

# Stratfield Mortimer Parish Council

Full Council 08/06/2023

## Foudry Brook

Agenda item 23/030 11. To receive an update and resolve:

- a. That SMPC write to Thames Water as stated in the recommendation.
- b. That a copy of the letter to Thames Water also be sent with appropriate covering letters to the Environment Agency and John Redwood MP.

### BACKGROUND

Information on storm overflows into Foudry Brook from the Mortimer Sewage Works has been presented at the 2022 and the 2023 Annual Parish Meetings but has not been formally considered by the Council. The information consisted of discharge data obtained from Thames Water under Environmental Information Requests and daily rainfall data for Stratfield Mortimer kindly provided by Dr Stephen Burt FRMetS.

The slides from the 2023 presentation are shown in the accompanying document (23-030 11.1 Foudry Brook APM Slides). The discharge data are from Event Duration Monitoring (EDM) which provides the start and finish times of discharging the mixture of rainwater and untreated sewage. In the records there are some short breaks of say 15 minutes to an hour. These short breaks have been ignored in the analysis.

Storm discharges occur most frequently between September and April with fewer (but some) in the summer. The graphs show daily rainfall (mm) and periods of discharge for the period 1 September to 31 March for the last few years. A summary is given in the table below.

Period	Rainfall (mm)	Days of discharge	Long spells of discharge (days)
1 <sup>st</sup> Sept to 31 March			
2019/20	608	139	67, 59, 8, 5
2020/21	487	123	52, 40, 26, 5
2021/22	341	29	9, 8, 6
2022/23	588	105	42, 35, 14, 12

It is clear that the discharges are driven by rainfall. In the wettest of the four periods (2019/20) discharge occurred on 139 days out of the 212 days in the period. Between 7<sup>th</sup> November 2018 and 31<sup>st</sup> March there is only one spell of 8 days without discharge. In 2020/21 between 3<sup>rd</sup> October 2020 and 25<sup>th</sup> February 2021 there were only 24 days without discharge.

The period 1<sup>st</sup> Sept 2021 to 1<sup>st</sup> February 2022 was relatively dry and most discharges occurred in February /March 2022. In 2022/23 there were long periods of discharge in November/December and December /January. Discharges started again in early March and continued to some extent in April and May (data not shown).

The first discharges in the season follow either a heavy rainfall event such as 46 mm on 2<sup>nd</sup> Oct 2020 or longer period of moderate rainfall such as in October 2019.

The analyses above use rainfall from 1<sup>st</sup> September to 31<sup>st</sup> March (7 months). Meteorologists use the six month period 1<sup>st</sup> October to 31<sup>st</sup> March to measure 'winter' rainfall. For the period 1991 to 2020 the mean winter rainfall was 398 mm. For the four periods considered here the corresponding figures were 538 mm (135% of mean), 465 mm (117%), 300 mm (75%) and 512 mm (129%). In recent years 2013/14 was wetter with 590 mm (148%). Thus, the years considered were not abnormally wet but are also consistent with climate change scenarios of wetter winters and drier summers.

Summer discharges are infrequent but do occur following heavy rainfall. A discharge of 55 hours started on 27<sup>th</sup> August 2020 following an intense shower of 42.3 mm of rain in 3 hours.

In 2021 a discharge of almost 4 days occurred from 18<sup>th</sup> June followed by another of 10 days from 27<sup>th</sup> June. Rainfall on 17<sup>th</sup> and 18<sup>th</sup> June was 53.2mm with 21.1 mm on 27<sup>th</sup> June and 15.4 mm on 5<sup>th</sup> July.

In 2022 there were no large summer rainfalls until 8<sup>th</sup> September when 22 mm fell and this was followed by 11 hours of discharge.

In January Thames Water posted on their website:

*"An upgrade is planned for Mortimer STW. This will include an increase on treatment capacity, so will reduce the need for untreated discharges. The £1m project is expected to be complete by December 2023. The date may change as the scheme progresses."*

The Clerk contacted Thames Water for an update on the project and received the following reply on 14<sup>th</sup> April.

*"As you'll know we provided a statement on the website recently which included a view on when we expect to be carrying out a scheme to improve performance at Mortimer STW. The forecast for us seeing the benefit from that scheme was expected by December of this year. We've had indication from the project engineer in the last few days that there is a high likelihood of the end date of this scheme being pushed back into 2024. Unfortunately there are long lead times on several items required for this project, and although we can't be certain at this stage, the indication is that a summer 2024 completion date is more likely."*

*I should point out that it is not unusual for project delivery dates do vary from month to month, as projects develop and resources and efforts are managed regularly across a portfolio of projects right across the Thames Water estate, so we can only provide a view of the likely timelines at any given time."*

At the Annual Parish Meeting, a member of the public suggested that contact be made with Action for the River Kennet (ARK) charity which is the rivers trust dedicated to improving the Kennet and Pang catchments. An online meeting was held with the Director of ARK, the member of the public, The Clerk and Cllr Dennett. The suggestions from the meeting were to keep pressure on Thames Water, to write to the Environment Agency and for SMPC to be invited to the next Kennet Catchment Partnership meeting

(<https://www.kennetcatchment.org/catchment/the-brooks/>). Other possible actions would be to involve ARK in rainwater capture projects and if the community could identify banks and ditches that need attention ARK would be able to inspect and suggest appropriate actions. (The last mentioned actions are included for completeness and may be of interest to the Greening Campaign).

## **RECOMMENDATION**

The Council writes to Thames Water requesting a copy of their consent to discharge, information on the maximum rates of discharge of the current equipment, more detail on the proposed upgrade and the estimated effect of the upgrade on discharge frequency. This paper and the supporting graphs should be included with the letter.

The letter and documents with appropriate covering letters expressing our concerns also be sent to the Environment Agency and John Redwood MP.