

### **Wherryman's Way Update**

Report by Senior Waterways and Recreation Officer

**Summary:** This report provides members with an update on the latest position regarding the closure of the Wherryman's Way at Hardley Flood on the River Chet.

**Recommendation:** That members note the contents of the report.

## **1 Background**

- 1.1 At the meeting of the Broads Local Access Forum (BLAF) on 7 June 2016, members considered a report on Norfolk County Council's proposal to extinguish the section of the Wherryman's Way trail which runs on the true left bank of the River Chet at Hardley Flood. The extinguishment was considered necessary as the bank was deteriorating in condition and a bridge structure had failed at one of the breaches in the bank where water flows into and out of Hardley Flood. Aside from the effect of the County Council's proposal to extinguish the path on countryside access the report also considered the implications of the potential extinguishment on the management of the river bank, the hydrology of the River Chet and the future maintenance of the navigation.
- 1.2 The report explained that Norfolk County Council did not consider that it had any responsibility for maintaining the structure of the bank and neither did the Environment Agency as the bank was not part of the flood defences. Accordingly the County council was proposing to have the section of path stopped up and the route permanently diverted.
- 1.3 Members will recall that the report also highlighted the fact that officers had been presented with anecdotal evidence from local businesses that the deterioration of the bank was having an adverse impact on tidal flow and water levels upstream of Hardley Flood. As there was no scientific evidence to substantiate this claim the report notified members that the Authority would be installing a tidal monitor at Pye's Mill to gather data on tidal fluctuations in the River Chet.
- 1.5 Members accepted that the Authority was not responsible for maintaining banks in private ownership or public rights of way and that its main responsibility with regard to the River Chet was the maintenance of the navigation. However, in general members felt that the Authority should object to the proposed extinguishment and work with the other public authorities with an interest in the matter to see if a project to deal with the underlying issues of

the bank could be developed and funded. In reaching this conclusion members were mindful of the Authority's second purpose (*promoting the enjoyment of the Broads by the public*) and recognised the importance of walking as highlighted in the stakeholder surveys carried out for the Authority in 2014.

- 1.6 The BLAF therefore resolved to advise the County Council under Section 94 (4) of the Countryside and Rights of Way Act 2000 to place a traffic regulation order (TRO) on the route rather than extinguishing it. Members felt that the loss of the path would potentially have an adverse impact on the quality of the route of the Wherryman's Way, tourism and navigation and also advised the County Council to work with the other relevant public authorities (South Norfolk District Council, Environment Agency, Natural England and the Broads Authority) to explore the possibility of developing a partnership project to protect the route.

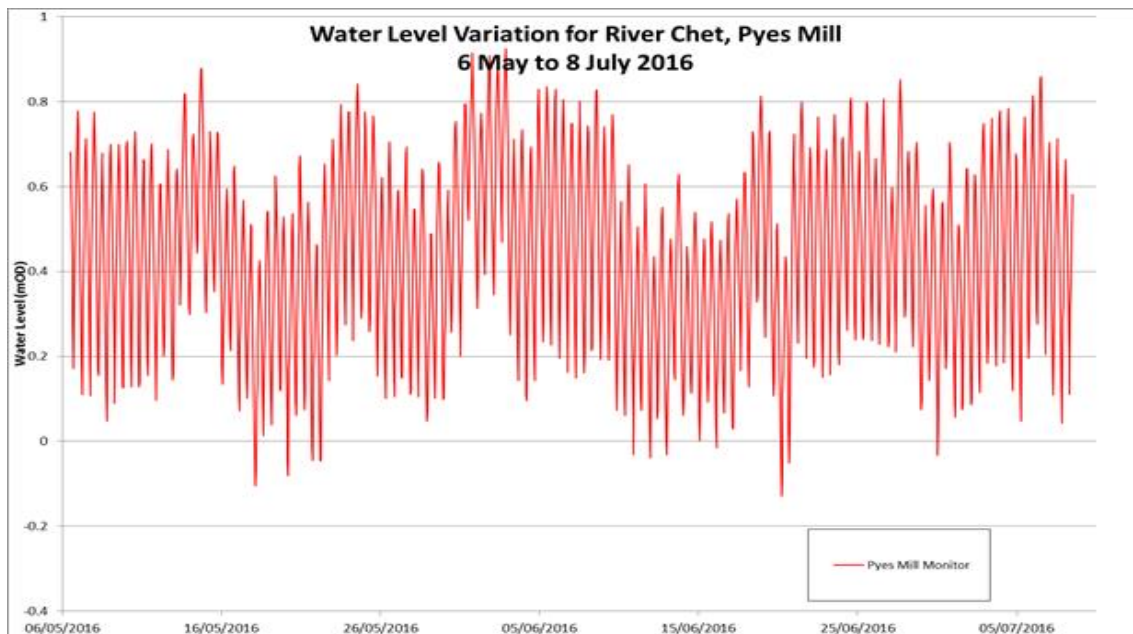
## **2 Current position**

- 2.1 The County Council has now responded to this advice by agreeing to the BLAF's suggested approach and it is now placing a TRO on the route which will allow discussions to continue with the other authorities involved.
- 2.2 Officers have had further meetings with the County Council and suggested that a jointly funded tree and scrub clearance project should be carried out on the path to remove trees in danger of collapse on the bank in order to reduce the risk of further breaches. Scrub clearance on the front face of the bank will also encourage reed growth which will also help to provide natural erosion protection.

## **3 Water Level Monitoring**

- 3.1 As mentioned at paragraph 1.3 the Broads Authority has received anecdotal evidence to suggest that the breaches in the bank have had an adverse effect on water levels at Loddon. The Authority has therefore been monitoring water levels at Pye's Mill since early May in order to be able to assess water levels accurately and compare tidal range in the Chet with that in the River Yare. Figure 1 shows the data for the period 6 May to 8 July.

Figure 1

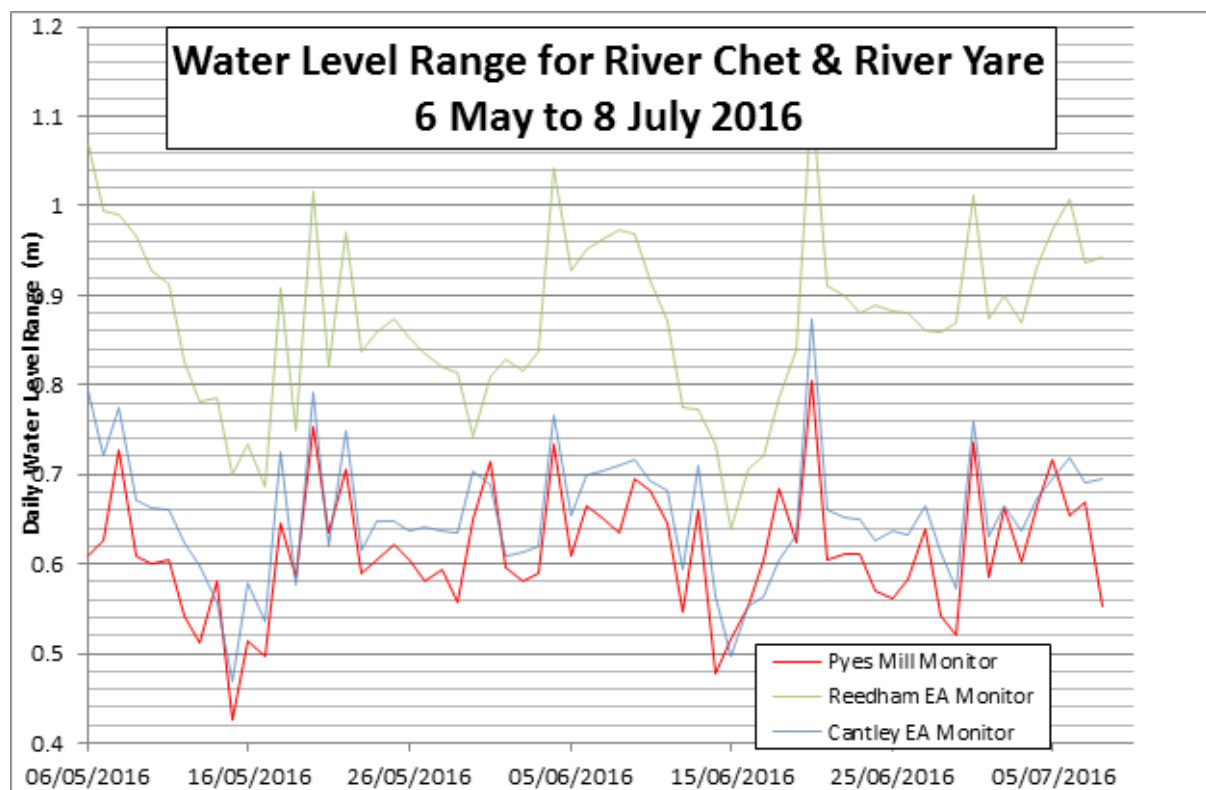


3.2 It is clear from the data that water levels at Loddon are following a typical tidal cycle of highs and lows. The plot shows that the tidal range (difference between high and low levels) varies between 0.5m and 0.8m. The actual high and low levels fit well with the tide levels given for Loddon in the 1993 Binnie & Partners Broadland Model Study, which are:

MHWS	MHWN	MLWN	MLWS
0.68mOD	0.38mOD	-0.05mOD	-0.10mOD

3.3 These data have been compared with data from the Environment Agency’s tidal monitors at Reedham and Cantley. Initial comparisons indicate that the tidal range on the Chet at Loddon is almost exactly the same as the range on the Yare at Cantley. Further, the timing of the tidal cycle at Loddon is also almost exactly the same as at Cantley. The tidal range at Loddon is approx. 200mm less than that at Reedham which is to be expected as the effect of the tide lessens as it progresses upstream. These data also indicate a 15 to 30 minute difference between tides at Reedham and Loddon (and the same for Cantley). Figure 2 shows a comparison of the data from the three monitors used.

Figure 2



3.4 The data gathered so far suggests that the inlets in the true left bank of the Chet which connect Hardley Flood with the river do not have a significant effect on tide levels. Further, there are no significant differences between current levels and those recorded in the Binnie and Partners Broadland Model Survey which was carried out in 1993. Neither is there a major time lag for high tide at Loddon which also indicates that the Hardley Flood inlets are having a negligible effect.

3.5 However, these data do not indicate what affect the connections between Hardley Flood and the Chet are likely to have on channel velocity or siltation which can only be assessed through hydraulic modelling. Modelling will also give some information on the effects of carrying out works to change the connections between the flood and the river on levels and the resulting flows through the connections. Officers feel that it is essential for modelling to be carried out in order to inform future project development and Norfolk County Council has indicated that this will be discussed at the joint meeting of the public authorities to be held in October.

3.6 In order to assess the level of boat traffic proceeding upstream on the River Chet the Authority's rangers have also been monitoring the number of boats mooring at Loddon. This has shown that Loddon mooring is usually full to capacity and indicates that boats are not having difficulties with channel depth.

## 4 Conclusions

- 4.1 The fact that the County Council has agreed to place a TRO on the route rather than extinguishing it will allow the public authorities to consider options for a project to deal with the breaches in the bank in order to bring it up to a standard suitable for continued public access. The County Council has indicated that it will convene a meeting of all the public authorities with an interest in the matter which is likely to be held in October and this will be the first stage of that process.
- 4.2 There is still a need for hydraulic modelling to be carried out and it should be recognised that funding sources will need to be identified to pay for any works to the bank as none of the public authorities have funding available to pay for such works. The TRO will allow for tree clearance to be carried out and as dredging takes place the Broads Authority will seek landowner permission to place material dredged from the river on to the bank which can be used to bulk up the bank.
- 4.3 In the meantime there is a diversion in place and flood defence works are currently taking place on the section of the route that runs from Pitt's Lane Chedgrave to Chedgrave Common. These works include the construction of an easy access path and once they are completed it should be possible to reopen the section of the route that run up to Hardley Flood.

Background papers:	Nil
Author:	Adrian Clarke
Date of Report:	25 August 2016
Broads Plan Objectives:	TR1, NA1, NA2
Appendices:	Nil