To: Kent Flood Risk Management Committee – 20th November 2015

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

Subject: Environment Agency and Met Office Alerts and Warnings and KCC flood 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 KCC flood response activity since the last meeting of the Committee on 20th July 2015. Members are requested to note this report.

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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, infra-structure 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 of 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 the Kent Resilience Forum Severe Weather Advisory Group.

1.3 More precisely geographically focused Flood Warning Service zones were introduced by the Environment Agency on 29th October 2014. This change was informed by lessons learned from the flooding events experienced across Kent during winter 2013/14, and has undoubtedly enhanced the effectiveness of this service.

2. Latest situation

2.1 Met Office data indicates that last August was the wettest experienced in south-east England since 1977. Resultant surface water flooding led to property damage in a number of locations across Kent, including New Romney on the 13th, the Pantiles, Silverdale and the train station at Tunbridge Wells on the 24th and Allenby Avenue in Deal on the 25th. Kent County Council is currently undertaking a detailed investigation into the nature and impact of the flooding in Tunbridge Wells. By contrast, both September and October 2015 have been notably dry months. However, September 2015 experienced the maximum tidal range in the natural 19 year astronomical tide cycle, resulting in 11 coastal flood alerts and operation of

the Thames Barrier. A surface water flooding event occurred in Albert Road, Deal on 22nd September thought to be linked to a malfunction at a local pumping station, with Southern Water currently investigating this incident.

2.2 Since 20th July 2015 a total of 20 Environment Agency flood alerts were issued, dividing almost equally between tidal and fluvial (river) locations[1].

2.3 A total of 7 yellow Severe Weather Alerts and Warnings have been issued for heavy rain and the risk of surface water flooding since the last meeting[2].

2.4 The Thames Barrier was closed on 4 occasions, for both test (3) and operational (1) reasons.

3. Next Steps

3.1 The autumn and winter period brings with it an increased risk of flooding. Long range forecasts suggest that weather conditions are likely to remain mild and unsettled in the period up to Christmas, underlining the need for continued vigilance by Kent County Council, our partners and residents.

3.2 The greatest risk of tidal flooding is experienced between November and March, when storms can coincide with high tides. Key dates for such high tides are the 26th and 27th November, 13th and 14th December, 26th and 27th December, 13th and 14th January and 26th January[3].

3.3 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 of alerts received since the last meeting of the Kent Flood Risk Management 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 and Warnings issued since 20th July 2015		
Flood Zone	**Date issued**	**Status**
Rivers on the Isle of Sheppey	24/07/2015	
Plenty, Swalecliffe and West Brooks Area	24/07/2015	Alert
New Romney Sewer Arm Area	13/08/2015	Alert
Upper River Stour Area	13/08/2015	Alert
Plenty, Swalecliffe and West Brooks Area	24/08/2015	Alert
Rivers on the Isle of Sheppey	24/08/2015	Alert
Coast from Pegwell Bay to Deal including the Tidal Stour	31/08/2015	Alert
Sandgate to Dungeness	31/08/2015	Alert
Fairlight to Dungeness including the Tidal Rother	31/08/2015	Alert
Coast from Sandgate to Dungeness	31/08/2015	Alert
Isle of Sheppey and Coast from Kemsley to Seasalter	31/08/2015	Alert
Coast from Whitstable to Margate	31/08/2015	Alert
Tidal Medway, Medway Estuary and Isle of Grain	31/08/2015	Alert
Coast from Dartford to Allhallows	31/08/2015	Alert
Coast from Sandgate to Dungeness	01/09/2015	Alert
Coast from Sandgate to Dungeness	14/09/2015	Alert
Coast from Fairlight to Dungeness including the Tidal Rother	14/09/2015	Alert
Upper River Stour area	22/09/2015	Alert
Plenty, Swalecliffe and West Brooks	22/09/2015	Alert
Lower River Medway Area	22/09/2015	Alert

Appendix 2: Met Office Severe Weather Flood Alerts and Warnings issued since 10th March 2015		
Met Office Alerts and Warnings	**Date issued**	**Status**
Yellow Alert of Rain and Wind for London & South East England	24/07/2015	Alert
Yellow Warning of Rain for London and South East England	24/08/2015	Warning
Yellow Warning of Rain for London and South East England	25/08/2015	Warning
Yellow Warning of Rain for London and South East England	27/08/2015	Warning
Yellow Warning of Rain for London and South East England	28/08/2015	Warning
Yellow Warning of Rain for London & South East England	22/09/2015	Warning
Yellow Warning of Rain for London & South East England	02/10/2015	Warning

Appendix 3

Briefing

Peak Astronomical Spring Tides

The following table indicates the peak astronomical Spring tides up to the 26 January 2014.

A Spring tide is the greatest difference between the high and low water. The peak spring tide is when levels will be at their highest. Tides will be high for 2-3 days before and after each peak spring tide.

Tide levels can be influence by differences in air pressures, creating positive or negative surges. Surge activity is not included in an astronomical forecast.

In addition the impact of wind speed and direction is not included in an astronomical forecast.

All data is presented in Ordnance Datum. To compare Ordnance Datum with local or Chart Datum, for Dover add 3.67m and for Sheerness add 2.90m.

Date of Astronomical Peak	Dover (m AOD)	Sheerness (m AOD)
26/11/2015 10:43	3.34	
27/11/2015 13:09		3.2
13/12/2015 01:18		2.86
14/12/2015 00:00	3.00	
26/12/2015 23:45	3.12	
27/12/2015 13:42		3.01
13/01/2016 00:47	3.18	
14/01/2016 00:00		3.01
26/01/2016 00:07	3.08	
26/01/2016 14:07		2.88