

**Report to Planning Services Scrutiny
Standing Panel**

**Date of meeting: 13th September
2011**

Portfolio: Planning and Technology/Environment

**Subject: Environment Agency Consultation on Managing Flood Risk in the Roding
Catchment**

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Committee Secretary: Mark Jenkins (01992 56 4607)



Recommendations/Decisions Required:

- (1) That the Council objects to the proposed flood risk strategy as there is insufficient detail to show and assess the short and longer term potentially detrimental effects, in terms of flood risk, on:
 - the residents of Epping Forest adjacent to the floodplain;
 - individual properties and areas of land, including land owned by the council;
 - flood zones and hence future development opportunities; and
 - ordinary watercourses within the district;
- (2) Depending on the outcome of discussions with the Environment Agency, that a further report be presented to the Planning Services Scrutiny Standing Panel and the Safer, Cleaner Greener Panel;
- (3) That a copy of the Panel's recommendations is made available to the town and parish councils listed in paragraph 1 of this report;
- (4) That consideration be given to including within the Council's response to the Environment Agency a request that urgent consideration to compensating and giving assistance to those householders who will be more at risk of flooding as a result of the Agency's proposals; and
- (5) That the procedure agreed at Overview and Scrutiny Committee on 24th January 2011 (minute 70) is used to ensure that the Panel's recommendations meet the consultation deadline.

Report:

Environment Agency (EA) proposals

1. The following parishes may be affected by the EA proposals on managing flood risk in the Roding catchment – Abbess, Beauchamp and Berners Roding; Buckhurst Hill; Chigwell; Fyfield; High Ongar; Lambourne; Loughton; Ongar; Stapleford Abbots; Stanford Rivers;

Stapleford Tawney; Theydon Bois; Theydon Garnon; Theydon Mount; and Willingale.

2. The consultation runs from July to 26 September 2011, and the EA is seeking opinion on its recommendations for managing flood risk in the Roding catchment. This includes Cripsey and Loughton Brooks, both of which feed into the River Roding. An officer from the EA will attend the Scrutiny Panel meeting to answer any questions which Members may raise. A Strategic Environmental Assessment (SEA) of the management strategy was published in October 2006, and an Environmental Report Addendum followed in June 2011. A short questionnaire has also been published, but this is primarily aimed at residents or owners of other properties which are at flood risk in the catchment.

3. Flooding is a natural process that cannot be entirely controlled or prevented. Climate change, urban development and decisions on managing risk all affect the likelihood and consequences of flooding. The Roding catchment has a long history of flooding – events have been recorded since 1926, with the most recent being in 2000 when more than 300 properties in the Woodford area were affected. The river rises at Molehill Green east of Stansted Airport and runs through Uttlesford and Epping Forest districts, and the London Boroughs of Redbridge, Newham and Barking, before discharging into the Thames at Barking Creek. More than 2,000 residential and commercial properties are potentially at risk in the southern part of the catchment (including the Buckhurst Hill/Loughton area). The upper part of the catchment is very rural and the natural floodplain copes well with flood water following heavy rainfall, although there are a few properties at high risk of flooding, some of which are in this district.

4. The EA is recommending three proposals, which, in combination, will improve protection of up to 1,000 properties, mainly in the Buckhurst Hill/Loughton/Woodford stretch of the catchment. The downside, from this Council's point of view, is that 15 properties in the district will be at greater risk of flooding (see para 6 below). It is important to note that the EA justifies the increase in flood risk to the properties in this district for two reasons. Firstly, the financial cost of continuing maintenance of the river is greater than repairing the damage that could be caused by flooding. Secondly, slowing the water down in the upper reaches of the catchment reduces the risk of flooding to properties in the lower catchment, so a small number of properties are negatively affected to benefit the majority.

5. The first two of the proposals have direct relevance for the district:

(i) making changes to river management and maintenance activities – this includes withdrawing all maintenance of the Roding from its entry into the district at Berners Roding to its exit into the LB Redbridge at Buckhurst Hill – ie allowing nature to take its course. The EA contends that the costs of continued maintenance outweigh the value of protection and the financial benefit provided. This does not apply to the Loughton and Cripsey Brooks where the proposal is to maintain the river channel and flood defences to the current standard of protection;

(ii) creating a large flood storage area (FSA) near Shonks Mill (south-west of Ongar) by 2020 – it would be large enough to deal with a 1 in 200 year flood event. This would involve constructing an earth embankment approximately 700 m long across the floodplain adjacent to Shonks Mill Road. The average height would be 2.5m and the maximum height would be 3.75m. The EA hopes that material to build the embankment (30,200 cubic metres) can be sourced from excavation works for surface runoff areas in Woodford. This implies that there would be lorry movements along the A113 through Chigwell, Abridge and Passingford Bridge to the Shonks Mill area, acknowledged as “increased volume of traffic including heavy vehicles on local roads” in the SEA Addendum Report. The FSA would operate like the Council owned one at Church Lane, North Weald, ie it would only flood during extreme rainfall events, and would remain in its current use (farmland) at all other times; and

(iii) improving surface water management at Woodford – all works would take place in Redbridge.

6. The EA states that some properties in the rural parts of the catchment, including the Cripsey and Loughton Brooks and the majority of properties on the Roding north of Abridge, will experience little change in flood risk. A small number of properties, especially in the northern part of the catchment, will remain at high risk of flooding. There are 15 properties in the district that will face an increased risk of flooding due to the termination of maintenance. Three are in the Passingford Bridge area, eleven around Fyfield and one at Birds Green. The EA has notified the owners of all these properties and states that it will work with them to identify ways of reducing or managing the risk. This includes flood resistance measures (eg defences) and flood resilience measures to reduce damage caused, making it easier to recover. The EA hopes that some property or land owners may wish to take on responsibility for maintaining local flood defences themselves. Officers believe that the EA should be encouraged to make appropriate financial contributions to help the owners affected by the reduction in maintenance of the river.

Issues

7. The SEA Addendum report acknowledges that withdrawal of all maintenance and repairs will lead to, inter alia, dilapidation and eventual failure of defence structures. Over time, this would lead to increased risk to life and damage to a limited number of properties in times of extreme flood events.

8. The creation of the FSA at Shonks Mill raises issues of visual and noise impact during construction and permanent change to the landscape character of the area. It would be helpful to know for certain what route construction lorries will be taking and an estimate of the likely number of such movements needed to transport material from Woodford. There are three properties immediately downstream of the proposed FSA and therefore their flood risk status will change due to the proximity of the FSA.

9. Whilst the EA has identified 15 properties within the district that will be at increased flood risk, it has not identified areas of open land where there may also be an increased risk. These open land increases may be minor, but they could alter the boundaries of the EA's Flood Zones and the Flood Risk Assessment Zones as shown in the Local Plan Alterations (2006). This in turn could mean that some development proposals will be located in higher flood risk zones than is the case at present. In particular, this could impact upon Ongar and adversely affect its potential for future development, significantly reducing spatial options in the district. The extent of any changes to the flood zones has not been specified by the EA although it is understood that they have undertaken hydraulic modelling to determine this. Greater areas of the catchment will be at risk from flood events, making it even more important that future development is excluded from the floodplain. It is not clear if the EA has considered this potential impact on future development schemes.

10. It is also not clear if the EA has identified the risk that the 'do nothing' option will have on the ordinary watercourse network that discharges into the River Roding (a main river). For any drainage network to function effectively it must be free of obstructions along its length and at its discharge point. By terminating maintenance on the river, vegetation along its banks will gradually increase and silt will build up. This will eventually lead to the discharge point of an ordinary watercourse being blocked up and to localised flooding at some point along the ordinary watercourse. The EA is responsible for main rivers and local authorities for ordinary watercourses. The 'do nothing' option is likely to result in an increase in the Council's monitoring and enforcement activities as well as an increase in responsibility as a riparian owner.

11. The EA currently undertakes routine and unscheduled maintenance on the River Roding including weed cutting, tree and bush management and desilting. Whilst the EA is not

the riparian owner of land either side of the river and is not legally responsible for maintenance, it has undertaken this in the past as the authority responsible for managing main rivers and as the national body for managing flood risk with funding for such works. When the EA withdraws this maintenance the responsibility will again fall to the riparian landowner adjacent to the river. Riparian owners will be responsible for monitoring the riverbank condition, arranging and paying for contractors, or completing the work themselves. This will place additional burdens on riparian owners, although they are legally responsible for maintenance.

12. The Council is riparian owner for approximately two miles of river along the Roding Valley Recreation Area between Debden and Buckhurst Hill. As the River Roding is classified as a Main River, the EA is the managing authority responsible for enforcement and authorising works on the river. The Council has always been the riparian owner and as such holds a responsibility for maintaining the riverbanks. However, the Council has benefited in the past from ad-hoc maintenance work and assistance by the EA and as such there has been no clear definition of who holds the ultimate responsibility for certain aspects of maintenance in that area, eg erosion control works. Officers understand that the EA would always insist that the Council (as riparian owner) is ultimately responsible.

13. Should ordinary watercourses become blocked at their confluence with the river, the Council as riparian owner would be responsible for funding and clearing the blockages along this two-mile stretch. An increase in surface water flooding from blocked ordinary watercourses in the recreational area would be a greater nuisance to the Council and the public who use the park. With all maintenance assistance from the EA terminated there would be over time be an increased cost to the Council for maintaining this stretch of the river. This will include the areas currently affected by erosion and any potential erosion mitigation.

14. The Roding Valley Recreational Area often suffers from flooding due to overtopping of the banks of the Roding. This is simply because the recreational area lies within the flood plain of the river. It is difficult to determine what effects the EA's proposals might have on fluvial (river) flooding in this area although it is possible that the area will see a decreased risk of such flooding due to the benefit of the Shonks Mill FSA upstream – although this may not be constructed until 2020.

15. The Council also own properties (mostly housing stock) in close proximity to the river at various locations along its length, which could be at greater risk of surface water flooding from blocked watercourses.

Funding

16. The EA states: - 'We have limited amounts of public money available to create flood risk management schemes across the country. So there is always competition for financial support. There are no guarantees about how much funding will be available and over what timescale. We have already allocated some funding from our flood defence budgets to pay towards the Shonks Mill Flood Storage Area. However, we will require further contributions from private, public and voluntary organisations and communities who will most benefit most from our work'.

17. The EA itself will carry out some of the recommendations immediately, in particular where it is planning to vary the maintenance activities along the river. However, in line with the above, the Agency will need to work in partnership to complete some of the other measures including the flood storage area at Shonks Mill. It could therefore be many years before the structures are completed. In areas where properties are at risk of flooding the EA considers that appropriate flood resistance measures could form 'part of community schemes'.

Conclusion

18. The SEA is a complex document but there is a lack of specific detail and clarity with regard to the potential effects the proposals may have. The consultation has therefore raised more questions than answers about managing flood risk in the Roding catchment. Given the lack of detail, the fact that the proposals include the termination of routine and unscheduled maintenance along the river which will increase flood risk within the district, officers believe that the Council should object to the recommended approach. **(recommendation 1)**

19. Officers have been trying to gather the additional information but that which has been received to date does not answer all the outstanding concerns. In order to facilitate the process it is recommended that delegated authority be given to the Directors of Environment and Street Scene and of Planning and Economic Development to enter into detailed discussions with the Environment Agency. **(recommendation 2)**

20. A further report should be presented to the appropriate panels once the EA has responded to the Council's concerns and when further details may be available. **(recommendation 3)**

Reason for decision:

The EA's proposed strategy has potentially adverse consequences for areas of the district, and it is therefore important that the Council responds expressing its concerns. The information contained within the EA's documents is not detailed enough to allow assessment of all the potential consequences if the recommended approach is implemented.

Options considered and rejected:

(a) Given the EA has carried out cost benefit analysis and the recommended approach is seen to benefit the majority of the catchment's public, the Council could support the proposals. But the strategy will have a detrimental effect on some residents and parts of the district. There are also too many 'unknowns' with regard to short and longer-term flood risks, so it is not considered to be in the best interests of the Council and its residents to support the recommended approach.

(b) Not to respond to the consultation.

Consultation undertaken: None by the Council

The EA has undertaken various internal consultations, and with relevant councils and agencies, and with members of the public who could be directly affected by the proposals.

Resource implications:

Budget provision: Currently none – but as the Council is a riparian owner there would be a resource implication in the future if increased maintenance and work is required on the River Roding/ordinary watercourses.

Personnel: Currently none – but there could be a resource implication in the future if increased inspection and enforcement is required on any ordinary watercourse that may be impacted by the proposals.

Land: Has the potential to affect land owned by the council.

Business Continuity and Corporate Emergency Plan reference:

If additional properties at risk of flooding, then should a flooding event arise there could be additional pressure placed upon the Council to assist residents, through for example, the provision of sand bags or related support/advice.

Relevant statutory powers:

Land Drainage Acts

Planning and Compulsory Purchase Act 2004

Flood and Water Management Act 2010

Background papers: The EA's:

River Roding Flood Risk Management Strategy Strategic Environmental Assessment – Environmental Report October 2006;

River Roding Flood Risk Management Strategy Strategic Environmental Assessment – Environmental Report Addendum June 2011; and

Managing Flood Risk Consultation July 2011.

Environmental/Human Rights Act/Crime and Disorder Act Implications: None

Key Decision reference: (if required) Yes