Wallington Flood Defence Improvements

WVCA AGM Progress Update June 2015

Background

Wallington Village is at risk of flooding from the river, the sea and surface water. In 2006 the Environment Agency looked at options to reduce the risk of river flooding. However, we were unable to identify an option that could be developed for a reasonable cost.

In 2012 the government introduced the Partnership Funding approach. This links the amount of funding available for a project to the benefits it can deliver. It may not cover the full cost of the project, but it allows funding to be 'topped up' through alternative sources e.g. working in partnership with other organisations, financial contributions, sponsorship, allowing free access over private land or offering the use of land for construction site offices.

We are now working with the local community and the Eastern Solent Coastal Partnership in an attempt to develop an approach for managing flooding risk in Wallington from all sources.

Progress to date

We reviewed the flood history of the area and studied existing reports to identify all potential ways of improving the level of protection in Wallington. These are some of the options we considered:

- Upstream water management.
- A flood storage pond at the Water Meadow in North Wallington.
- Improve the capacity of road drainage at Drift Rd/White Horse Pub and Wallington Shore Rd.
- Connect the surface water drains on Broadcut to the Broadcut pump.
- Sustainable Urban Drainage System (SUDS) storage for surface water in the industrial estate.
- Targeted dredging of the channel to improve water movement in key locations e.g. Broadcut Shoal.
- Targeted improvements to flood walls e.g. strengthening/raising/constructing new ones.
- Increase the capacity of water movement at key bottleneck locations.
- A road hump along Wallington Shore Rd to tie in with an extension to the existing flood bund.
- Replace/install non return flaps on drains in key locations e.g. along Wallington Shore Rd.
- Dredge the Millpond to provide a flood reservoir.
- A new structure at the Delme Roundabout culvert to regulate flood tides.

We used a computer model to check how well each option would reduce flood risk. Unfortunately, our modelling revealed that many of the options would not provide a significant reduction in flood risk and the list has been narrowed down to the following 3 options:

1. **Make the most of the existing river walls** – The River Wallington has a series of walls along its banks and a number of pipes running into the river. The aim of this option is to maximise the protection from the walls by repairing, strengthening or building them up to a consistent level. Fitting non-return flaps to the pipes will ensure river water does not flow back up the pipes and cause flooding
2. **Property level measures** – Some properties in Wallington have been fitted with protective devices to reduce the damage caused during flood events. Other properties might also benefit from these devices. There are many types of doors, barriers and gates designed to limit water getting into your property. Raising electric sockets and the use of water proof plaster can also help your home be more resilient to flooding.

3. **Change how the river catchment is managed** – Managing the river above Wallington (including how water enters the river) could slow the flow of water through parts of the catchment. This could change the way flood flows develop, reducing peak flood levels and spreading them more evenly across the tidal cycle.

Next steps

We will continue using the computer model to test and develop these 3 options. We will also look at the cost, benefits and risks of each option and what funding is available. Once we understand how each option will reduce flood risk and how much it costs, we can choose the preferred one. Once the preferred option has been chosen, we will identify the likely environmental risks, prepare outline designs and carry out further consultation with the local community and other interested parties. We will then prepare a business case for building the preferred option. This will be submitted for approval in winter 2015. If the Environment Agency budget holders approve the business case and we secure funding for the project, we hope to start work on site in 2016, but this is not guaranteed.

Ground investigation

To help us understand the cost and risks of each option, we need to look at the ground conditions along the river and beneath the river walls. During the course of the summer 2015 we will be installing 3 boreholes at different locations across the village between the Water Meadow in North Wallington and the flood bund along Wallington Shore Road. We will also be digging a series of small trenches along the riverward side of the river walls. We may require access through some gardens during this time. We will write to you in the next month with more details.