

## LOOKING BACK AT FLOODING

Located at the seaward end of a short steep sided fluvial valley, the lower areas of Outer Hope have probably always suffered from flooding. For local farmers, flooding in the valley was just a minor irritation and they welcomed the lush spring pasture it encouraged, ideal for dairy cattle put out to graze as soon as the ground was firm enough, typical meadow fields.

Early in the last century, the stream running through Outer Hope was diverted to a manmade leat, slightly higher than the valley bottom. This was done to supply water for watercress beds, water for cleaning boats, nets and fish and to create important out of season work for local fisherman. It's conceivable the leat was never originally constructed as an alternative course to the natural stream, but simply a method to utilise and manage a fresh water resource.

As local fishing declined, maintenance of the manmade leat lapsed and development encroached on the sides of the leat through the village. There is now little evidence of the course of the original stream running through village - until we have a flooding incident. Development elsewhere in the village introduced additional surface water runoff from tarmac roads, drives, gutters and soak ways. All the highway drains feed into the leat. The fields between Outer Hope and Galmpton constitute significant drainage areas that play an important part in minimizing the flood risk.



Meadow View Terrace looking upstream from New Road, Outer Hope. This photograph was taken several hours after the height of the flooding and while flood water was draining away. At the peak of the incident, flood water lapped at the back doors of the Terrace from the deep lake of flood water pictured about. The manmade leat is on the opposite side of the terrace about 6 feet higher. Flood water is clearly visible running down the valley following the old course of the diverted stream.

*Photograph was taken by a local resident and used in the Atkins report, 2013.*

Sadly, due to neglect and when following heavy rain, the leat is no longer adequate for these increased pressures development has introduced. A number of properties have flooded, one so seriously undermined it had to be demolished, not once but twice. The site, Bolt View, Lower Bye Pass Road, remains a waterlogged hole in the ground and has done so for 18 years.

While there is minor flooding of meadow fields higher up the valley, all the serious flooding occurs from the point the manmade leat deviates from the original water course. During heavy or prolonged rain, a considerable volume of water, runs down the steep sided valley into the stream/leat and the old stream channel. There is also significant flood spillage from the overwhelmed leat into the old stream channel from numerous leat choke points in the village. A large and threatening flood lake accumulates above New Road and in front of Meadow View Terrace. The area covering this flood channel with 23 properties, is now designated a high flood risk zone by the Environment Agency.

In 2002, a camera survey of the village underground sections of the leat was commissioned by a solicitor. He was acting for a local resident involved in litigation following serious flood damage to a property, Bolt View referred to above. There was an out of court settlement and consequently, no public details of the report.

In 2012, following several serious incidents, South Hams District Council commissioned Atkins, hydrology consultants, to complete a flood risk study and prepare a report. Atkins submitted their report to SHDC in August 2013 and identified three potential action points.

1. The construction of storage pond/s upstream from the village. Essentially, areas of meadow field that are encouraged to flood in preference to the village. At the time the cost of this work was estimated at £184,991.69.
2. Heighten the banks of the leat at strategic points in the village and eliminate choke points. The cost of this work was estimated at £330,398.85.
3. Heighten several 'low spots', for example Sea View Gardens and St. Johns Lodge area. The cost of this work was estimated at £83,599.71.

The Atkins report recommended action points 1 and 3, relegating point 2 on cost grounds. Although local residents were told there would be follow-up meetings and publication of the report, nothing materialized.

In 2014 and after making inquiries, local residents were told the improvement project would not be going ahead due to the cost, only one property had apparently flooded and insufficient properties remained under a flood threat.

Later in 2014 Jean Gordon, St Johns Lodge TQ7 3HG, was flooded out for four months while her property dried out and repaired. At well unto her nineties she doesn't deserve the worry and very sadly Jean passed away the following year.

Localized flooding continues but fortunately there have been no serious damaging incidents in recent years. We are assessed as a flood risk zone 3a, with a 1 in 100

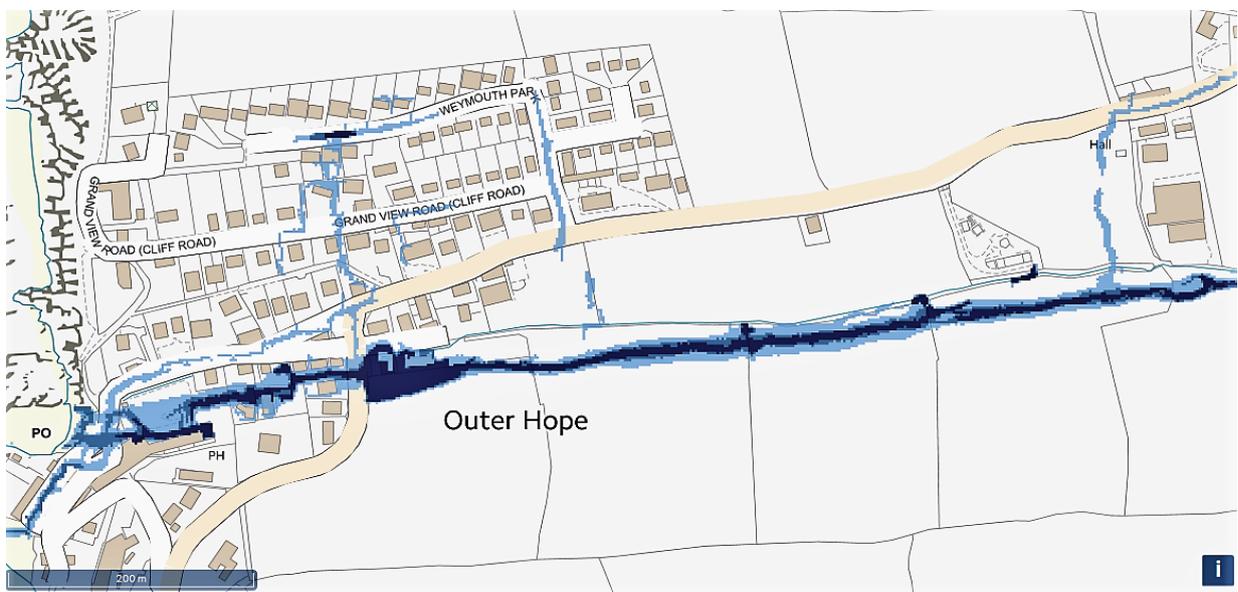
or greater annual probability of flooding and running out of time. Our bad flood years have been 1999, 2000, 2001, 2004, 2006, 2009, 2012, 2013, 2014 and 2016.

There are 23 properties in the flood plain, plus part of the Pub, The Hope & Anchor. Local hearsay reports 13 properties have experienced various degrees of flooding over the years.



This is a typical example of minor flooding caused by rain water reverting to the course of the old stream when the leat becomes overwhelmed. This can occur quickly and disappears in a few hours without causing significant damage. Walls, fencing and garden landscaping haven't helped and now the course of the old stream has almost disappeared – that's until it floods.

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*The Environment Agency Outer Hope flood areas.*