



# INFORMATION NOTE

## Park View Playing Field Flood Incident 5<sup>th</sup> November 2019

### Introduction

- On the weekend of the 28th September 2019 the remnants of ex hurricane Lorenzo crossed the North of England bringing severe rainfall and high winds. The effect on the Fylde coast coincided with high tides to when the flood gates at Graving Dock Bridge naturally close due to tidal water pressure, to prevent coastal flooding. Prior to this the Fylde coast had experienced a series of rainfall events which had caused the land to be saturated.
- The Borough of Fylde is served predominantly by a combined (surface water and foul) sewerage system. This means that rainwater which doesn't need to be treated enters the sewerage system increasing the volume of combined sewerage which has to be pumped to the treatment facility at Clifton Marsh. This additional volume puts the network under further pressure and ultimately caused flooding of the field.

### Background

- Queen Elizabeth II Park View Playing Fields is a public open space in Lytham St Annes and is owned by Fylde Council. The site is a natural flood plain for Lytham.
- The site is identified at a high risk of flooding on the Government's long term flood risk map of England.
- The site is low lying and is at risk of surface water flooding. In addition Liggard Brook which runs along the western boundary of the site flows into the River Ribble at Graving Dock Bridge. The flood gates at Graving Dock Bridge close during high tides to protect the coast from coastal flooding which can cause water running down Liggard Brook to back up onto Park View Playing Field.
- In September 2005 the Council leased an area of land at Park View playing fields to United Utilities for an underground detention tank with associated pumping station and associated accessory for a period of one hundred and twenty five years.
- Also in 2005 the Council installed a pipe and sand slit drainage system on Park View Playing field to drain 4 sports pitches.
- April 2015 – Liggard Brook burst its banks and flooded the area close to the bridge access from AXA Car Park
- August 2016 – The manhole cover located near the bmx track overflowed and flooded the site.

### Flood Investigation

- The recent high level of rainfall meant an increased flow in Liggard Brook and other local water courses and an increased level of surface water ingressing into the sewer network system. This caused the combined sewer system to surcharge into Park View QEII playing field via a man hole located in the centre of the playing field.
- This was due to the very large volumes of water received by the United Utilities pumping station. When

the pumping station receives its maximum pass forward flow of 100 l/s, incoming flows are diverted into the available storage tank which can store approximately 9 Million litres of storm water. This reached capacity very quickly and then flows were diverted to a wet well where the flows are pumped into Liggard Brook via a screening system to a maximum of 500 l/s. In the event of these screens being blinded due to rags, wet wipes and other litter, flows are then diverted to bypass the screens. This is to reduce risk of flows backing up the system and flooding further upstream. It is worth noting that flows at this point are relatively diluted due to the amount of rainwater in the system. It is important to understand that the blinding of the screens would not have affected the flooding of the fields.

- In response United Utilities sent a clean-up team and Fylde Council assisted by providing appropriate warning signage and advising residents via social media. The clean-up campaign was hampered by additional rainfall events after which the clean-up continued. There remained a flooded area to the north of the playing fields which formed part of the area drained by the Council in 2005. Fylde Councils Technical Services team cleared any blockages and the water drained away. United Utilities guidelines were followed which advised that the recovery period in Autumn on a turf playing field was 13 days.
- These guidelines were followed and communicated via social media (see table detailing the recovery periods dependent upon ground/season below), by Fylde Councils Communications team.

Season	Turf/clay (days)	Soil/sand (days)
Spring	13	20
Summer	6	9
Autumn	13	20
Winter	18	11

## **Conclusion**

- Upon further investigation the cause of the flooding can be attributed to severe rainfall in an area that was saturated, coinciding with a high tide. This resulted in large volumes of water being received at Ballam pumping station. The system dealt with 100l/s flow pumped to Lytham Pumping station after which the 9 million litre storm tank filled. 500 l/s are then pumped into Liggard Brook. The system reached over capacity and the manhole surcharged onto Park View Playing Field.
- With Climate Change surface water flooding is becoming an increasing problem. All the agencies, Lead Flood Authority, Environment Agency, United Utilities and Fylde Council are working in partnership to raise awareness and develop long term flood risk management plans.
- These measures involve the development of a cross agency asset management approach which will lead to the production of a mapping tool which will include assets from all the agencies showing how they interact with each other.
- There are also other aspects of flood risk management we can promote to our communities, use of water saving devices including water butts, education in the disposal of wet wipes and the effect of development on surface water/flood risk.

## **Actions**

The following actions will be progressed:

- Fylde Council host a workshop with partnership agencies to discuss surface water flooding to develop a long term plan.
- Fylde Council work with the Environment Agency United Utilities and Lancashire Wildlife Trust to develop a project to improve water quality, the river environment and make Liggard Brook more resilient to flooding.
- The pipe and sand slit drainage system on Park View playing fields requires the outfall lifting and the original ditch line reinstating as a dry swale on the Northern boundary of the playing field.

**FURTHER INFORMATION** - Contact: Darren Bell Head of Technical Services

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