



Proposed works on the River Frome, Wareham - Nov 2013 with updates as of January 2015.

The Environment Agency is undertaking a number of works to the river banks of the Frome at Wareham and Arne as follows:

- 1. Urgent repairs to Turners Cove sluice:** Turners Cove sluice, a device for controlling the flow of water regulating the water levels around the Arne Moors, is currently failing. The structure consists of a culvert (made up of two pipes jointed together) with a flap valve and a head-wall (a small retaining wall placed at the outlet of the culvert). There has been significant wash out of embankment material around the sluice, which is thought to be associated with a break in the buried pipe joint. There is a large differential between water levels on the landward and the seaward side at high tide which results in high erosive pressure on the embankment material by any leakage. Previous repairs have been only successful in the short term, and a more substantial repair is now planned.

The Environment Agency is arranging for one of their framework contractors to undertake urgent repairs to the sluice to keep it serviceable until 2018/20. This will keep the environmentally designated freshwater habitat intact whilst the ***managed realignment scheme is planned and designed*** – see below. The sluice repair work is due to commence around January 2014. Only water-borne access will be permitted to the sluice because the land is highly environmentally designated.

Additionally, EA staff need to regularly access the sluice for inspection purposes, which is currently difficult due to the flooded ditch network and the high density of reeds growing on the embankment and berm. A number of small crossings will therefore be installed across the moor ditches to allow safe and direct access to these inspectors, but there will not be any public access.

Update: January 2015: We have done some repairs to the sluice at Turners Cove, but have not finished and we will be back in the springtime to complete the works.

- 2. Repairs to Left Bank of River Frome at Bestwall / Priory:** This bank is in poor condition due to a lack of historical maintenance – leading to the growth of scrub (trees) and the resultant water path through the embankment along the major roots. The crest of the embankment has also been eroded and is regularly over-topped at high tides.

The design and planning works will commence in April 2014. This project will have many complexities, e.g. the interaction with moorings users, supply of suitable material, disposal of waste, access to the embankment, a constrained width of land to operate on and the interaction with users of the public footpath. Works are currently envisaged to commence on site in Spring/Summer 2015.

Update: January 2015: These works have been delayed by the legal restrictions on working on land inhabited by water voles. Weather permitting; our intention is to commence tree clearance towards the end of January. There will also be a lot of

strimming of the reeds and vegetation to avoid reed-nesting birds taking roost and to discourage the return of the water voles during the works once they have been trapped and translocated. We are aiming to translocate them to a local site, and are applying for the necessary licence from Natural England. We hope to be starting the main earthworks as soon as the ground is suitably dry enough for machine access. There are 2 occurrences of very high tides in the next 2 months (22 + 23 Jan and 20 + 21 Feb) that may well cause local overtopping of the low portions of bank in this area.

- 3. Arne Moors Managed Realignment scheme:** Over the next 100 years approx 3,500 properties in Poole will become at risk of tidal flooding. If these properties are defended from flooding, the defences will cause loss of natural habitat due to coastal squeeze as sea levels rise. The loss of habitat must be offset by the creation of habitat elsewhere around Poole Harbour. The managed realignment scheme will involve the creation of a set-back embankment across the moors, and one or more tidal ingress points created in the existing tidal embankment. The banks are man-made and were originally erected to drain the land for agricultural, food production purposes. They do not play a role in defending any properties. Wareham and the Arne Moors play a key role in the wider picture of protecting Poole Harbour from sea level rise and tidal flooding in the future. By undertaking the realignment scheme at Arne Moors, 3500 properties will be protected in Poole and inter-tidal habitat will be created for wading birds. For every hectare of freshwater land given up to the sea for inter-tidal habitat at Arne, another hectare of freshwater land has to be found as compensatory habitat elsewhere.

The new tide bank will be lower in level and will be located further south towards Ridge. When tidal water comes into the new area of compensatory land, this bank will act as a defence structure to stop the sea-water going any further. The bank could provide new local public access with views across to Poole Harbour, a debate that needs to take place with local people in Ridge. The detailed design work for the scheme will take place over the next 5 years and will include assessing how many cut-through points need to be made into the bank, how often the tide is predicted to enter these breaches, and what type of species are expected to colonise the new habitat. Engineering works are anticipated to start in 2018 as it will take a number of years to get the appropriate approvals and there are a number of agricultural stewardship agreements that run until this date.

Update: January 2015: We are developing the scope for our consultants and starting our process of tendering for consultancy.

- 4. Update January 2015 - Redclyffe path works:** ***These were recently completed by a 'recovery programme' project. The funding came direct from central government for repairs to flood defence assets that had suffered damage during the winter storms and high tides of 2013/14. Hopefully everyone is happy with the repairs and the way the contract was managed to keep disturbance to the users of the path to a minimum.***
- 5. Stoborough Local Flood Risk**
The LiCCo project funded the acquisition of a number of Flood Stop barriers that are now stored locally. These are intended to be deployed as local protection to the four properties nearest to the causeway, and to be a physical barrier to traffic if the necessary police authorisation is given.