

To: Kent Flood Risk Management Committee – 16th July 2018

From: Tony Hills, Chair of Kent Flood Risk Management Committee

Subject: Environment Agency and Met Office Alerts and Warnings and KCC severe weather response activity since the last meeting.

Classification: Unrestricted

Summary: To update Kent Flood Risk Management Committee on the water resources situation, Environment Agency and Met Office Warnings, and flood response activity since the last meeting of the Committee on 5th March 2018. Members are requested to note this report.

1. Background

1.1 KCC Resilience and Emergency Planning Service Duty Emergency Planning Officer (DEPO) and Contact Point receive Environment Agency and Met Office alerts and warnings on a 24 hour basis. Site specific severe weather impacts are notified to the DEPO by the emergency services and other resilience partners, with reports from the public received by Contact Point and passed to the DEPO and/or Kent Highways as appropriate. Potential impacts are assessed and a response mobilised as required.

1.2 Some 70,000 properties in Kent are located within areas identified as potentially at risk from fluvial (river) or tidal flooding. Where practically possible, these properties are offered a Flood Warning Service by the Environment Agency. However, other parts of the County are also vulnerable to surface and ground water flooding. Early warning of flood risk to communities (including areas outside of floodplains) is delivered through flood guidance statements, severe weather warnings and mobilisation of Kent Resilience Forum Severe Weather Advisory Group (SWAG).

2. Latest situation

2.1 The last meeting of the Committee took place during the rapid thaw following the cold snap dubbed the 'Beast from the East' by the media. Subsequently, three episodes of locally heavy rainfall affected Kent, in late March, April and May respectively. These contributed to a wetter than average spring in Kent, as can be seen from the table reproduced below.

Month	Kent rainfall (mm)	% LTA* for Kent
March 2018	83.7	173%
April 2018	81.4	165%
May 2018	62.7	123%
Spring 2018 total (Mar-May)	227.8	153%

*LTA = Long-term Average

2.2 Intense and localised rainfall events experienced in late May saw sporadic surface water flooding across the county, with resultant property inundation and

subsidence impacts. Kent Highways chaired multi-agency SWAG teleconferences from 29 to 31 May, enabling effective co-ordination of planning and response.

2.3 By contrast June was notably dry and saw a rainfall total of just 4.6mm, or 10% of the long-term average in Kent. Despite a wet spring, soil moisture deficits increased markedly as this month progressed ending June well above average. Groundwater levels have been less affected by the recent dry weather and continue to range from normal to notably high. The legacy of spring's rainfall also kept most monthly mean river flows across Kent in the normal category, with only the River Eden below normal. Whilst reservoir levels declined in June, this is normal for the summer months, with Bough Beech ending the month at 84% of capacity and Bewl at 93%.

2.4 However, dry conditions have continued into July, resulting in drought stress to the county's natural and farmed environments as soil moisture deficits intensify. Local water companies are now actively promoting water saving measures to customers.

2.5 Nonetheless, as a result of a particularly wet spring, a total of 20 flood alerts (18 fluvial and 2 coastal) were issued by the Environment Agency since the last meeting on 5th March 2018¹. This contrasts with just 4 flood alerts (3 fluvial and 1 coastal) during the corresponding period in 2017.

2.6 A total of 15 yellow Met Office severe weather warnings have also been issued since the last meeting (6 for snow and ice, 2 for ice, 6 for rain and 1 for a thunderstorm)². This compares with 6 yellow warnings (5 for heavy rain and 1 for high winds) during the same period last year.

2.7 The Thames Barrier was closed on 4 occasions since the last meeting of the Committee, all for test purposes³. The figure for the corresponding period in 2017 was also 4, again all for test purposes.

3. Next Steps

3.1 Prevailing dry conditions will continue to be closely monitored by KCC and the wider resilience community in Kent, informing emergency planning contingencies for drought, pollution and wildfire.

3.2 Elected Members will continue to be regularly briefed on the prevailing water resources situation, flood alerts, severe weather warnings, operational response and significant flood or other severe weather events affecting Kent.

4. Recommendations

4.1 That Members:

- Note the current water resources situation and the level of warnings received since the last meeting of the Committee; and
- Contribute any additional matters arising from debate by the Committee.

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Background documents: None

¹ Please see appendix 1

² Please see appendix 2

³ Please see appendix 3

Appendix 1: Environment Agency Flood Alerts issued since 5th March 2018

Flood Zone	Date issued	Status
River Beult	30/03/2018	Alert
Lower River Medway	31/03/2018	Alert
Lower River Medway	03/04/2018	Alert
Rivers Eden, Eden Brook and Kent Ditch	29/04/2018	Alert
River Rother	29/04/2018	Alert
Rivers on the Isle of Sheppey	29/04/2018	Alert
River Darent catchment	29/04/2018	Alert
Upper River Medway	29/04/2018	Alert
Upper River Stour	30/04/2018	Alert
Isle of Sheppey and coast from Kemsley to Seasalter	30/04/2018	Alert
Rivers Eden, Eden Brook and Kent Ditch	30/04/2018	Alert
River Bourne	30/04/2018	Alert
Plenty, Swalecliffe and West Brooks	30/04/2018	Alert
Great Stour from Lenham Heath to Hothfield	30/04/2018	Alert
Lower River Stour	30/04/2018	Alert
Lower River Medway	30/04/2018	Alert
River Beult	30/04/2018	Alert
Tidal River Stour	30/04/2018	Alert
New Romney Sewage Arm	01/05/2018	Alert
Rivers Shuttle and Cray	29/05/2018	Alert

Appendix 2: Met Office Severe Weather Warnings issued since 5th March 2018

Met Office Warnings	Date issued	Status
Yellow Warning of Snow and Ice	14/03/2018	Warning
Yellow Warning of Snow and Ice	15/03/2018	Warning
Yellow Warning of Snow and Ice	15/03/2018	Warning
Amber Warning of Snow and Ice	16/03/2018	Warning
Amber Warning of Snow and Ice	17/03/2018	Warning
Yellow Warning of Snow and Ice	17/03/2018	Warning
Yellow Warning of Snow and Ice	17/03/2018	Warning
Yellow Warning of Snow and Ice	18/03/2018	Warning
Yellow Warning of Ice	18/03/2018	Warning
Yellow Warning of Ice	19/03/2018	Warning
Yellow Warning of Rain	21/04/2018	Warning
Yellow Warning of Rain	25/05/2018	Warning
Yellow Warning of Rain	27/05/2018	Warning
Yellow Warning of Rain	28/05/2018	Warning
Yellow Warning of Rain	30/05/2018	Warning
Yellow Warning of Rain	30/05/2018	Warning
Yellow Warning of Thunderstorm	05/07/2018	Warning

Appendix 3: Environment Agency Thames Barrier closures since 5th March 2018

Thames Barrier closures	Date	Status
Thames Barrier closed	22/03/2018	Test
Thames Barrier closed	03/05/2018	Test
Thames Barrier closed	04/06/2018	Test
Thames Barrier closed	02/07/2018	Test