

INFORMATION NOTE



EAST LYTHAM DRAINAGE - LIGGARD BROOK & MAIN DRAIN

Surface water in East Lytham is drained by two main rivers Liggard Brook and Main Drain.

- Liggard Brook; a natural river which runs through Lytham, and
- Main Drain; a man-made channel constructed in 1841 as part of a project to reclaim much of the land around Lytham for farming

Together they drain over 50km² of land between the M55 and the Ribble Estuary. These rivers are linked by a weir at Birks water course to allow water to pass from Liggard Brook into Main Drain, when water levels are high in Liggard Brook. These rivers are relatively flat and are tide locked when the tide rises twice a day. There is a pumping station at Dock bridge that operates to pump surface water into Lytham Creek when water levels reach a critical level. This facility is operated by the Environment Agency.

In particular Liggard Brook has a number of issues:-

- Water quality
- Silting of the outfall to Lytham Creek
- Routine dyke maintenance

The areas foul water drainage and combined surface water and foul drainage from the older part of Lytham drain to Ballam Road Pumping Station at Park View Playing fields or Lytham Pumping Station at Graving Dock Road. Foul water from Ballam Road is pumped on to the Lytham station and from there pumped on to the treatment works at Freckleton Marsh, these facility are operated by United Utilities.

Ballam Road pumping station has a large storage tank under Park View playing fields to take pressure off the system during heavy rainfall events. United Utilities have a permit/licence from the Environment Agency to discharge storm water into Liggard Brook from the Ballam Road storage tank when storm water levels exceed their pumping and storm water detention tank capacity.

Storms Desmond and Eva put a considerable pressure on the sewer network in December 2015 and January 2016 which led to a frequent operation of storm spills in line with United Utilities permit to discharge. The storm tank can discharge at a rate of 500 litres per second to Liggard Brook to prevent homes and businesses in Lytham from flooding with foul storm flows. The discharges into Liggard Brook were mostly rainwater which presents a low risk to the environment. There were approximately 28 storm spills between the start of December and the middle of January. This was a long period of intense rainfall which impacted much wider than solely upon the public sewer system. Since these storms around the Christmas / New year period, the storm spills from the Ballam Road asset has been infrequent and aligned with United Utilities expectations.

Water quality in Liggard Brook is classed as moderate for 2013-2015 with bad dissolved oxygen levels, high pH levels (Alkaline) and therefore bad for Invertebrates, water quality is not helped by these combined sewer overflows.

There is also a pumping station at Fairhaven and we have been informed by United Utilities Wastewater Asset Manager for Fylde that 5 spills have been recorded during the bathing season from Fairhaven pumping station, dated 19th, 20th June, 28th, 29th June and the 22nd August.

It is reported that these discharges go straight out into the main River Ribble within the estuary and have no impact upon any inland watercourses. It has been confirmed that Ballam did not spill all summer, and Lytham pumping station (Graving Dock Road) had 1 spill, this again was linked to the rainfall event of the 22nd August (similar to Fairhaven).

Cllr Lloyd arranged with United Utilities a fact finding tour of the Ballam Road Pumping Station on the 7th October 2016 which was attended by Elected Members, a local farmer, United Utilities, the Environment Agency and the Head of Technical Services at Fylde.

United Utilities Wastewater Asset Manager for Fylde explained the operation of the station and showed the newly installed real time monitoring systems on the outfall to Liggard Brook.

After the tour a discussion was held in the eco pod at Park View where Members were shown a plan of the areas surface water drainage system including Liggard Brook and Main Drain.

Water is held in these watercourses due to the low flat nature of the topography in the area and lack of gravity discharge caused by silting at the outfalls.

The Environment Agency currently have a £3m East Lytham Flood Risk Management Scheme to address this problem which was the subject of a update reported to the 6th September committee. This scheme will protect 752 residential properties, 286 commercial properties and 974Ha of farm land at fluvial flood risk in Lytham.

The report in September also provided details of the Environment Agency plans for routine dyke maintenance in the area.

FURTHER INFORMATION AVAILABLE FROM

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