

To: Kent Flood Risk Management Committee – 23rd November 2020

From: Stephanie Holt-Castle, Interim Director of Environment, Planning and Enforcement

Subject: Environment Agency and Met Office Alerts and Warnings and KCC severe weather response activity.

Classification: Unrestricted

Summary: To update Kent Flood Risk Management Committee on the current local water resources situation, Environment Agency and Met Office Warnings, and flood response activity since the last meeting of the Committee on 6 July 2020.

1. Background

- 1.1 This report is the latest of the regular updates to the Committee addressing the current water situation and severe weather and flood response activity, and covers the period from July to November 2020.
- 1.2 The KCC Resilience and Emergency Planning Service Duty Emergency Planning Officer (DEPO) and KCC Contact Point receive Environment Agency (EA) and Met Office alerts and warnings regarding severe weather on a 24/7 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 on to the DEPO and/or Kent Highways. DEPO further initiates multi-agency reporting using the innovative Severe Weather Impacts System (SWIMS) to capture resources and costs arising from severe weather incidents.
- 1.3 Some 85,500 residential and commercial addresses across Kent are located within areas identified as at risk from fluvial (river) or tidal (coastal) flooding. Where possible, flood vulnerable properties are offered a free Flood Warning Service by the EA, which provides warnings by telephone, email or text message. Early warning of flood risk to communities (including areas outside of floodplains) is delivered through Flood Guidance Statements (which are issued by the EA / Met Office Flood Forecasting Centre and provide information for emergency responders to assist emergency planning and resourcing decisions), Met Office Severe Weather Warnings, and mobilisation of the Kent Resilience Forum (KRF) Severe Weather Advisory Group (SWAG).

2. Latest situation

- 2.1 The period July to September 2020 saw a succession of drier than average months in Kent, with July recording 71%, August 76% and September 73% of long-term average rainfall respectively. October was a much wetter month, with 172% of long-term average for the county. Temperatures were around normal from July to October, with the exception being August, which saw a total +2.3°C. above the mean.
- 2.2 Monthly mean river flows across Kent are currently mostly at the top of their normal ranges or above normal as a consequence of the above average rainfall experienced through October.
- 2.3 Significant soil moisture deficits at the end of September returned to near normal with the above average rainfall in October.
- 2.4 By the end of October groundwater levels were best characterised as normal, with more reactive catchments, including local chalk and gravel aquifers, in the upper part of that range.
- 2.5 Reservoir levels started to rise during October, although not until the end of the month at Bewl, finishing at 59% of capacity, while Bough Beech had reached 54% of capacity.
- 2.6 A dry summer and relatively calm weather conditions in autumn saw just seven Flood Alerts issued by the EA since the last meeting of the Committee in July 2020 (four fluvial and three coastal)¹. This contrasts with 47 flood alerts and five warnings (nine fluvial and 43 coastal) for the same period last year.
- 2.7 The Met Office issued 47 Weather Warnings for Kent between June and October (the last period for which data is available)². These Warnings related to predominately summer thunderstorms.
- 2.8 The Thames Barrier was closed on two occasions since the last meeting (both for test purposes)³. The figure for the corresponding period last year was three (twice for test and once for operational purposes).

3. Looking forward

- 3.1 The Met Office three-month outlook (November to January) indicates above average temperatures as being slightly more likely than below average

¹ Please see appendix 1

² Please see appendix 2

³ Please see appendix 3

temperatures. In terms of rainfall, below-average precipitation is slightly more likely than above-average precipitation.

- 3.2 We are currently in a La Niña year, which is where warmer waters are pushed further west than is usual across the Pacific Ocean by strong easterly winds. This influences global weather patterns from January to March, including in Europe and the UK and often leads to an increased chance of mild, wet and windy conditions, but a few colder spells are still possible. Vigilance is therefore required going forward into the New Year in relation to a potential increased risk of stormy conditions.
- 3.3 The EA continuously runs surge forecasts, informed by astronomical tide calculations. If a risk of coastal flooding is forecast, then this information is communicated to partners. Elevated spring tides with a corresponding higher risk of coastal flooding, if in combination with high winds, are forecast between: 27th and 29th November; 13th and 15th December; 11th and 14th and 26th and 29th January; and 9th and 12th and 25th and 28th February.
- 3.4 Kent Flood Risk Management Committee will continue to receive regular updates on water resources, flood alerts, weather warnings and response.

4. Recommendations

- 4.1 That Members note the warnings received since the last meeting of the Committee; and contribute to planning and response policy and practice through oversight and debate.

5. Contact Details

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Appendix 1: EA Flood Alerts and Warnings issued since 6 July 2020		
Date issued	Flood Zone	Status
19/09/20	Isle of Sheppey and Coast from Kemsley to Seasalter	Alert
02/10/20	Rivers Shuttle and Cray	Alert
	Isle of Sheppey and Coast from Kemsley to Seasalter	
03/10/20	River Bourne from Hadlow to East Peckham	Alert
	Rivers Eden and Eden Brook	
17/10/20	Coast from Fairlight to Dungeness including the Tidal Rother	Alert
25/10/20	River Rother and its tributaries from Turks Bridge to the Royal Military Canal	Alert

Appendix 2: Met Office Severe Weather Warnings – June 2020 to October 2020

Weather Element	Number of Warnings	Dates of Weather Events
Fog	N/A	N/A
Rain	7	18 Jun, 27 Aug, 2-4 Oct, 21 Oct
Wind	6	21 Aug, 25-26 Aug (Storm Francis), 21 Oct
Thunderstorm	31	14-18 Jun, 25-26 Jun, 31 Jul, 9-17 Aug, 26-28 Aug
Wind and Rain	3	2 Oct, 24 Oct

Appendix 3: Environment Agency Thames Barrier closures since 6th July 2020

Thames Barrier closures	Date	Status
Thames Barrier closed	06/07/20	Test
Thames Barrier closed	04/10/20	Test

