

RM REP003 CLA objection to the Environment Agency's Application to vary the Scheme within the River Medway (Flood Relief) Act 1976

Environment Agency technical response, September 2020

Further to the CLA's representation to Defra, the Environment Agency believe the representation raises four specific issues. These four issues are addressed below.

1. You are concerned that the proposed works have not been undertaken with adequate consultation and discussion with the landowners and farmers directly affected by the proposals.

Alongside the usual engagement carried out as part of any flood risk management scheme, the Environment Agency has also carried out a specific consultation on the proposed change to the stored water level within the Leigh Flood Storage Area (FSA). This is in accordance with the River Medway (Flood Relief) Act 1976.

In May 2019, the Environment Agency's land agent, Dalcour Maclaren, wrote to 36 landowners and tenants within the existing FSA to advise them of the proposed application to increase the maximum stored water level, and to offer a meeting to explain the impact this would have on them and discuss any concerns they had. These letters were followed up with phone calls and 27 parties took up the offer of a meeting. There are no new landowners and/or occupiers that would be brought into the FSA as a result of the proposed expansion.

Alongside this process, the Environment Agency also contacted all of the organisations named within the Act as Specified Interests (plus additional organisations as directed by Defra) to make them aware of the application to expand the FSA, offer meetings to discuss the proposal and any concerns they had on behalf of their residents or members. These organisations have gone through their own processes to ensure that they understand the impact of the proposal on their residents or members.

Of the 52 landowners and organisations consulted (36 landowners and 16 organisations), 11 representations have been made in response to our formal consultation on the proposed changes. We are continuing to work with those individuals to answer their questions and try to resolve their concerns. However, it should be noted that, of the 11 representations made, according to our modelling only 1 will be affected by the proposal to increase the maximum stored water level.

2. You state that "Any decisions on flood mitigation works that are likely to have a significant impact on the land or business of the landowner must be based on robust evidence and with all potential solutions fully explored. In this case it is clear that there are some outstanding questions around the technical analysis that must be resolved before a decision is made."

The Environment Agency, and the wider hydrological industry, uses modelling software, mapping techniques and topographical and rainfall data to understand a

wide range of catchment processes, how river catchments respond to different rainfall events, and to identify the impacts of these events.

The Environment Agency has flow gauges upstream of Rogues Hill, at Chafford Bridge and Colliers Land Bridge on the River Medway and at Peshurst and Vexour Bridge on the River Eden. This represents a significant investment in flow monitoring and allows us to understand the water levels on both rivers. Information from these gauging stations was used to calibrate the 2015 Medway flood model and is used to inform the operation of the Leigh Flood Storage Area (FSA).

Our modelling indicates that the proposed change to increase the maximum impoundment level will not increase the depth of flooding above Rogues Hill. This is demonstrated in Figure 1 below. Figure 1 shows the increase in flooding depth from raising the Leigh FSA maximum impoundment level from 28.05m Above Ordnance Datum (AOD) to 28.6m AOD (measured at the main Leigh FSA embankment) during a 1.33% flood event. The map below has been taken from the Flood Risk Assessment for consistency. This map has been updated since the submission of the Application. Whilst it shows greater depth variation lower in the FSA, the point at which the effect of the expansion dissipates remains the same.

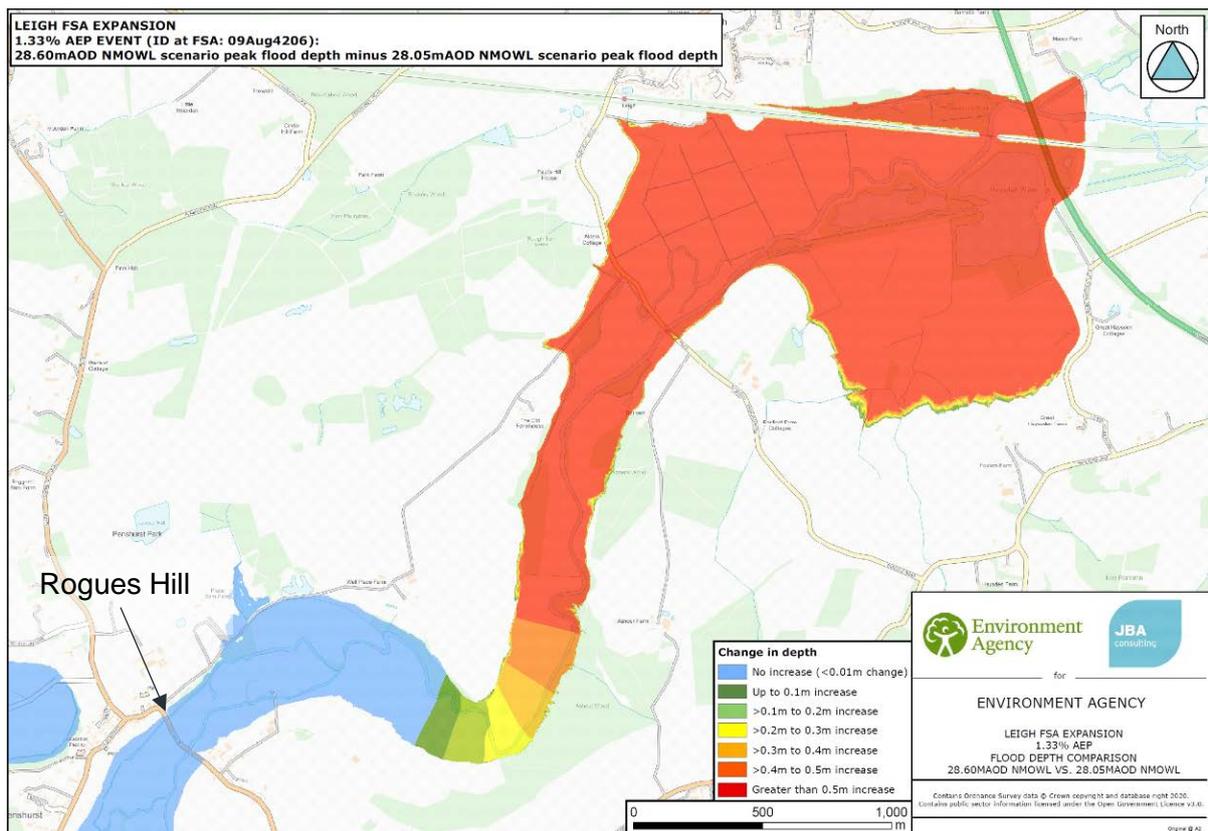


Figure 1: Increase in flood depth in a 1.33% flood event. 28.05m AOD vs 28.6m AOD

The Flood Risk Assessment was submitted with our planning application at the end of August 2020. The planning application reference number is 20/02463/FUL, and it is available for view at the Sevenoaks District Council planning portal:

<https://pa.sevenoaks.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=QFPV1WBK0LO00>

Every flood event is different, depending on a number of factors, including soil saturation and weather patterns. The modelled scenario in Figure 1 was chosen to demonstrate the impact of expanding the FSA because it shows the greatest change in flood depths.

Whilst it is always possible to further refine the calibration of any flood model by considering more baseline data, the Environment Agency is confident that the modelled flood data is sufficient to understand the flood risk upstream of the FSA.

In addition to the 2015 Medway flood model, the Environment Agency has photographs and data showing the extent of land flooded during previous events, and staff observed the flooding at Rogues Hill in February 2020 to understand the extent of flooding at this location. The timing and extent of the flooding in February 2020 was as predicted by the model.

You state that there are some outstanding questions around the technical analysis that must be resolved before a decision is made. Please can you clarify the questions that you'd like us to answer?

3. You have concerns that in other locations landowners are flooded more frequently than was anticipated when agreements were made and have provided an invaluable service to the communities downstream, without adequate compensation for the damage to their land.

The River Medway (Flood Relief) Act 1976 (the 1976 Act) accepts through section 17(4) that property may be affected by the operation of the Leigh FSA and gives landowners the right to be compensated for any damages caused.

Landowners are able to claim compensation after each flood event. As an alternative to the previous operators, the Southern Water Authority, offered landowners within the FSA the opportunity to enter into agreements where full and final compensation would be paid for any damage caused as a result of the operation of the existing FSA into the future.

The agreements made in the 1970s and 1980s allowed flooding to any depth and for any duration for the lifetime of the FSA. We must assume that they were correctly calculated with the best available data at the time.

As a result of the 2015 Medway flood model, we now know that more land is affected by the operation of the existing FSA than was covered by some of the agreements made in the 1970s and 1980s. On the occasions where operation of the FSA has caused damage to areas not covered by agreements, the Environment Agency has paid compensation for that damage. This is in accordance with Section 17(4) of the 1976 Act.

Whilst the 1976 Act provides a right for those who suffer damage as a result of operation of the existing FSA to claim compensation on a case by case basis, we are willing to consider entering into further agreements with affected landowners to fully and finally discharge this obligation.

4. You are requesting that agreements and mitigation opportunities are entered into before this application is confirmed.

As noted in our response to point 3, Section 17(4) of the 1976 Act obliges the Environment Agency to compensate landowners where damage is sustained as a result of operation of the existing FSA. If the level of that compensation is not agreed then the matter can be referred to a court for determination. The Environment Agency does not have to agree compensation before submitting the Revised Scheme to Defra.

Whilst we have started discussions with some landowners about the possibility of a supplemental agreement to fully and finally discharge this obligation to pay compensation under Section 17(4) for damage caused as a result of the existing FSA, these are separate discussions and should not prevent the Minister from determining the Revised Scheme.