Q. Who is leading this scheme?
A. The Environment Agency and Blackwater Aggregates are working in partnership to develop the flood alleviation scheme across land under their joint control.

Q. What is the proposed scheme?
A. The flood alleviation scheme will provide flood protection to the villages of Coggeshall, Feering and Kelvedon through the creation of an “on-line” dam and “off-line” flood storage area. Our scheme will start at the footbridge adjacent to Larkspur Walk and will end near the footbridge at the entrance to Cuckoo’s Hollow. It will include:

1. On-line Dam: A clay embankment (or dam) will cross the valley next to the football ground. The height of the dam will be approximately 5m at its highest point as it crosses the river and will reduce in height to taper into natural ground levels on either side.

2. Increased on-line storage area: Following the construction of the dam, we will be able to store more flood water “on-line” within the valley utilising the existing flood plain.

3. Off-line storage area: An “off-line” flood storage area will be created next to the river (to increase the storage capacity of the flood plain). This will be created by removing the underlying aggregates from the footprint of the site and large quantities of London Clay from the base. The restored flood storage area will form an extension to the natural flood plain that will enable flood water to be stored during storm events.

4. Connection point: This will be created alongside the natural flood plain. Behind the dam the existing bank will be lowered to provide a point of connection between the existing flood plain and the flood storage area. The ground levels across the flood storage area will match levels within the existing flood plain. This will allow flood water to naturally rise and fall as the storm event occurs and subsides.
Q. When would the works be starting and finishing?

A. The entire scheme would take approximately 20 years to complete.

The dam itself would be constructed during year 6 (of the 20 year programme) and once completed would be able to provide significantly improved levels of flood protection to the local communities ahead of completion of the full scheme.

The off-line flood storage area will be constructed in 4 main phases, each taking 5 years to complete.

The entire scheme, including restoration works across the flood storage area would be completed in 22 years.

Q. What would the impacts be locally whilst the works are happening?

A. The operational aspects of the scheme will result in a continuation of Blackwater Aggregates’ existing quarrying operations at Bradwell Quarry. Noise and dust assessments will be carried out and closely monitored against baseline data as the scheme is developed.

The site will be accessed via the existing entrance to Bradwell Quarry from the A120 and either a tunnel or road-level crossing point on Cuthedge Lane. This will limit any impact locally as the existing mineral processing plant location and associated transport movements will remain unchanged.

Access for heavy construction plant and equipment to the dam and flood storage area will be via Bradwell Quarry’s existing access road from the A120 and the proposed Cuthedge Lane crossing point.

While we are undertaking the works there will be some areas that we will need to have the footpath diverted, but an alternative route will be made available and fully detailed in the planning application. These routes will be clearly marked.

Q. How does this scheme link to Blackwater Aggregates’ other sites?

A. Whilst working in partnership with the Environment Agency, Blackwater Aggregates are also preparing an application to potentially move its operations into Site A7. The reason for progressing both applications at the same time is that Blackwater Aggregates require a constant supply of minerals to maintain continuity in their quarrying operations and planning permission is not assumed for the flood alleviation scheme.

Blackwater Aggregates will only carry out quarrying operations in either the Flood Alleviation Scheme or Site A7, not both.

Q. What will happen next with regards to applying for planning permission?

A. We are currently in the process of completing environmental, ecological and other on-site studies ahead on the planned planning submission. There will be further public engagement events later this year and more information published as the
proposal progresses. We intend to submit our planning application to Essex County Council in January 2020.

**Q. How is the scheme being funded?**

A. This project has received £1 million from central government (via the Environment Agency), and £8 million in direct funding contributions through the Blackwater Aggregates partnership. Blackwater Aggregates’ normal quarrying operations across the site will ultimately support in the delivery of a flood alleviation scheme that would cost in excess of £25 million to deliver.

**Q. If a scheme is completed, will it mean all properties in the village are no longer at flood risk?**

A. No, the scheme provides a good level of flood protection for the communities up to and including the 1 in 100 year (1%) fluvial flood event, taking into account climate change predictions, but an exceptional flood event may still occur (over 1:100).

**Q. Do you maintain the river channel through the villages?**

A. Yes. We currently carry out a cut and clear through the villages once a year.

**Q. Do you have any information on how and when this is carried out?**

A. Yes, there is information available at the drop in session.

**Q. Why are we not doing as much weed cutting/maintenance works as we were doing before?**

A. We must demonstrate benefits in flood risk reduction for every pound we spend. This means that we are constantly reviewing our programmes of work to minimise flood risk across England. We can’t simply do what we have always done. We have to be able to show that cutting the weed in the Blackwater reduces flood risk more than any other works we could be doing elsewhere. Whilst the works which we are still carrying out meet this requirement, other parts of the river are not being cut this year as the resources are more urgently required elsewhere. Weed cutting is also disruptive to the ecology, so we only remove weed when it is required to reduce flood risk. This is part of a more sustainable long term management strategy.

**Q. Do you protect against erosion to banks?**

A. No. Bank erosion is the responsibility of the riparian owner, please see the ‘Living on the Edge’ booklet. This is available at the drop in session or online at: www.gov.uk/government/publications/riverside-ownership-rights-and-responsibilities

**Q. Why do you not dredge/de-silt the river?**

A. Our knowledge of how rivers function is continually improving. Regular, extensive, catchment wide dredging is very expensive and often has a relatively modest effect, if any, on reducing flood risk, particularly in impounded rivers with shallow gradients,

Coggeshall, Feering and Kelvedon flood alleviation scheme: Frequently Asked Questions
such as the river Blackwater. Also, by speeding up the flow of water, dredging can potentially increase the risk of flooding to communities downstream.

Regular dredging can have a significant adverse effect on the ecology within the river, reducing habitat diversity, displacing plants and animals, and affecting water quality. We now take a more targeted approach to de-silting, only removing sediment locally, where it is a cost effective solution that is necessary to reduce flood risk.

Q. What was the primary cause of the 2001 flood event and would this scheme provide protection against a similar event?

A. The 2001 flood was caused by an exceptional rainfall event which created extreme volumes of water over a short period of time, exceeding a 1 in 100 year event. The water levels created by this extreme event over topped all structures in the River Blackwater and went beyond the natural flood plain, resulting in properties and businesses being flooded in all three communities. This was a major flood event created by extreme river flows coming down the valley.

The proposed flood alleviation scheme has been modelled on a 1 in 100 year event (including an allowance for climate change), and has been developed to offer flood protection against multiple long term rainfall events over extended periods of time. Even though the exceptional rainfall during the 2001 flood exceeded the 1:100 year event, our modelling has shown that if this flood alleviation scheme had been in place at that time, no flooding would have occurred to the properties and businesses in Coggeshall Feering or Kelvedon.

Q. What is the alternative to prevent flooding in a large storm event for the Blackwater Valley?

A. Currently there is no alternative that can provide a suitable amount of flood storage or property protection which is financial viable. The EA would continue to operate the flood warning service and its operations team will carry out maintenance to the required standards for the river and its associated structures.

Q. Who can I contact if I have further questions?

A. If you would like to understand more about these works or the wider programme, please contact us on the details below, Monday to Friday during normal office hours.

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