

5 July

Report of	Assistant Director Environment	Author	Rory Doyle
Title	Haven Road Flooding		☎ 507855
Wards affected	Old Heath and The Hythe		

1. Executive Summary

- 1.1 There is a long history of flooding affecting Haven Road in Colchester in the area where it is crossed by Distillery Lane. The flooding is generally associated with high tides, and is exacerbated by heavy rain.
- 1.2 A multi-agency Hythe Task Force was established by the MP in 2021 to explore issues of local concern. This included working with stakeholders to explore options to resolve or mitigate the risk and impact of flooding to Haven Road.
- 1.3 This report provides Scrutiny Panel with some background information, a summary of work undertaken, and an outline of the roles and responsibilities of the key stakeholders involved in relation to the flooding at Haven Road.

2. Action Required

- 2.1 Report is for information.

3. Reason for Scrutiny

- 3.1 The Panel has requested information on the work of the Hythe Task Force

4. Background Information

- 4.1 The surface water drainage in the Haven Road area is complex, with some elements of the original Victorian systems remaining, however these have been extended and altered over the years. Much of the area to the west of the Hythe area drains directly or indirectly to Distillery Pond. Distillery Pond also accepts drainage from the Bourne Stream system and other ponds to the west in addition to Anglian Water storm sewers and a storm water connection from the Albany Gardens housing development.
- 4.2 Distillery Pond drains to Haven Road, where it connects with another storm drain. Road gullies in Haven Road are also connected to the system and everything discharges to the River Colne through an outfall in the river wall.
- 4.3 In addition to the surface water drainage systems, there is a combined trunk sewer running along Haven Road. This sewer drains to the main Anglian Water sewage treatment works further along Haven Road.
- 4.4 The ground level at the junction of Haven Road and Distillery Lane is lower than the quay level and is lower than spring high tide levels. The whole system is tide locked at high water, with water routinely spilling onto the highway from the road gullies during high tides. The flooding is more severe when high tide combines with wet weather.
- 4.5 Summary of Issues:
 - The road is lower than the high tide level at the outfall meaning flooding is always likely to occur in this location.
 - The frequency of flooding depends on the volume of inflowing water from the Bourne stream system via Distillery Pond, the duration of tide locking where river levels are above the level of the road, and the limited capacity of storage within the drainage system below the road level of Haven Road inland from the tide flap valve
 - There is a redundant tide flap valve previously maintained by Anglian Water just before the outfall in the river wall.
 - A new flap valve was installed by Anglian Water within an inspection chamber further back from the river wall to prevent river water entering the system at high tide.
 - There have been issues with the new tidal flap valve becoming blocked with debris and silt. When it is not operating effectively this has caused river water to enter the drainage system at high tide. This has the effect of further reducing capacity within the drainage system.
 - Whilst this will exacerbate flooding in the locality it is not the root cause of the issue and the road will flood even if the flap valve is operating correctly. As soon as the tide level reaches the level of the junction, the flow of water from Distillery Pond will no longer escape and will fill the chambers of the drainage system discharging onto the road.
 - Heavy rainfall in the locality and the topography of the land further compounds the problem and will affect the frequency and severity of flooding.
 - The hydrostatic pressure of the incoming tidal water may be influencing the severity of flooding affecting the capacity of the surface water drainage system, especially if the sewer network is not sealed as it should be.

4.6 Managing flooding and flood risks: who is responsible:

- **Defra** has overall national responsibility for policy on flood risk management and provides funding for flood risk management authorities through grants to the Environment Agency and local authorities.
- The **Environment Agency** (EA) is responsible for taking a strategic overview of the management of all sources of flooding. This includes providing support and advice on a local level. The Agency also has operational responsibility for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea.
- **Essex County Council** as the **Lead Local Flood Authority (LLFA)** ECC is responsible for developing, maintaining, and applying a strategy for local flood risk management in the County and for maintaining a register of flood risk assets. They also have lead responsibility for managing the risk of flooding from surface water, groundwater, and ordinary watercourses. As the Highway Authority ECC is responsible for providing and managing highway drainage and must ensure that road projects do not increase flood risk.
- **Colchester Borough Council** is a key partner in planning local flood risk management and can carry out flood risk management works on minor watercourses, working with LLFA and others to do so.
- As the Water Authority **Anglian Water** are responsible for managing the risks of flooding from water and foul or combined sewer systems providing drainage from buildings and yards.

4.8 As the LLFA and Highway Authority ECC is responsible for the surface water drainage system and leading the work to establish a solution at Haven Road. However all authorities mentioned above have a duty to co-operate with each other and to share data and work in partnership as set out in the Flood and Water Management Act 2010.

4.9 A summary of work undertaken by the Task Force in relation to this matter is set out below:

- The Task Force has received reports from the EA including data and modelling of tides and tidal surges and the impact on flooding. The EA have also conducted analysis of flood water samples for salinity when testing the effectiveness of the tidal flap valve.
- Reports have been received on previous maintenance, investment and works undertaken to Distillery Pond and the surface water drainage system led by ECC
- Members of the Taskforce have coordinated a controlled test to understand the impact of restricting flow from Distillery pond during a high tide scenario.
- Servicing and maintenance of the existing tidal flap valve has been undertaken with agreement to jointly fund maintenance moving forward led by Anglian Water.
- Commissioning of a drone survey in partnership with the University to survey the wider drainage catchment area.
- Agreed need for highways signage relating to flood water.

- Liaison with the Fire Authority to test temporary/emergency pumping solutions
- Gather costings and exploration of eligibility criteria and available funding mechanisms to secure a high-volume pump solution to mitigate risk and impact of flooding led by ECC with support from the EA.

5. Taskforce work programme

5.1 Current work of partners and proposed next steps are set out below:

- Receive report and consider recommendations following area drone survey undertaken on 21st June.
- Undertake further multi agency site surveys as required.
- ECC to install Highways signage
- Pending installation of alternative valve options continue with inspection and maintenance of current tidal flap valve joint funded by partners.
- ECC with support from partners to complete funding application to the EA for a pump solution and installation of duck bill flap.