

To: Kent Flood Risk Management Committee – 17th July 2017

From: Tony Hills, Chair 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 the water resources situation, Environment Agency and Met Office Alerts and Warnings, and flood response activity since the last meeting of the Committee on 6th March 2017. Members are requested to note this report.

1. Background

1.1 KCC Resilience and Emergency Planning Service and Contact Point receive Environment Agency and Met Office 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 and winter has extended into spring and early summer 2017. The Environment Agency has recently issued a Prolonged Dry Weather Update outlining the current situation¹.

2.2 Prevailing dry conditions are reflected in the paucity of flood alerts issued since the last meeting of Kent Flood Risk Management Committee on the 6th March 2017. A total of just 5 flood alerts (4 fluvial and 1 coastal) have been issued by the Environment Agency². This contrasts with 32 flood alerts during the corresponding period in 2016.

2.3 A total of 6 yellow Met Office severe weather alerts and warnings have been issued since the last meeting (5 for heavy rain and 1 for high winds)³. This is far lower than the 12 yellow alerts and warnings issued during the same period last year.

2.4 The Thames Barrier has been closed by the Environment Agency on 4 occasions (all for test purposes) since the last meeting of the Committee. The figure for the same period in 2016 was 10 (8 for flood defence and 2 for test purposes).

¹ Please see appendix 1

² Please see appendix 2

³ Please see appendix 3

3. Next Steps

3.1 The 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, pollution and wildfire planning and response. Indeed, the Kent Resilience Forum Drought Plan has been reviewed and updated and is currently out to consultation with local resilience partners.

3.2 Elected Members will continue to be regularly updated on the water resources situation, flood alerts, severe weather warnings, operational response and any significant flooding events affecting Kent.

4. Recommendations

4.1 That Members:

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

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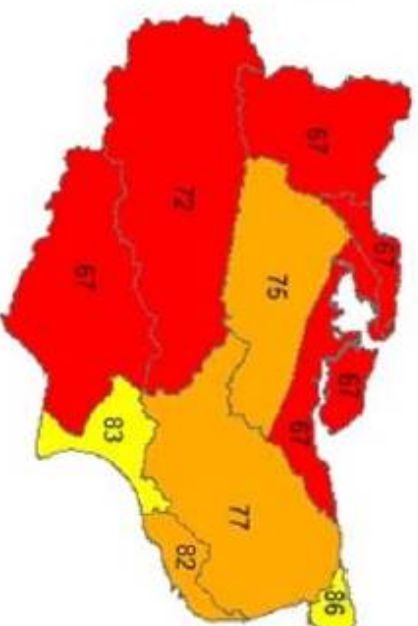
Background documents: None

Prolonged dry weather update - Kent

The situation

- We are currently in a period of prolonged dry weather. The 11 month period from July 2016 to May 2017 was the driest on record for many parts of Kent.
- The dry winter and spring means river flows and groundwater levels are much lower than they would usually be at this time of year and some reservoirs are also below average.
- Rivers that are predominantly fed by rainfall are notably or exceptionally low (Medway, Upper Stour, Rother). Rivers supported by chalk groundwater are also below normal or notably low (Darent, Great Stour, Dour).
- Groundwater levels in some areas are exceptionally low for this time of year and are declining sharply.
- The intermittent periods of rainfall over the last month have temporarily eased pressure on the environment, but have not changed the overall water resources situation.
- The period of hot, dry weather in June put the environment and farmers under increased pressure.
- We are now seeing some environmental impacts exacerbated by the prolonged dry weather.
- Water companies have not put any customer restrictions in place, but always advise people to use water efficiently, especially during prolonged dry weather when everyone can help preserve water supplies and protect the environment.

Kent rainfall map - last 12 months



Total rainfall for hydrological areas across Kent for the last 12 months (to May 2017), classed relative to an analysis of respective historic totals.
 Data source: Rainfall from South East Soil Moisture Model.
 Some features of this map are based on digital spatial data licensed from the Centre for Ecology and Hydrology. © CEH. Includes material based on Ordnance Survey 1:50 000 maps with the permission of the controller of Her Majesty's Stationery Office © Crown copyright. All rights reserved. Environment Agency, 100026390, 2017.

Environmental impacts

- Low river flows cause problems for fish and wildlife and increase the impact of pollution.
- We have recently attended several incidents where fish have died, which have been exacerbated by the hot and dry weather.

June 2017



What are we doing?

- We are monitoring river flows and groundwater levels.
- We use this information to manage the many water abstractions by farmers, businesses and water companies.
- We are attending significant environmental incidents and taking appropriate action to minimise any potential impacts on the environment and wildlife.
- We are working with water companies, who are also taking appropriate actions to manage the prolonged dry weather.
- We are working with all our partners to balance the needs of people, business and the environment.

Outlook

- Continued dry weather will add pressure on water resources and further impact on the water environment and farmers.
- Any further rainfall will be welcome, although we do not anticipate that reservoir or groundwater levels will recover until this winter, at the earliest.

How can I help?

- We always advise that everyone uses water wisely, especially during a period of dry weather. Please follow the advice of your water company on using water efficiently.
- Please report any environmental incidents to our 24 hour hotline: 0800 80 70 60.

Appendix 2: Environment Agency Flood Alerts issued since 6th March 2017

| Flood Zone | Date issued | Status |
|---|--------------------|---------------|
| Pent Stream (Folkestone) | 28/05/2017 | Alert |
| Rivers Shuttle and Cray | 28/05/2017 | Alert |
| Rivers Shuttle and Cray | 21/06/2017 | Alert |
| Isle of Sheppey and Coast from Kemsley to Seasalter | 25/06/2017 | Alert |
| Rivers Shuttle and Cray | 05/07/2017 | Alert |

Appendix 3: Met Office Severe Weather Warnings issued since 6th March 2017

| Met Office Warnings | Date issued | Status |
|--|--------------------|---------------|
| Yellow Warning of Rain for London & South East England | 26/05/2017 | Warning |
| Yellow Warning for Rain for London & South East England | 01/06/2017 | Warning |
| Yellow Warning of Wind for London & South East England | 06/06/2017 | Warning |
| Yellow Warning of Rain for London and South East England | 21/06/2017 | Warning |
| Yellow Warning of Rain for London and South East England | 30/06/2017 | Warning |
| Yellow Warning of Rain for London and South East England | 04/07/2017 | Warning |