B.8 DA08 Folkestone, Sugar Loaf Hill and Dover Hill

Folkestone and Hythe Stage 1 SWMP : Summary and Actions
Drainage Area 08

Area overview

Area (km^2)	2.4

Drainage assets/systems	Type	Known Issues/problems	Responsibility
Pent Stream	Main River	History of manholes along the Pent Stream culvert surcharging around industrial estate. Also known flooding/blockage issues around the Pavilion Road/Bradstone Road area.	Environment Agency
Sugar Loaf Hill drains	Ordinary Watercourse	No known issues or problems	Kent County Council
Sewer network	Sewers (combined, foul and surface water)	Known problems of surcharging at numerous locations across the drainage area.	Southern Water

Flood risk

Receptor	Source	Pathway	Historic Evidence
A: Three Acres Site	Heavy rainfall resulting in overloaded sewers and surcharging of Pent Stream Culvert	Southern Water Sewers Fluvial flow paths come from the north east and spread out around the Three Acres Site and contine south.	Pent Stream culvert known to have surcharged in this area historically, but not since the FAS was formed upstream to the north west of Sugar Loaf Hill.
B: Downs Road (mid)	Heavy rainfall resulting in overloaded sewers and surcharging of Pent Stream Culvert	Southern Water sewers Flows from the Pent Stream and from surface water runoff follow the route in between the Downs Road and Park Farm road affecting properties on Park Farm Road Downs Road, Dolphins Road and Canterbury Road, flows route south into the dip in ground around the southern tip of Downs Road at the junction with Dolphins Road.	Southern Water records support incidents of flooding. SDC SFRA highlights the historical fluvial flooding. Pluvial flooding is indicated by the FMfSW 1 in 200yr (deep)
C: Downs Road (southern)	Heavy rainfall resulting in overloaded sewers and surface water runoff	Southern Water Sewers Surface water runoff along Downs / Dolphins Road	Highlighted as an area where the highway regularly floods, and where properties are sometimes affected. There is also a cluster of historic records of sewer flooding in the area.
D: Pavilion Road/Foorde Road/Bradstone Road	Heavy rainfall resulting in overloaded sewers and surcharging and overtopping of main Pent Stream	Southern Water Sewers Fluvial and pluvial overland flow routes continue south following Pavillion Road, Bradstone Road and Foord Road under the railway.	The area is known to have been extensively flooded in the past, notably the 1996 event. The event was a combination of surface water and fluvial flooding. There are also a cluster of sewer flooding records in the area around the Foorde Road Black Bull Road Junction.
E: Various (sewer)	Heavy rainfall resulting in overloaded sewers	Southern Water Sewers	Southern Water supplied historic records.
F: Various (surface water)	Heavy rainfall resulting in surface water runoff	Aside from the main flow path along the course of the Pent Stream, there are numerous areas of localised ponding across the drainage area	No historic records in these locations, but shown as deep flooding in FMfSW

Summary of Location-specific Actions

Area of benefit	Location of action	Action	Action owner	Priority
Downs Road	Downs Road (mid)	Complete study to investigate source of flooding on Downs Road and undertake options testing, options to consider include the following: • Increase kerb heights to keep the surface water on the roads • Store floodwater in the allotment gardens • Permeable roads • Consider installation of further gullies along Downs Road (although note that Highways have already done some works) • Potential for diversion to the Pent Stream	KCC	Quick Win
Downs Road	Downs Road / Dolphins Road	Remove allotment drainage from main sewer network (SW explained that a 150mm pipe constriction had been removed and replaced with a 600mm pipe and it was also highlighted that the allotments have been modified so that they drain directly into the sewer. Ownership of allotment needs confirming with Folkestone Town Council).	KCC & SDC	Quick Win
Warren Road and Burrow Road	Warren Road and Burrow Road	Commission modelling study to better understand risk within Warren Street and Burrow Street	KCC	Long term

North

Legend

- Main River (EA) - open channel
- Main River (EA) - culverted
- Ordinary Watercourse - open channel
- Ordinary Watercourse - culverted
- Surface Water Sewer (Southern Water)
- Combined Sewer (Southern Water)
- Foul Sewer (Southern Water)

Receptors

A	Three Acres Site
B	Downs Road (mid)
C	Downs Road (southern)
D	Pavilion Road/Foorde Road/Bradstone Road
E	Various (sewer)*
F	Various (surface water)*

* Illustrations not located on the map, as there are several receptor areas across the drainage area

Client: Kent County Council

Partners: Southern Water, Environment Agency

Consultant: JBA consulting

Folkestone Hythe & Romney Marsh Shepway District Council www.shepway.gov.uk

Scale 1:10,000

Folkestone and Hythe SWMP Stage 1

Watercourses and Drainage Systems
DA08

North

A

B

C

D

Legend

Main River (EA) - open channel

Main River (EA) - culverted

Ordinary Watercourse - open channel

Ordinary Watercourse - culverted

Receptors

A Three Acres Site

B Downs Road (mid)

C Downs Road (southern)

D Pavilion Road/Foorde Road/Bradstone Road

E Various (sewer)*

F Various (surface water)*

* Illustrations not located on the map, as there are several receptor areas across the drainage area

Historic flooding (other RMAs)

Other/Unknown

Fluvial Flooding

Groundwater

Combined

Surface Water

Sewer

Sewer flooding incidents (Southern Water)*

Number of flood occurences per postcode area

1 - 5

6 - 15

>16

* Polygons only represent the postcode area and not the flood extent

Client:

Kent County Council

Partners:

Southern Water

Environment Agency

Folkestone Hythe & Romney Marsh Shepway District Council

Consultant:

JBA consulting

Scale 1:10,000

Folkestone and Hythe SWMP Stage 1

Historic Flooding

DA08

North

Legend

- Main River (EA) - open channel
- Main River (EA) - culverted
- Ordinary Watercourse - open channel
- Ordinary Watercourse - culverted
- Education (Nursery, Primary School, Higher Education)
- Hospital
- Emergency Services (Ambulance, Fire and Police Stations)
- Nursing and Retirement Homes
- Water Utilities
- Electricity and Gas / Communications
- Military Barracks

Cleared gullies

- (based on data received from SDC)

Receptors

- **A** Three Acres Site
- **B** Downs Road (mid)
- **C** Downs Road (southern)
- **D** Pavilion Road/Foorde Road/Bradstone Road
- **E** Various (sewer)*
- **F** Various (surface water)*

* Illustrations not located on the map, as there are several receptor areas across the drainage area

FMfSW 1 in 30yr AEP

- > 0.3m deep

FMfSW 1 in 200yr AEP

- > 0.3m deep

Client: Kent County Council

Partners: Southern Water; Environment Agency

Consultant: JBA consulting

Folkestone Hythe & Romney Marsh Shepway District Council www.shepway.gov.uk

Scale 1:10,000

Folkestone and Hythe SWMP Stage 1

Surface Water and Critical Infrastructure

DA08