

HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Executive Member for Environment and Transport
Date:	3 November 2016
Title:	Buckskin and Romsey Flood Risk Management
Reference:	7849
Report From:	Director of Economy, Transport and Environment

Contact name: Simon Cramp and Gloria Kwaw

Tel:	01962 832348	Email:	Simon.cramp@hants.gov.uk
	01962 847657		Gloria.kwaw@hants.gov.uk

1. Executive Summary

1.1. The purpose of this paper is to seek approval for an approach to develop the Buckskin and the Romsey Flood Alleviation Schemes, and for working with multi-agency partners to identify and secure contributions for the schemes subject to their technical and financial viability.

1.2. This paper seeks to:

- Provide an update on the progress of the schemes;
- Outline the financial implications for the County Council;
- Set out the key issues and risks
- Set out the next stages of the development of the schemes

2. Contextual information

2.1. Following approval of the Flood Risk and Coastal Defence Programme report to the Executive Member for Environment and Transport in September 2016, this paper provides an update on the emerging flood alleviation schemes for Buckskin and Romsey. These two locations were identified as priorities for the programme recognising the County Council's commitment to work with the Environment Agency, Borough Council and other partners to bring forward improvements for flood risk reduction using a multi-agency approach.

Buckskin

- 2.2. Following significant flooding in Buckskin and surrounding areas in the winter of 2013-2014, Hampshire County Council in its role as Lead Local Flood Authority undertook investigations in accordance with Section 19 of the Flood and Water Management Act 2010 to establish the cause and extent of flooding. The flooding in Buckskin appeared to have been driven by groundwater and surface water exacerbated by fluvial flooding. This was followed by a feasibility study of gravity and pumped options led by the County Council, which is responsible for investigating groundwater flooding. The feasibility study identified a potential solution for reducing flood risk by installing a new surface water gravity pipe at Buckskin between Ridgeway Centre area and winterbourne north of Worting Road roundabout, and new flood storage areas.
- 2.3. Subsequent groundwater modelling to test the preferred option has shown that although flood storage areas may be required for events of increased surface water flows, at present, the most technically viable option to deal with an event of similar significance to the 2014 event, is a gravity flow pipe with no need for storage areas. This solution is subject to suitable gradients being achieved.

Romsey

- 2.4. In the winter of 2013/14, Romsey was significantly impacted by flooding with up to 36 residential and 44 commercial properties reported as flooded from sources including groundwater, sewer, surface water and fluvial. The flood event damaged the local economy, led to the closure of parts of the highway network, and disrupted critical infrastructure and services.
- 2.5. In April 2014, the County Council carried out a Section 19 investigation. The report's conclusions have been used by the County Council, Test Valley Borough Council and other partners to inform an extended high level assessment of flood risk in Romsey and feasibility studies to identify a preferred option to manage flooding from all sources.
- 2.6. A detailed feasibility appraisal is now being progressed to develop a scheme of works including the installation of a water control structure at the head of Fishlake Stream, river embankment work, flood storage areas and localised surface water drainage improvements.

3. Finance

- 3.1. In March 2015, it was announced that the County Council's bids for the Romsey and Buckskin Flood Alleviation Scheme had been allocated funding in the six year (2015/16 – 2020/21) Flood and Coastal Erosion Risk Management (FCERM) capital programme. Romsey was allocated £2.87m Grant in Aid (GiA), and £0.310m local levy by the Southern Regional Flood and Coastal Committee. In addition, it was confirmed that the Romsey (R.

Test) Fluvial Flood Alleviation Scheme, promoted by the Environment Agency, had been allocated approximately £0.7m. Buckskin was allocated £2.0m GiA.

- 3.2. These allocations are indicative and, in accordance with the process established by Defra for unlocking FDGiA, subject to the development of a robust business case, cost benefit analysis, and securing partnership funding contributions. The current Defra formulae for determining FDGiA allocation includes the level of deprivation of the location.

Buckskin

- 3.3. The base project cost of the Buckskin Flood Alleviation Scheme based on the Gravity Flow Pipe Option is estimated to be £3.8m but rises up to £6.0m when risk contingency, and optimism bias required by Environment Agency's guidance for infrastructure projects at this stage of development, is taken into account. The estimated costs are based on assumptions and uncertainties which will be refined as the development of the scheme progresses.
- 3.4. Subject to the submission of a full business case, the scheme is likely to attract around 30-40% of its overall costs from Defra's Flood Defence Grant in Aid (FDGiA). This will leave a shortfall of 60-70% funding for the scheme which is to be sourced from a variety of sources including the County Council, its multi agency partners and local levy.
- 3.5. A key criterion of local levy funding administered by the Thames Regional Flood and Coastal Committee is the ability to show local buy-in and partnership contributions. The County Council and the multi-agency partners contributions will therefore be required to 'unlock' local levy funding.
- 3.6. The Environment Agency has allocated funding from the FDGiA for the development of the next stages of the scheme which is the detailed design stage, preparation of the full business case and project appraisal. This process will verify indicative costs and, on completion, a formal decision will be sought from the Executive Member for the County Council's funding commitment to the scheme.

Romsey

- 3.7. The cost of the preferred option currently being developed for Romsey is estimated at £2.706m including a risk contingency value of £0.74m and future maintenance and operational costs of £0.271m. Using Defra's Partnership Funding Calculator, the amount of FDGiA that could be made available to support the preferred option has been estimated as 39% or £1.055m. External contributions, which may include an element of local levy, are required to make up the remaining 61%, to the value of £1.651m.

- 3.8. Work on the detailed feasibility appraisal, which is being funded by the Environment Agency, is currently underway. It is estimated that this will be completed by early 2017 with implementation work starting in summer 2017.
- 3.9. The appraisal will provide greater certainty in the cost estimate, procurement and delivery options, and a more accurate assessment of those parties better protected by the scheme implemented. The appraisal will also provide an accurate economic justification for the works to proceed through Outline Business Case (OBC) and Full Business Case (FBC) as required by the FDGiA process. Subject to approval of details, costs and contribution amounts, the scheme will then be presented to the Executive Member for formal decision to proceed to construction.
- 3.10. Based on current figures, and existing partnership arrangements, the County Council's share of the external contributions could be in the order of £0.85m.
- 3.11. It is anticipated that the County Council's contributions to Buckskin and Romsey Flood Alleviation Schemes will be drawn from the County Council's Flood Risk and Coastal Defence (FRCD) Programme. The aim of the programme is to provide for works and strategies for flood defence and coastal sites including match funding for Environment Agency grant in aid schemes and joint initiatives with other external bodies. To date, the programme has successfully drawn in funding in excess of £2.1m from external sources. Although a substantial amount of the total resource available to the programme has already been committed, there would be capacity to assist with the scale of financial requirements currently outlined for both the Romsey and Buckskin schemes.

4. Key issues and risks

- 4.1. The County Council, Environment Agency and Borough Councils have been working together with local partners since the 2013/14 flood events to develop and deliver a range of measures to improve flood risk management in Buckskin and Romsey. Whilst this has been welcomed, there is an expectation that more significant measures will be provided and that this will happen soon.
- 4.2. In Buckskin, public perception is that it's taken too long to complete the feasibility of the scheme. This is partly because the behaviour of groundwater is complex and little understood. It has required specialists from the Environment Agency and Atkins to agree the methodology for measuring the effectiveness of the proposed option and has been ground-breaking in its application.
- 4.3. All multi-agency organisations agree that the Buckskin scheme should not cause emergence of groundwater or flooding elsewhere including along the River Loddon. It is the responsibility of all multi-agency organisations to manage expectations with regards to the benefits and limitations of the scheme, and timescales for developing the scheme.

- 4.4. The investigations, modelling and feasibility work for Romsey and Buckskin will provide a significant level of confidence that the key issues, constraints and opportunities have been identified. However, there remains the risk that further unforeseen issues may surface during the detailed development and implementation of the scheme with, the potential to delay delivery of the project overall. For example: the assessment and relocation of utilities; impacts of environmental and heritage designations; and dealing with high groundwater levels during excavations.
- 4.5. The FDGiA and local levy funding allocated in the six year Flood and Coastal Erosion Risk Management (FCERM) programme is only indicative. The actual amount to be secured will be dependent upon the outcomes of the detailed feasibility appraisal, and availability of external contributions. The currently estimated cost of the schemes, the value of the benefits derived from their implementation, and therefore the cost benefit ratio, are likely to change as the schemes are developed further. Although considered unlikely, this could have a negative impact on the viability of the scheme and access to FDGiA.
- 4.6. If unable to attract maximum funding from either the FDGiA or local levy, or the refined costs of the schemes are more than expected in the context of local government financial constraints, it may be challenging to bridge the funding gap and this could render the schemes financially unfeasible.

5. Next steps

- 5.1. The next steps are to include (but are not limited to) the following:
 - To seek executive approval for development of the Buckskin and Romsey schemes up to project appraisal stage, including detailed scheme design and business case preparation;
 - To seek executive approval to allocate funding within the County Council's Flood Risk and Coastal Defence Programme up to the amounts currently indicated to potentially secure Defra Flood Defence Grant in Aid (FDGiA), and other partnership contributions, for the delivery of the schemes;
 - To seek executive approval to commit funds to the delivery of the schemes if proven to be viable;
 - To agree a memorandum of understanding that establishes mechanisms for collaboration, decision making and commitment of multi-agency partners. This would include Basingstoke and Deane Borough Council ring-fencing land for flood storage areas at West Ham Park and Saunders Field and leading on property level resilience, if required;
 - To seek multi-agency organisation contributions towards the scheme;

6. Recommendation

6.1. It is recommended that approval is given to:

- An agreed approach as set out in the paper to develop technically and financially feasible schemes at Buckskin and Romsey; and
- Work with multi-agency partners to identify and secure contributions for the schemes subject to their technical and financial viability.

CORPORATE OR LEGAL INFORMATION:**Links to the Corporate Strategy**

Hampshire safer and more secure for all:	Yes
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):	

Other Significant Links

Links to previous Member decisions:		
<u>Title</u>	<u>Reference</u>	<u>Date</u>
Flood Risk and Coastal Defence Programme - Priorities	7526	2016
Catchment-based Approach to Flood Risk Management in Hampshire	6931	2015
Response to the Flood Investigation in Romsey and Sub-Catchment Flood Risk Management	5957	2014
Managing Flood Risk in Hampshire Update	6243	2014
Response to the Flood Investigation in Buckskin, Basingstoke	6037	2014
Direct links to specific legislation or Government Directives		
<u>Title</u>	<u>Date</u>	
Flood and Water Management Act 2010	2010	

[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.)

<u>Document</u>	<u>Location</u>
None	

IMPACT ASSESSMENTS:

1. Equality Duty

1.1. The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act;
- Advance equality of opportunity between persons who share a relevant protected characteristic (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, gender and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- a) The need to remove or minimise disadvantages suffered by persons sharing a relevant characteristic connected to that characteristic;
- b) Take steps to meet the needs of persons sharing a relevant protected characteristic different from the needs of persons who do not share it;
- c) Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity which participation by such persons is disproportionately low.

1.2. Equalities Impact Assessment:

The development of the schemes will have no impact on specific groups with protected characteristics. The schemes when in place will offer all residents more protection from flooding, and reduce the cost, distress and disruption associated with recovery from flooding.

2. Impact on Crime and Disorder:

2.1. The development of the scheme has no impact on Crime and Disorder. The scheme when in place will reduce the chances of crime and disorder which could occur during flooding events.

3. Climate Change:

3.1. How does what is being proposed impact on our carbon footprint / energy consumption?

Putting effective schemes in place would reduce the amount of energy required to alleviate flooding emergencies through measures such as

pumping of flood water and reduce the resources needed for recovery after an event.

- 3.2. How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

The severity and frequency of extreme weather events that often cause flooding is linked to the changing climate. The design and capacity of the measures being proposed will take into consideration climate change allowances to make them fit for the future.