Yes
BR	1.43	No

#### Urbanisation parameters

Name	Value	User-defined?
Urban area (km <sup>2</sup> )	0	No
Urbext 2000	0	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km <sup>2</sup> )	0.00	Yes
Sewer capacity (m <sup>3</sup> /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
00:00:00	1.2109	0.0000	0.4067	0.0000	0.000658	0.000658
00:30:00	2.0287	0.0000	0.6905	0.0000	0.00065	0.000687
01:00:00	3.3812	0.0000	1.1764	0.0002	0.000643	0.000818
01:30:00	5.5908	0.0000	2.0153	0.0005	0.000641	0.00112
02:00:00	9.0985	0.0000	3.4666	0.0011	0.000647	0.00173
02:30:00	12.5336	0.0000	5.1545	0.0022	0.000669	0.00286
03:00:00	9.0985	0.0000	4.0171	0.0041	0.000718	0.0048
03:30:00	5.5908	0.0000	2.5832	0.0068	0.000808	0.00761
04:00:00	3.3812	0.0000	1.6047	0.0100	0.000951	0.011
04:30:00	2.0287	0.0000	0.9782	0.0134	0.00115	0.0145
05:00:00	1.2109	0.0000	0.5894	0.0167	0.00141	0.0181
05:30:00	0.0000	0.0000	0.0000	0.0195	0.00173	0.0212
06:00:00	0.0000	0.0000	0.0000	0.0213	0.00208	0.0234
06:30:00	0.0000	0.0000	0.0000	0.0218	0.00244	0.0242
07:00:00	0.0000	0.0000	0.0000	0.0211	0.0028	0.0239
07:30:00	0.0000	0.0000	0.0000	0.0196	0.00314	0.0228
08:00:00	0.0000	0.0000	0.0000	0.0178	0.00344	0.0212
08:30:00	0.0000	0.0000	0.0000	0.0157	0.0037	0.0194
09:00:00	0.0000	0.0000	0.0000	0.0137	0.00393	0.0176
09:30:00	0.0000	0.0000	0.0000	0.0119	0.00411	0.016
10:00:00	0.0000	0.0000	0.0000	0.0103	0.00426	0.0146
10:30:00	0.0000	0.0000	0.0000	0.0090	0.00438	0.0134
11:00:00	0.0000	0.0000	0.0000	0.0078	0.00448	0.0122
11:30:00	0.0000	0.0000	0.0000	0.0066	0.00455	0.0112
12:00:00	0.0000	0.0000	0.0000	0.0055	0.00461	0.0101
12:30:00	0.0000	0.0000	0.0000	0.0045	0.00464	0.0091
13:00:00	0.0000	0.0000	0.0000	0.0034	0.00465	0.00809
13:30:00	0.0000	0.0000	0.0000	0.0025	0.00465	0.00713
14:00:00	0.0000	0.0000	0.0000	0.0016	0.00462	0.00626
14:30:00	0.0000	0.0000	0.0000	0.0010	0.00459	0.00554
15:00:00	0.0000	0.0000	0.0000	0.0005	0.00454	0.00505
15:30:00	0.0000	0.0000	0.0000	0.0002	0.00449	0.00474
16:00:00	0.0000	0.0000	0.0000	0.0001	0.00444	0.00454
16:30:00	0.0000	0.0000	0.0000	0.0000	0.00438	0.00441
17:00:00	0.0000	0.0000	0.0000	0.0000	0.00433	0.00433

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
17:30:00	0.0000	0.0000	0.0000	0.0000	0.00427	0.00427
18:00:00	0.0000	0.0000	0.0000	0.0000	0.00422	0.00422
18:30:00	0.0000	0.0000	0.0000	0.0000	0.00416	0.00416
19:00:00	0.0000	0.0000	0.0000	0.0000	0.00411	0.00411
19:30:00	0.0000	0.0000	0.0000	0.0000	0.00406	0.00406
20:00:00	0.0000	0.0000	0.0000	0.0000	0.00401	0.00401
20:30:00	0.0000	0.0000	0.0000	0.0000	0.00395	0.00395
21:00:00	0.0000	0.0000	0.0000	0.0000	0.0039	0.0039
21:30:00	0.0000	0.0000	0.0000	0.0000	0.00385	0.00385
22:00:00	0.0000	0.0000	0.0000	0.0000	0.0038	0.0038
22:30:00	0.0000	0.0000	0.0000	0.0000	0.00376	0.00376
23:00:00	0.0000	0.0000	0.0000	0.0000	0.00371	0.00371
23:30:00	0.0000	0.0000	0.0000	0.0000	0.00366	0.00366
24:00:00	0.0000	0.0000	0.0000	0.0000	0.00361	0.00361
24:30:00	0.0000	0.0000	0.0000	0.0000	0.00357	0.00357
25:00:00	0.0000	0.0000	0.0000	0.0000	0.00352	0.00352
25:30:00	0.0000	0.0000	0.0000	0.0000	0.00348	0.00348
26:00:00	0.0000	0.0000	0.0000	0.0000	0.00343	0.00343
26:30:00	0.0000	0.0000	0.0000	0.0000	0.00339	0.00339
27:00:00	0.0000	0.0000	0.0000	0.0000	0.00335	0.00335
27:30:00	0.0000	0.0000	0.0000	0.0000	0.0033	0.0033
28:00:00	0.0000	0.0000	0.0000	0.0000	0.00326	0.00326
28:30:00	0.0000	0.0000	0.0000	0.0000	0.00322	0.00322
29:00:00	0.0000	0.0000	0.0000	0.0000	0.00318	0.00318
29:30:00	0.0000	0.0000	0.0000	0.0000	0.00314	0.00314
30:00:00	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031
30:30:00	0.0000	0.0000	0.0000	0.0000	0.00306	0.00306
31:00:00	0.0000	0.0000	0.0000	0.0000	0.00302	0.00302
31:30:00	0.0000	0.0000	0.0000	0.0000	0.00298	0.00298
32:00:00	0.0000	0.0000	0.0000	0.0000	0.00294	0.00294
32:30:00	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029
33:00:00	0.0000	0.0000	0.0000	0.0000	0.00287	0.00287
33:30:00	0.0000	0.0000	0.0000	0.0000	0.00283	0.00283
34:00:00	0.0000	0.0000	0.0000	0.0000	0.00279	0.00279
34:30:00	0.0000	0.0000	0.0000	0.0000	0.00276	0.00276
35:00:00	0.0000	0.0000	0.0000	0.0000	0.00272	0.00272

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
35:30:00	0.0000	0.0000	0.0000	0.0000	0.00269	0.00269
36:00:00	0.0000	0.0000	0.0000	0.0000	0.00265	0.00265
36:30:00	0.0000	0.0000	0.0000	0.0000	0.00262	0.00262
37:00:00	0.0000	0.0000	0.0000	0.0000	0.00259	0.00259
37:30:00	0.0000	0.0000	0.0000	0.0000	0.00255	0.00255
38:00:00	0.0000	0.0000	0.0000	0.0000	0.00252	0.00252
38:30:00	0.0000	0.0000	0.0000	0.0000	0.00249	0.00249
39:00:00	0.0000	0.0000	0.0000	0.0000	0.00246	0.00246
39:30:00	0.0000	0.0000	0.0000	0.0000	0.00243	0.00243
40:00:00	0.0000	0.0000	0.0000	0.0000	0.00239	0.00239
40:30:00	0.0000	0.0000	0.0000	0.0000	0.00236	0.00236
41:00:00	0.0000	0.0000	0.0000	0.0000	0.00233	0.00233
41:30:00	0.0000	0.0000	0.0000	0.0000	0.0023	0.0023
42:00:00	0.0000	0.0000	0.0000	0.0000	0.00227	0.00227
42:30:00	0.0000	0.0000	0.0000	0.0000	0.00225	0.00225
43:00:00	0.0000	0.0000	0.0000	0.0000	0.00222	0.00222
43:30:00	0.0000	0.0000	0.0000	0.0000	0.00219	0.00219
44:00:00	0.0000	0.0000	0.0000	0.0000	0.00216	0.00216
44:30:00	0.0000	0.0000	0.0000	0.0000	0.00213	0.00213
45:00:00	0.0000	0.0000	0.0000	0.0000	0.00211	0.00211
45:30:00	0.0000	0.0000	0.0000	0.0000	0.00208	0.00208
46:00:00	0.0000	0.0000	0.0000	0.0000	0.00205	0.00205
46:30:00	0.0000	0.0000	0.0000	0.0000	0.00203	0.00203
47:00:00	0.0000	0.0000	0.0000	0.0000	0.002	0.002
47:30:00	0.0000	0.0000	0.0000	0.0000	0.00197	0.00197
48:00:00	0.0000	0.0000	0.0000	0.0000	0.00195	0.00195
48:30:00	0.0000	0.0000	0.0000	0.0000	0.00192	0.00192
49:00:00	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
49:30:00	0.0000	0.0000	0.0000	0.0000	0.00188	0.00188
50:00:00	0.0000	0.0000	0.0000	0.0000	0.00185	0.00185
50:30:00	0.0000	0.0000	0.0000	0.0000	0.00183	0.00183
51:00:00	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018
51:30:00	0.0000	0.0000	0.0000	0.0000	0.00178	0.00178
52:00:00	0.0000	0.0000	0.0000	0.0000	0.00176	0.00176
52:30:00	0.0000	0.0000	0.0000	0.0000	0.00174	0.00174
53:00:00	0.0000	0.0000	0.0000	0.0000	0.00171	0.00171



Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
53:30:00	0.0000	0.0000	0.0000	0.0000	0.00169	0.00169
54:00:00	0.0000	0.0000	0.0000	0.0000	0.00167	0.00167
54:30:00	0.0000	0.0000	0.0000	0.0000	0.00165	0.00165
55:00:00	0.0000	0.0000	0.0000	0.0000	0.00163	0.00163
55:30:00	0.0000	0.0000	0.0000	0.0000	0.00161	0.00161
56:00:00	0.0000	0.0000	0.0000	0.0000	0.00159	0.00159
56:30:00	0.0000	0.0000	0.0000	0.0000	0.00157	0.00157
57:00:00	0.0000	0.0000	0.0000	0.0000	0.00155	0.00155
57:30:00	0.0000	0.0000	0.0000	0.0000	0.00153	0.00153
58:00:00	0.0000	0.0000	0.0000	0.0000	0.00151	0.00151
58:30:00	0.0000	0.0000	0.0000	0.0000	0.00149	0.00149
59:00:00	0.0000	0.0000	0.0000	0.0000	0.00147	0.00147
59:30:00	0.0000	0.0000	0.0000	0.0000	0.00145	0.00145
60:00:00	0.0000	0.0000	0.0000	0.0000	0.00143	0.00143
60:30:00	0.0000	0.0000	0.0000	0.0000	0.00141	0.00141
61:00:00	0.0000	0.0000	0.0000	0.0000	0.0014	0.0014
61:30:00	0.0000	0.0000	0.0000	0.0000	0.00138	0.00138
62:00:00	0.0000	0.0000	0.0000	0.0000	0.00136	0.00136
62:30:00	0.0000	0.0000	0.0000	0.0000	0.00134	0.00134
63:00:00	0.0000	0.0000	0.0000	0.0000	0.00133	0.00133
63:30:00	0.0000	0.0000	0.0000	0.0000	0.00131	0.00131
64:00:00	0.0000	0.0000	0.0000	0.0000	0.00129	0.00129
64:30:00	0.0000	0.0000	0.0000	0.0000	0.00128	0.00128
65:00:00	0.0000	0.0000	0.0000	0.0000	0.00126	0.00126
65:30:00	0.0000	0.0000	0.0000	0.0000	0.00124	0.00124
66:00:00	0.0000	0.0000	0.0000	0.0000	0.00123	0.00123
66:30:00	0.0000	0.0000	0.0000	0.0000	0.00121	0.00121
67:00:00	0.0000	0.0000	0.0000	0.0000	0.0012	0.0012
67:30:00	0.0000	0.0000	0.0000	0.0000	0.00118	0.00118
68:00:00	0.0000	0.0000	0.0000	0.0000	0.00117	0.00117
68:30:00	0.0000	0.0000	0.0000	0.0000	0.00115	0.00115
69:00:00	0.0000	0.0000	0.0000	0.0000	0.00114	0.00114
69:30:00	0.0000	0.0000	0.0000	0.0000	0.00112	0.00112
70:00:00	0.0000	0.0000	0.0000	0.0000	0.00111	0.00111
70:30:00	0.0000	0.0000	0.0000	0.0000	0.00109	0.00109
71:00:00	0.0000	0.0000	0.0000	0.0000	0.00108	0.00108

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
71:30:00	0.0000	0.0000	0.0000	0.0000	0.00107	0.00107
72:00:00	0.0000	0.0000	0.0000	0.0000	0.00105	0.00105
72:30:00	0.0000	0.0000	0.0000	0.0000	0.00104	0.00104
73:00:00	0.0000	0.0000	0.0000	0.0000	0.00102	0.00102
73:30:00	0.0000	0.0000	0.0000	0.0000	0.00101	0.00101
74:00:00	0.0000	0.0000	0.0000	0.0000	0.000999	0.000999
74:30:00	0.0000	0.0000	0.0000	0.0000	0.000986	0.000986
75:00:00	0.0000	0.0000	0.0000	0.0000	0.000974	0.000974
75:30:00	0.0000	0.0000	0.0000	0.0000	0.000961	0.000961
76:00:00	0.0000	0.0000	0.0000	0.0000	0.000949	0.000949
76:30:00	0.0000	0.0000	0.0000	0.0000	0.000937	0.000937
77:00:00	0.0000	0.0000	0.0000	0.0000	0.000925	0.000925
77:30:00	0.0000	0.0000	0.0000	0.0000	0.000913	0.000913
78:00:00	0.0000	0.0000	0.0000	0.0000	0.000901	0.000901
78:30:00	0.0000	0.0000	0.0000	0.0000	0.00089	0.00089
79:00:00	0.0000	0.0000	0.0000	0.0000	0.000878	0.000878
79:30:00	0.0000	0.0000	0.0000	0.0000	0.000867	0.000867
80:00:00	0.0000	0.0000	0.0000	0.0000	0.000856	0.000856
80:30:00	0.0000	0.0000	0.0000	0.0000	0.000845	0.000845
81:00:00	0.0000	0.0000	0.0000	0.0000	0.000834	0.000834
81:30:00	0.0000	0.0000	0.0000	0.0000	0.000824	0.000824
82:00:00	0.0000	0.0000	0.0000	0.0000	0.000813	0.000813
82:30:00	0.0000	0.0000	0.0000	0.0000	0.000803	0.000803
83:00:00	0.0000	0.0000	0.0000	0.0000	0.000793	0.000793
83:30:00	0.0000	0.0000	0.0000	0.0000	0.000782	0.000782
84:00:00	0.0000	0.0000	0.0000	0.0000	0.000772	0.000772
84:30:00	0.0000	0.0000	0.0000	0.0000	0.000763	0.000763
85:00:00	0.0000	0.0000	0.0000	0.0000	0.000753	0.000753
85:30:00	0.0000	0.0000	0.0000	0.0000	0.000743	0.000743
86:00:00	0.0000	0.0000	0.0000	0.0000	0.000734	0.000734
86:30:00	0.0000	0.0000	0.0000	0.0000	0.000724	0.000724
87:00:00	0.0000	0.0000	0.0000	0.0000	0.000715	0.000715
87:30:00	0.0000	0.0000	0.0000	0.0000	0.000706	0.000706
88:00:00	0.0000	0.0000	0.0000	0.0000	0.000697	0.000697
88:30:00	0.0000	0.0000	0.0000	0.0000	0.000688	0.000688
89:00:00	0.0000	0.0000	0.0000	0.0000	0.000679	0.000679

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m <sup>3</sup> /s)	Baseflow (m <sup>3</sup> /s)	Total Flow (m <sup>3</sup> /s)
89:30:00	0.0000	0.0000	0.0000	0.0000	0.000671	0.000671
90:00:00	0.0000	0.0000	0.0000	0.0000	0.000662	0.000662

## Appendix

### Catchment descriptors

Name	Value	User-defined value used?
BFIHOST	0.38	No
BFIHOST19	0.42	No
PROPWET (mm)	0.23	No
SAAR (mm)	569	No