

To: Kent Flood Risk Management Committee – 6th March 2017

From: Michael Harrison, Chairman of Kent Flood Risk Management Committee

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

Classification: Unrestricted

Summary: To update Kent Flood Risk Management Committee on Environment Agency and Met Office Alerts and Warnings, and severe weather response activity since the last meeting of the Committee on 14th November 2016. Members are requested to note this report.

1. Background

1.1 KCC Resilience and Emergencies Unit and Contact Point receive Environment Agency flood alerts and warnings and Met Office severe weather alerts and warnings by e-mail on a 24 hour basis. Potential impacts upon communities, infrastructure and the wider environment are then 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 A drier than average autumn in 2016 extended into December, with Kent receiving just 17% of its average rainfall total for that month. A wetter January saw rainfall levels nearer the long-term average, largely eliminating prevailing above average soil moisture deficits and engendering a recovery, albeit short-lived, in river flows across the County.

2.2 However, February saw a return to drier conditions. As a consequence, rivers within the Medway and Stour catchments are flowing at below their normal expected levels for the time of year. Aquifer levels across Kent are also below normal range. The same general synopsis is reflected in the County's reservoirs, with Bewl Reservoir the focus of particular scrutiny, as it is currently two thirds full. As with the majority of reservoirs in Kent, further filling is largely dependent upon a sustained recovery of river flows, as only when such conditions are met are water companies permitted to abstract and fill. In most areas, water resources are generally resilient to a single dry winter, but the observed deficiencies increase the potential for future water resource pressures. With the window for substantial aquifer and reservoir replenishment narrowing before evapotranspiration¹ rates begin to climb, late-winter/early-spring

rainfall patterns will have a significant bearing on the long-term water resources outlook. The latest outlooks suggest a continuation of dry conditions through the later winter period and no clear signal for the spring. The Environment Agency will continue to monitor the water resources situation, and provide timely updates as conditions dictate. In addition, they will continue to work with the water companies and other abstractors, as well as partner organisations, so as to ensure that any response is proportionate to the prevailing conditions.

2.3 Since the last meeting of the Kent Flood Risk Management Committee on the 14th November 2016, a total of 17 flood alerts (4 fluvial and 13 coastal) have been issued by the Environment Agency². This contrasts with 54 flood alerts (43 fluvial and 11 coastal) during the corresponding period in 2015/16.

2.4 A total of 12 yellow Met Office severe weather alerts and warnings have also been issued since the last meeting (2 for ice and fog, 5 for fog, 1 for snow and 4 for high winds)³. A single amber warning for high winds was also issued. This narrowly exceeds the 10 yellow alerts and warnings issued during the same period last year.

2.5 The Thames Barrier has been closed on 10 occasions (8 for flood defence and 2 for test purposes) since the last meeting of the Committee in November. The figure for the same period in 2015/16 was 3, twice for test purposes and once operationally during Storm Imogen in early February 2016.

3. Next Steps

3.1 Prevailing dry conditions will continue to be closely monitored by KCC and the wider resilience community in Kent, informing water resource planning and effective emergency planning contingencies for drought and wildfire. However, the damaging surface water flooding events experienced last June underline the unpredictability of our weather, and the need for continued vigilance on local flood risk by Kent County Council, district councils, the wider resilience community, residents and businesses.

3.2 Members will continue to be regularly updated on flood alerts, severe weather warnings, operational response and significant flood events across Kent.

4. Recommendations

4.1 That Members:

- Note the level 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 The process whereby water is transferred from the land to the atmosphere by evaporation from soil and other surfaces and by transpiration from plants

² Please see appendix 1

³ Please see appendix 2

Appendix 1: Environment Agency Flood Alerts issued since 14th November 2016

| Flood Zone | Date issued | Status |
|--|--------------------|---------------|
| Coast from Pegwell Bay to Deal including Tidal Stour | 15/11/2016 | Alert |
| River Eden and Eden Brook Area | 20/11/2016 | Alert |
| Upper River Medway Area | 20/11/2016 | Alert |
| River Rother Area | 20/11/2016 | Alert |
| Coast from Pegwell Bay to Deal including Tidal Stour | 11/01/2017 | Alert |
| Coast from Dartford to Allhallows | 11/01/2017 | Alert |
| Tidal Medway, Medway Estuary and Isle of Grain | 11/01/2017 | Alert |
| Isle of Sheppey and Coast from Kemsley to Seasalter | 11/01/2017 | Alert |
| Coast from Pegwell Bay to Deal including Tidal Stour | 12/01/2017 | Alert |
| Tidal Medway, Medway Estuary and Isle of Grain | 13/01/2017 | Alert |
| Coast from Sandgate to Dungeness | 13/01/2017 | Alert |
| Isle of Sheppey and Coast from Kemsley to Seasalter | 13/01/2017 | Alert |
| Coast from Fairlight to Dungeness including the Tidal Rother | 13/01/2017 | Alert |
| Coast from Pegwell Bay to Deal including Tidal Stour | 13/01/2017 | Alert |
| Coast from Whitstable to Margate | 13/01/2017 | Alert |
| Coast from Dartford to Allhallows | 13/01/2017 | Alert |
| Lower River Medway Area | 13/01/2017 | Alert |

Appendix 2: Met Office Severe Weather Warnings issued since 14th November 2016

| Met Office Warnings | Date issued | Status |
|---|--------------------|---------------|
| Yellow Warning of Wind for London & South East England | 17/11/2016 | Warning |
| Amber Warning for Wind for London & South East England | 19/11/2016 | Warning |
| Yellow Warning of Wind for London & South East England | 21/11/2016 | Warning |
| Yellow Warning of fog for London and South East England | 05/12/2016 | Warning |
| Yellow Warning for fog in London and South East England | 11/12/2016 | Warning |
| Yellow Warning for fog in London and South East England | 12/12/2016 | Warning |
| Yellow Warning of fog for London and South East England | 30/12/2016 | Warning |
| Yellow Warning of fog for London and South East England | 30/12/2016 | Warning |
| Yellow Warning of Snow for London & South East England | 10/01/2017 | Warning |
| Yellow Warning of Ice and Fog for London & South East England | 24/01/2017 | Warning |
| Yellow Warning of Ice and Fog for London & South East England | 24/01/2017 | Warning |
| Yellow Warning of wind for London and South east England | 31/01/2017 | Warning |
| Yellow Warning of Wind for London & South East England | 23/02/2017 | Warning |