

Houghton Brook Flood Storage Area in Luton now completed

A new £8.5 million flood storage area to benefit 600 residential and commercial properties, along with key infrastructure, in Luton has been completed.

The Environment Agency worked with South East Midlands Local Enterprise Partnership (SEMLEP) and Luton Borough Council on the major flood defence works on Houghton Brook near Luton and Houghton Regis.

The new flood storage area can hold back 140,000m³ of water, equivalent to 56 Olympic sized swimming pools, at times of heavy rain and it will then allow it to drain slowly and under control into the Houghton Brook – cutting the risk of flooding to people and property along the Houghton Brook and River Lea in Luton.

The control structure of the Houghton Brook Flood Storage Area

One of the key benefits of the scheme is that it will mean important services and employment will be able to carry on during heavy rainfall events where in previous floods roads near the River Lea were inaccessible.

The scheme will also deliver many environmental and recreational benefits with the planting of over 3,000 new bushes / shrubs and 260 new trees, as well as planting wildflowers on the banks of the river. An otter ramp has also been included at the scheme. We have completed many improvements to the Houghton brook, including restoring important chalk river habitat.

Sam Lumb, Environment Agency Area Director, said:

We and our partners are really pleased that we can announce the completion of the flood storage area on the Houghton Brook, which is a key part of plans to reduce the risk of flooding in the Luton area. Even with Covid and a wet winter, we have been able to complete this project on time and within budget.

This scheme will not eliminate flood risk altogether, but will significantly reduce the risk of flooding in Luton from the River Lea. We still encourage everyone to check the risk of flooding in their area and also to familiarise themselves with the different warning levels, so they know what to do in the event of flooding.

Judith Barker, Director of Programmes and Governance at SEMLEP said:

We are pleased to partner with the Environment Agency and Luton Borough Council in delivering the Houghton Brook Flood Storage Area project by providing £1 million of funding through SEMLEP's Local Growth Fund.

The successful delivery of the project helps us improve the quality of life for those that live and work within the SEMLEP region and the Oxford to Cambridge Arc. We are proud to support Luton's economic resilience through the project providing £35 million in economic benefits associated with the reduction in flood risk for over 600 residential and commercial properties, future proofing Arc businesses and communities against the effects of climate change on the River Lea.

Since 2015, £2.6 billion has been invested in more than 700 projects across the country, helping to protect a further 300,000 homes from flooding and coastal erosion in England. There will also be a record breaking investment of £5.2 billion in 2,000 new flood and coastal defences across England between 2021 and 2027.

Further information

You can get more advice of preparing for flooding, which includes signing up to the free [Flood Warning Service](#) and checking necessary actions for each level of warning, working with neighbours to create a community flood plan, and gathering essential items in a personal 'flood kit' on GOV.UK.

Work by construction partner BAM Nuttall began in May 2020. It is being funded by Defra, Thames Regional Flood and Coastal Committee, SEMLEP Local Growth Fund and Luton Borough Council.

The volume of cohesive material imported to site was 70,000 tonnes and was completed during October, which saw more rainfall than a 1:10 year event. During the import, the tipper lorries were able to access from the nearby motorway junction, tip and safely exit the site in an average of 6 minutes.

The embankment construction has been carried out in layers, some sections requiring 24 layers to full height, with in excess of 1,800 on-site and off-site tests carried out to validate the standard of the materials used throughout.

The Flow Control Structure is based around 6 precast units, each measuring 2m x 2m internally. The design of the structure involved a total of 25 different sized concrete pours. An important planning requirement for the visual appearance of the asset saw the use of a specialist form liner to create a masonry effect finish to the exposed wall faces. This is a reusable panel, with various other surface finishes available.