HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Executive Member for Economy, Transport and Environment
Date:	11 July 2014
Title:	Response to the Flood Investigation in Romsey and Sub-Catchment Flood Risk Management
Reference:	5957
Report From:	Director of Economy, Transport and Environment

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1. Executive Summary

1.1 This paper seeks approval to take forward the actions and recommendations within the Flood Investigation report into the flooding that occurred in Romsey between December 2013 and February 2014, which was carried out in accordance with section 19 of the Flood and Water Management Act 2010 ("FWMA"). This work will incorporate short term response actions as well as developing a more coordinated longer term approach with flood risk management agencies and other partners, on a sub-catchment basis.

1.2 It is proposed that the report's actions and recommendations are progressed as part of the County Council's existing flood risk management work by:

a) Implementing specific actions as part of a programme of early action, identified following recent flooding and those already incorporated in flood-risk capital and maintenance schemes.

b) With other flood risk management agencies and relevant partners develop a wider sub-catchment strategy for the Test Valley, including the specific actions for Romsey which incorporates the findings of the recent Section 19 Flood Investigation report. This work will consider the development of a potential flooding pathfinder programme for Hampshire as a whole

1.3 This paper provides background information on the findings, and actions, of the Section 19 Flood investigation report into the flooding experienced in Romsey in Winter 2013/14. A summary of the actions based on the Section 19 Flood investigation report and knowledge from the response and recovery operations is provided in Appendix 1.

1.4 A summary of early actions is provided in Appendix 2.

2. Contextual information

2.1 Following the flooding incidents in Romsey between December 2013 and February 2014, Hampshire County Council as the Lead Local Flood Authority (LLFA) conducted an investigation in accordance with Section 19 of the FWMA.

2.2 As the County Council were one of the emergency responders during the flood events, a consultant, CH2MHILL, was commissioned to carry out the investigation on behalf of Hampshire, providing an independent examination of the incidents. There were two phases to the flood investigations as follows:

Phase 1: Investigation of flooding incidents between 23 December 2013 and 6 February 2014. Three areas were investigated:

- Cupernham Lane and Fishlake Meadows
- Winchester Road (including Southampton Road and Middlebridge Street)
- Mainstone and Causeway.

Phase 2: Investigation of the flooding incident that started on 14 February 2014.

2.3 The investigations revealed that an estimated 96 properties were flooded in December and January 2013/14. Of these, 34 were known to have flooded internally. Sources of flooding were varied and included fluvial (from the river), groundwater, surface water and foul water flooding. Other key findings of the Phase 1 investigation were:

- Cupernham Lane was flooded by a combination of surface water from overland flow and high groundwater levels.
- At Winchester Road high groundwater led to the flooding of properties cellars and the inundation of sewers, particularly around the Plaza roundabout.
- At Mainstone and Causeway there were separate distinct incidents which contributed to the flooding. Surface water flooding from the A3090/A27 to the properties at Mainstone, and also groundwater levels, combined with excess flows in the ordinary watercourse in the field to the rear of Mainstone causing separate incidents on the Causeway and the rear of properties on Mainstone.
- The properties in Riverside Gardens were affected by surface water flooding from sewer networks. Some properties suffered directly from fluvial flooding from the River Test.
- Properties in Middlebridge Street were affected by surface water and foul flooding from sewer networks. Some properties also reported groundwater flooding.

2.4 The investigation into the flooding in December and January found that the Abbotswood development was not likely to have increased flood risk at Cupernham Lane. However, the Section 19 Flood Investigation report recommends that key issues in relation to the on-going drainage works are addressed through the next phases of the Abbotswood development.

2.5 The A27 and the A3090 were flooded and caused overland flow and these roads were subsequently closed. The report identified that the Mainstone and Causeway areas should be considered a high flood risk area.

2.6 The investigation found that the Southampton Road pumping station experienced a power outage which meant that the system was inundated and led to surcharging of manholes. A rising main burst outside the Cromwell Arms requiring over pumping into the River Test. Access to the pumping station at the north end of the Causeway was restricted due to the flooding on the Causeway and surrounding areas in the incident of 14 February 2014.

2.7 The investigation into the incident that started on 14 February 2014 assessed the source as being primarily fluvial, but was significantly influenced by high groundwater levels and high volumes of surface runoff. The flooding directly affected 36 domestic and 44 commercial properties. Emergency flood defence work (commonly referred to as the ‘cat flap’ and formally as Operation Pitchpole) was undertaken on the River Test in order to divert water from the town centre without causing an increased risk downstream.

2.8 The emergency work carried out through a Gold-Silver-Bronze command structure was principally focussed on the flow restriction proposed on the Fishlake Stream. The Section 19 Flood Investigation report considers that the collaborative approach by the many Flood Risk Management Authorities was well implemented and coordinated.

2.9 The implementation of Operation Pitchpole on the Fishlake Stream was successful in reducing the flood risk to Romsey and especially the Budds Lane, Greatbridge and Fishlake areas. The effect of the flow restriction was to divert some flow (approximately 40%) from the Fishlake Stream into the main River Test where it could be attenuated on the flood plains to the west of Romsey.

2.10 Due to this effect, the dates of the full implementation of the flow restriction, and the nature of the paths of the water channels upstream of their convergence just north of the Causeway, it is deemed that the area of Mainstone and The Causeway were not placed at higher risk as a result of Operation Pitchpole.

2.11 Other areas in the Test Valley were also impacted by flooding over the same period, requiring an emergency response or action from a Flood Risk Management Authority.

3 Sub-Catchment Flood Risk Management, and Funding

3.1 Currently the main sources of funding for flood risk management schemes are the Flood Defence Grant in Aid (FDGiA) and the Local Levy. The FDGiA is administered by the Environment Agency on behalf of Defra and schemes are judged in relation to cost / benefit and contributions from partners, which are required in all schemes. The allocation of Local Levy funding is decided by the Regional Flood and Coastal Committees (RFCCs).

3.2 The criteria for FDGiA are aligned with delivering the maximum flood risk mitigation for property for every pound spent. As a result factors such as the number of properties protected; areas high on the indices of multiple-deprivation and where wider environmental improvement can be achieved; score highly. This means that the character of Hampshire, where flooding occurs across wide areas and towns with relatively low populations e.g. small market towns such as Romsey or in more rural areas; are less likely to attract funding.

3.3 The County Council has submitted a number of proposals for FDGiA funding but it recognises that these may be unsuccessful due to the factors highlighted in paragraph 3.2.

3.4 The County Council as LLFA, has therefore been discussing with the other risk management agencies, including the Environment Agency an alternative approach to flood risk management and the funding of schemes. By looking at a sub-catchment approach to flood risk management, the opportunity to consider flooding across a catchment rather than focusing on individual schemes, would deliver wider benefit and value for money in an area and allow for protection of communities from flooding.

3.5 This approach will still require the delivery of solutions to flooding, but by considering the sub-catchment level, opportunities to develop schemes that protect multiple communities are more easily identified.

3.6 It is proposed that this work is delivered initially on a pilot basis in the Test Valley and Itchen Valley, with a view to widening to the remainder of the County as a potential pathfinder programme in due course.

4 Early Actions Programme

4.1 Through its ordinary watercourse work and discussions with parishes, the County Council recognises that there is the potential for early action across the County in relation to reducing future flood risk.

4.2 Due to the nature of these works they would not be eligible for funding through the FDGiA or Local Levy mechanism. An allocation of capital funding from the County Council is available and it is proposed that this be used to support the delivery of this programme, as well as working with partners where they are able to contribute additional funds. Appendix 2 contains a current list of schemes with a summary of the proposed actions.

4.3 As LLFA the County Council will also be working with riparian owners and others to ensure actions to maintain ordinary watercourses and drainage channels are undertaken; where necessary the County Council will use its enforcement powers in this area.

5 Proposed Next Steps

5.1 In order to take forward the sub-catchment pilots for the Test and Itchen Valleys, the County Council as LLFA will need to work closely with flood risk management authorities, and other interested parties. Therefore it is proposed that a project delivery group is established to achieve this. The findings and outcome of this work will be reported back to the Executive Member for Economy, Transport and Environment in due course.

5.2 This work should incorporate the findings of the Section 19 Flood investigation report for Romsey and identify priority actions and measures for early intervention alongside the wider programme of early action.

6 Recommendations

6.1 That the County Council, as Lead Local Flood Authority (LLFA), co-ordinates the response to the actions and recommendations from the Romsey Section 19 Flood Investigation report.

6.2 That the County Council works with partners to develop sub-catchment pilots for the Test Valley and Winchester (Itchen) to develop a programme of flood risk management, with consideration to the development of a wider pathfinder approach to flooding in Hampshire as a whole.

6.3 That authority be given for the development and implementation of a programme of early actions on flood risk management using local resources within approved funding allocations, where funding is unlikely to be achieved via Flood Defence Grant in Aid or Local Levy mechanisms, and that delegated approval be given to the Director of Economy, Transport, and Environment to finalise the programme and implement schemes within approved budgets.

Rpt/5957/CW

CORPORATE OR LEGAL INFORMATION:

Links to the Corporate Strategy

Hampshire safer and more secure for all:	no
Corporate Improvement plan link number (if appropriate):	
Maximising well-being:	yes
Corporate Improvement plan link number (if appropriate):	
Enhancing our quality of place:	yes
Corporate Improvement plan link number (if appropriate):	

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

Document	Location
None	

IMPACT ASSESSMENTS:

1. Equalities Impact Assessment:

1.1 The proposals in this report have been developed with due regard to the requirements of the Equality Act 2010, including the Public Sector Equality Duty and the Council's equality objectives. The website contains a summary assessment of the impacts on Enhancing Hampshire's Quality of Life and Ensuring that Hampshire is Energy and Climate Change Resilient

1.2 It is considered that the issues covered by this report will not have impacts requiring further specific actions by the Council above those already established in its existing policies and working procedures.

2. Impact on Crime and Disorder:

2.1. The recommendations in this report are unlikely to have any direct impact on crime and disorder, but may indirectly reduce the risk of home burglary and looting when areas are evacuated as a result of flooding.

3. Climate Change:

3.1. The recommendations in this report are unlikely to have a significant impact on the carbon footprint or energy consumption of the County Council

3.2. Climate change is likely to increase the risk of future flooding and flood risk. By undertaking the recommendations in this report Hampshire's communities will be better prepared and more resilient to future flooding as a result of climate change.

	Item	Potential Task	Timescale	Lead Authority (other authorities involved)
1	**Ordinary watercourses in Mainstone and Causeway area**	*Assess the watercourses, identify land owners and ensure maintenance is undertaken by riparian owners (use of enforcement if required).*	Short term	Hampshire County Council (landowners)
2	**Main River Test maintenance**	*Assess the watercourses, identify land owners and ensure maintenance is undertaken by riparian owners (use of enforcement if required).*	Short term	Environment Agency (landowners)
3	**Flooding from the A27**	*Assess the surface water drainage from the A27 and what improvements can be undertaken. Assess the highway maintenance programme and update where necessary.*	Medium term	Hampshire County Council
4	**Mitigation of identified High Flood Risk Area**	*Examine and assess future management of flood risk from the Causeway including improvements to the drainage from the adjacent field*	Medium to long term	Hampshire County Council (Environment Agency, homeowners)
5	**Access to pumping station at the North End of Causeway**	*Consider options and develop a preferred proposal to maintaining access to the pumping station at the North End of Causeway*	Short term	Hampshire County Council (Southern Water, Environment Agency, landowners)
6	**Provision of the Cat Flap (Operation Catchpole) on the River Test**	*Undertake feasibility of making this emergency measure permanent on the main river and identify funding sources for this work.*	Medium to long term	Environment Agency (Hampshire CC, landowners)
7	**Sewer network and flood risk**	*Assess and identify options for dealing with the interaction between surface & groundwater on the sewer system particularly around Middlebridge Street and the affects of the tidal locking.*	Medium to long term	Southern Water (homeowners, Hampshire CC, Environment Agency)
8	**Pumping station resilience**	*Provision of back up mechanism for potential power outage and potential failure of pump within the pumping stations. Put in place a protocol for over pumping into the River Test*	Short term	Southern Water
9	**Review of the Abbotswood drainage strategy**	*Review of what is currently in place and what is proposed for the drainage strategy for Abbotswood. Assessment of whether the current proposals are acceptable and alterations to the proposals where required.*	Short term	Test Valley BC (Environment Agency, Hampshire CC, Southern Water, Developer)
10	**Flooding across Cupernham Lane**	*Assessment of the options for managing overland flow across Cupernhams Lane*	Medium term	Hampshire County Council (Test Valley BC, landowners)

Appendix 2: Indicative Early Actions Programme

Potential Locations	Key Partners	Summary of the potential actions
The Candovers (Preston + Brown)	Parish Council, EA, private landowners	Increased capacity to existing ditches and culverts.
Hurstbourne Tarrant		Increased capacity to existing surface water network and improvement to flow paths.
Water Lane, Winchester	WCC, EA	Flood 'barrier'.
Littleton	Parish Council, WCC	Increased capacity to existing surface water network and improvement to flow paths.
Hursley	Parish Council, WCC	Increased attenuation capacity and improvement to existing drainage network
Budds Lane, Romsey	TVBC, EA	To be confirmed
Kingsworthy / Headbourne Worthy	Parish Council, WCC	Increased capacity to existing surface water network and improvement to flow paths.
Cheriton	Parish Council, WCC	Increased capacity to existing surface water network and improvement to flow paths.
Bramdean	Parish Council, WCC	Increased capacity to existing surface water network and improvement to flow paths.
Hinton Ampner	Parish Council, WCC	Increased capacity to existing surface water network and improvement to flow paths.
Kings Somborne	Parish Council, TVBC	Increased capacity to existing surface water network and improvement to flow paths.
Netley Marsh, New Forest	Parish Council, EA, private landowners	New and reinstatement ditch work.
Copythorne, New Forest	Parish Council, EA, private landowners	New and reinstatement ditch work.
North Gorley, New Forest	Parish Council, EA	Increased capacity to existing ditches and culverts.
Church Lane East, Aldershot	RBC	Increased capacity to existing surface water network and improvement to flow paths.
Chandlers Lane, Yateley	HDC	Increased capacity to existing ditches and culverts.
Woodlands and Tiptoe, New Forest	EA	Increased capacity to existing ditches and culverts.
Watery Lane, Upper Clatford		New ditch work discharging into the main river catchment.
Park Avenue, Winchester	WCC, Winchester School of Art	Flood 'barrier'.
Timsbury	EA	To be confirmed
Sutton Scotney	Parish Council	Increased capacity to existing surface water network and improvement to flow paths.
Pamber Green	Parish Council	Increased capacity to existing culvert.