

HAMPSHIRE COUNTY COUNCIL**Decision Report**

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| Decision Maker: | Cabinet |
| Date: | 15 December 2014 |
| Title: | Update on Managing Flood Risk in Hampshire |
| Reference: | 6243 |
| Report From: | Director of Economy, Transport and Environment |

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1. Executive Summary

- 1.1. The purpose of this paper is to update Cabinet on the progress the County Council is making following the 2013/14 floods and to seek approval for a revised strategy for overall flood risk management and for drainage and flood defence improvements.
- 1.2. An important legacy of the 2013/14 floods has been the wealth of intelligence gathered. Continuing analysis of this will help inform Hampshire's Flood Risk Management Strategy and shape its future. Based on the lessons learned, this paper sets out principles to guide future flood risk management and aid greater understanding and co-operation between flood risk management authorities.
- 1.3. It is crucial that the momentum for sharing information and the willingness to work together during the response and recovery phase earlier this year is not lost but is harnessed and developed. No one organisation is responsible for flooding. Active engagement by all partners, both public and private sector and, of course, by local communities themselves is vital if Hampshire is to successfully reduce flood risk and strengthen its long term resilience.
- 1.4. The paper highlights the on-going challenges Hampshire faces in securing national funding for capital flood defence schemes via Flood Defence Grant in Aid (FDGiA), and how the County Council is continuing to explore all possible funding options and to exert its influence through its representatives on the Regional Flood and Coastal Committees (RFCCs).
- 1.5. This paper seeks Cabinet endorsement for the approach that is being taken on the management of flood risk and the Hampshire Groundwater Pathfinder which, in addition to seeking devolved capital funding from central government, advocates a targeted partnership approach to tackling Hampshire's complex flood issues from community action, such as clearing ditches, to low level engineering works.

2. Background

- 2.1. Last winter Hampshire experienced the most significant rainfall for 250 years. Three hundred and thirty five houses were flooded and over 270 miles of the highway network were affected, leaving strategic routes such as the A32 and A272 closed for up to two months. The village of Hambleton and surrounding areas endured three consecutive months of flooding. The market town of Romsey and villages in the outlying areas in the Test Valley experienced significant episodes of flooding from the River Test and its tributaries, and from groundwater including inundation of sewer systems. Over eighty homes in Buckskin, Basingstoke, had to be evacuated due to groundwater flooding. The City of Winchester also experienced significant problems due to overflow of the River Itchen.
- 2.2. Hampshire's coastal towns, such as Milford on Sea, experienced violent storms and coastal flooding. Further details about the 2013/14 floods and the highly praised multi-agency response and recovery operations were reported to [Cabinet on 14th April 2014](#) . Throughout this time Hampshire County Council has had a central role in acting as both a Category One Emergency Responder and as the Local Highway Authority, in addition to its broader role as the Lead Local Flood Authority.

3. Update following the winter floods of 2013/14

- 3.1. Whilst Hampshire has experienced flooding historically, most notably in 2000/01 and 2004, the flooding in winter 2013/2014 was the most extreme event to date. It was the first major flooding event since the County Council was given the role of Lead Local Flood Authority by the Flood and Water Management Act 2010.
- 3.2. This role has included the preparation of a Local Flood Risk Management Strategy (LFRMS) and statutory responsibilities, such as consenting of works to ordinary watercourses, establishment of a strategic Hampshire-wide flood risk group and formal investigations into significant flooding events. The County Council had also been actively involved with the emerging Approval Body role for sustainable urban drainage systems (SUDS). It has worked with partners such as the South East 7 to develop best practice guidance for the formal enactment of these delayed provisions of the Flood and Water Management Act.
- 3.3. Significant areas of the county were affected by flooding during the winter of 2013/14 and, although a large proportion was due to high groundwater levels, much of the flooding experienced was from a combination of flooding sources.
- 3.4. Since then the County Council's main areas of activity in relation to flood risk have been:
 - a) ensuring that current drainage and flood defence systems and assets owned and operated by the County Council e.g. highway drainage, are repaired, properly maintained and operating as designed;
 - b) commencement of a programme of highway works to repair damage to roads caused by the floods;

- c) investigations of flood incidents, and the subsequent formulation and delivery of actions to reduce flood risk locally and providing information about riparian land owner responsibilities;
 - d) focussed support for local flood groups to prepare and review flood response plans in relation to local actions and community response to flood risk;
 - e) preparation and submission of 33 Flood Defence Grant in Aid (FDGiA) funding applications and applications for Local Levy funding to support flood defence and drainage improvement works and schemes;
 - f) formulation of new strategic framework and commencement of review of the strategic documents.
- 3.5. Significant amounts of data and information have been collected and part of the overall flood risk work has involved collating and reviewing this information, as well as using this to identify key areas. This includes ongoing work to identify ways in which this information can be made more easily available to members of the public and partners.

4. Update to the Strategic Flood Risk Management Strategy

- 4.1. As part of the requirements of the Flood and Water Management Act 2010, Hampshire County Council produced a Local Flood Risk Management Strategy (LFRMS) which was adopted in July 2013. The strategy included an overall assessment of flood risk from local sources across Hampshire. It also included the collection of local flood risk information and data at that time.
- 4.2. The strategy provides a framework for how flood risk is viewed and considered within Hampshire and therefore requires reviewing periodically to ensure it is up to date and fit for purpose.
- 4.3. In conjunction with the LFRMS, a programme of Surface Water Management Plans (SWMPs) were also initiated. They provide a more detailed look at the issues affecting an area, including actions and works that can be undertaken to reduce flood risk. At the time of commissioning a number of district areas were identified as the basis for the SWMPs. Draft reports for Rushmoor and Eastleigh are available.
- 4.4. Hampshire also commissioned a Groundwater Management Plan (GWMP) which covered the whole county. As the LLFA, the County Council reviewed previous studies following the flooding in 2000/2001 and worked in partnership with other authorities to prepare the GWMP which was consulted on in December 2013.
- 4.5. Since the winter floods of 2013/14, a review of those documents has been undertaken. It is now proposed to refocus the strategic documents away from district-based boundaries to look at a catchment-based approach, and to provide a clearer policy framework, utilising all the information collected and better inform future flood management.
- 4.6. It is proposed that in the interim amendments to the LFRMS are made in the form of additions and specific amendments to the existing plan rather than a wholesale revision of this document. At this stage it is not proposed to further

review, replace or update the SWMPs or GWMP until the catchment-based approach pilots are completed and the outcomes reviewed.

5. Funding via FDGiA bids and local levy

- 5.1. Currently the main sources of funding for flood risk management schemes are from Flood Defence Grant in Aid (FDGiA) and the Local Levy, although these have to be augmented by local match funding. FDGiA is administered by the Environment Agency on behalf of DEFRA and schemes are judged in relation to cost/benefit, as well as contributions from partners which are required for all schemes. The allocation of Local Levy funding is decided by the Regional Flood and Coastal Committees (RFCCs).
- 5.2. A total of 33 bids were submitted to the three Environment Agency regions for FDGiA. Fifteen bids were submitted for the six year Flood Defence Capital Programme (2015/16 – 2020/21) and 18 for inclusion into its seven year plus pipeline programme to develop schemes for future flood defence and alleviation measures. The outcome of the FDGiA bidding process was announced on 2nd December as part of the Government’s Infrastructure Investment Plan relating to the Chancellor’s Autumn Statement delivered on 3rd December 2014.
- 5.3. Within Hampshire, in addition to the funding awarded for the scheme at Hambledon, 8 further County Council schemes have been included in the programme, subject to development of schemes and approval of business cases. The total value of these schemes is £4.8m, with the largest allocation to Buckskin. The provisionally approved schemes include a number of smaller measures with funding becoming available, subject to business case approval from 2016-18, with larger allocations for Buckskin, again subject to approval of business cases, from 2018-21 and funding for Romsey and Upper Test Villages from 2021 and beyond. There are no County Council schemes in the pipeline programme at present, though it is expected that the submission of additional details will support possible inclusion as the programme is reviewed on an annual basis.
- 5.4. In addition to the County Council schemes submissions for FDGiA funding were also made by the Environment Agency and other flood risk management authorities, including District Councils who submitted proposals generally for coastal works or local flood alleviation schemes. Nineteen of these bids submitted by other agencies for schemes in Hampshire have also been funded. An outline schedule of FDGiA schemes in Hampshire is attached as Appendix Two of this report. Significant funding awards were also made for schemes, mainly coastal defence works, in Portsmouth and Southampton.
- 5.5. The County Council has consistently experienced the difficulties in securing funding for Hampshire and its characteristic groundwater flooding through the FDGiA process. This is primarily because the formula used to assess the benefit of schemes focusses primarily on the numbers of properties affected, the level of deprivation in an area, and other issues such as the delivery of environmental benefit, rather than the overall impact and cost of flooding.
- 5.6. The nature of groundwater flooding in Hampshire, with the exception of Buckskin in Basingstoke, has mainly affected dispersed rural communities. The criteria for FDGiA does not favour schemes designed for such dispersed areas,

nor does it take account of the duration of flooding events, which can last for many months, nor the wider socio-economic impacts for example of an extended road closure. The requirements for bidding successfully into the FDGiA programme are very onerous, and have proved to be a further barrier to securing adequate funding, due to the costs incurred in submitting bids, particularly for relatively modest works and measures. The County Council is therefore keen to explore alternatives, which better reflect these issues, and place a meaningful value on the active engagement of local communities.

- 5.7. With respect to Local Levy the County Council has been successful in securing Local Levy for feasibility study development for alleviation schemes and quick wins. A summary of the Local Levy funding received is given in Appendix 1.
- 5.8. However, it is important to note that the local levy funding is relatively modest and is therefore mainly used for the costs of developing schemes and business cases for submission to the FDGiA programme, although some small scale works can be funded directly through local levy. Therefore, a simplification of the FDGiA process could help ensure that more local levy funding is used for capital works rather than for bid preparation. It is hoped that the Government will consider exploring this further with interested Flood Risk Management Authorities following the Autumn Statement.

6. A Catchment Based Approach To Flood Risk Management

- 6.1. Hampshire's approach to flood risk management has developed over time and incorporates the requirements of the Flood and Water Management Act 2010 and Hampshire's experiences during and after the 2013/14 flooding events.
- 6.2. The complex nature of many of the flooding incidents during 2013/2014 and subsequent investigation has identified the need to work together with other authorities to:
 - recognise the complexity in relation to flood risk management in Hampshire;
 - build on the local evidence gathered during the 2013/14 events;
 - agree joint objectives, and set joint policies and priorities as far as possible;
 - present the evidence to enhance Hampshire's ability to obtain relevant funding.
- 6.3. To test this approach the County Council has worked with partners to jointly develop two pilot sub-catchment strategies, one for the Test, the other for the Itchen.
- 6.4. These pilots have started to develop local action strategies, which will complement the overall LFRMS for Hampshire adopted in July 2013 and, if approved, feed into Hampshire's Groundwater Pathfinder approach detailed below.
- 6.5. The two pilot studies have multi-agency involvement to identify and implement a suite of realistic measures to manage the risk of flooding from all sources in

the catchment. This recognises that measures in one part of the catchment could affect flood risk within another part; the approach therefore promotes an integrated multi agency response in active partnership with local communities. The approach also recognises the likelihood of future ground water flooding events and seeks to adapt the local environment to become more resilient to reduce the impact of such events. Central to this thinking is the importance of local alleviation measures, maintaining the integrity of the transport system, and supporting and promoting property level protection measures by the local community.

- 6.6. The approach has an overarching framework which covers the strategic aspects of the work, below that is a proposed catchment-based approach and a delivery aspect providing for the more local on the ground approaches. An illustration of this is presented in Appendix 3.

7. Groundwater Pathfinder

- 7.1. As mentioned above groundwater flooding presents unique challenges, which are not so easily overcome by engineering solutions, as other types of flooding might be. This uniqueness also presents a problem with supporting bids for national flood defence funding as areas in Hampshire do not typically fit the profile which achieve a high rating through the bid assessment process.
- 7.2. In order to better inform this process and understand the true wider social and economic impacts of groundwater flooding and, significantly, the full benefits of local interventions the County Council is proposing a Hampshire Groundwater Pathfinder and is seeking support for this approach from Government.
- 7.3. Groundwater flooding causes significant damage to communities particularly those in rural areas, where communities are effectively forced to “shut down” from normal life for the duration of the flooding. In some cases this can last for weeks or even several months. The effects are long lasting in terms of recovery beyond the initial flooding. The current cost-benefit ratio for flood alleviation measures does not favour those communities most prone to groundwater flooding. This is due to the relatively low numbers of properties affected compared to dense urban areas, and the difficulty in fully capturing the social and economic impacts such as disruption to transportation routes, businesses, welfare, social care and education. By better understanding the nature of these impacts both at an individual community level and cumulatively across the whole of Hampshire, it would be possible to develop a clearer picture of the potential benefits of delivering groundwater alleviation schemes as a whole rather than at a scheme level.
- 7.4. Therefore the County Council proposes to work with partners to develop a jointly funded programme of local measures for flood alleviation and to test the cost benefit over a three to five year programme in order to accurately assess the true cost and benefits of groundwater flooding and a local programme of integrated interventions.
- 7.5. This approach is supported by the recent House of Common’s Environment, Food and Rural Affairs Select Committee report on the Winter Floods 2013/14 which noted that each catchment area has different flood risk management requirements and consequently different funding needs. The report argues that

to be effective priorities must reflect local knowledge and local circumstances. In its recommendations it calls on Government to assess the possibility of a transition to a total expenditure classification for flood and coastal risk management to allow greater flexibility to target funding according to local priorities.

- 7.6. The types of measures that could be employed through the Pathfinder would engage the local community in practical resilience and preventative activities such as ditch maintenance, changes in land management practices, e.g. holding water 'up catchment' away from settlements; understanding riparian ownership responsibilities, and managing the interaction between groundwater and flooding from other sources e.g. fluvial and surface water. These measures would be integrated with low cost engineering solutions, potentially integrating work programmes and funding sources at the local level, such as highway alterations, drainage capacity and infrastructure improvements.
- 7.7. The aim is to build a holistic approach to the management of groundwater flood risk and lasting community cohesion & resilience and also reduce the wider socio-economic impacts of flooding. The outcome is to secure a sensible baseline for cost-benefit analysis of flood risk measures to enable investment in small scale flood defence, whilst achieving the payment for outcomes objectives and alleviating flood risk on the unique nature of chalk landscapes, such as those in the south east.
- 7.8. The Pathfinder could be supported by an academic institution to ensure that the cost benefit and value of the measures are independently tested and challenged and that the criteria for taking this forward are independently evaluated to inform Defra's review on funding criteria.
- 7.9. The project would build on the existing evidence from flood investigations,, community flood plans and the latest local data that has been gathered by all organisations and individuals. This will provide "top down" and "bottom up" information to identify what happened locally and identify priority areas for action. Effective engagement with local communities is key to obtaining the latest information and to securing community buy-in.
- 7.10. The information would also be used to identify actions that can be implemented in the shorter-term by individuals or relevant organisations without the need for additional funding.
- 7.11. Key outputs expected are:
 - A package of appropriate measures to capture the cost-benefits of a range of solutions and identify responsibilities for delivery, from high level strategic opportunities down to local level and community activity.
 - An academic analysis of the full range of socio-economic impacts as a result of flooding incidence, including impacts beyond specific communities affected.

8. Financial context

- 8.1. Cabinet will recall the estimated costs for response and recovery to the 2013/14 floods for the County Council alone was £68.5m. The County Council is still waiting to hear the outcome of its Bellwin claim, which, after taking account of

its threshold, would provide a net grant of £5m for its part in the emergency response, including payment for some recovery operations such as removing sandbags.

- 8.2. Cabinet may also recall that the estimated cost of damage to the highway network is £36m. In recognition for its asset management programme noted as best practice, the County Council secured one of the largest sums of any highway authority in the South - a total of £17.5m (£11.5m for the highway flood recovery programme and £6m from the pothole fund). This funding is now being used in conjunction with the highways annual structural maintenance budget, to restore the condition of the highway network. Following a detailed assessment of the network, a programme of repairs has been developed and work on the worst affected roads is now well underway.
- 8.3. In terms of recovery Hampshire Highways has completed over £29m of works including £11.5m on the highways flood recovery programme, £2.8m on around 50,000 defect repairs from the pothole fund, with the remainder programmed for completion by April 2015. A further £3.6m has been spent on minor drainage and structural repairs, and £2.8m on bridges, which have also been subject to inspections from specialist divers to assess flood damage in some cases. Some 137 maintenance and improvement schemes have been carried out at known flooding sites, and additional work has been carried out to maintain ditches, grips and gullies. The County Council is also designing a number of the larger schemes to repair the edges to rural carriageways and other resurfacing which will be programmed within the next couple of months.
- 8.4. The ability of the County Council to reduce flood risk will partly depend on its ability to secure capital funding for flood alleviation schemes. Following the announcement of the detailed outcome of the other FDGiA bids, through the Chancellor's Autumn Statement there is capital funding potentially available from 2016-21, but this is subject to approval of detailed business cases, which in turn follow from development and finalisation of scheme details. Without changes to the assessment methodology, it is unlikely that the County Council will be successful in attracting FDGiA funding for schemes for addressing groundwater flooding impacts in smaller rural settlements. FDGiA is still the only major mechanism for funding flood alleviation works. Funding for flood alleviation for business or employment sites, either existing or proposed may also be possible via Local Enterprise Partnership's Local Growth Fund, if the economic impact of such measures is sufficiently significant. The Council will also need to consider the impact of internal resources in the management of the delivery of future capital works, if funding is only secured on a case by case basis through annual programme review.
- 8.5. The review and update of the strategic flooding plans, as outlined above, can be managed within the existing work programme of the County Council. The action plans for the catchments will be undertaken through work with partners. It is important to note that the flooding events from last winter, and the subsequent recovery work have significantly stretched the capacity and staff resources of all the agencies involved. With further reductions in capacity at all agencies it is imperative that inter-agency working, community self help and digital self service are all maximised to maintain service delivery and resilience.

- 8.6. The funding the County Council is seeking from Government for the Hampshire Groundwater Pathfinder, would support the development of the Pathfinder and the delivery of actions. This would be supported by “in-kind” staff time and also by some capital funding already available or identified to match fund FDGiA for flood alleviation works. By seeking additional funding in this way it is anticipated that increased outcomes can be delivered.

9. Recommendations

- 9.1. That Cabinet notes the progress the County Council, as Lead Local Flood Authority, is making following the 2013/14 floods.
- 9.2. That Cabinet approves the proposed approach to managing overall flood risk in Hampshire which is set out in the report.
- 9.3. That Cabinet notes how evidence from those floods is informing the Hampshire Flood Risk Management Strategy and its associated plans in order to improve future flood resilience and authorises the updating of the strategic documents on a catchment based approach.
- 9.4. That Cabinet endorses the development of the Hampshire Groundwater Pathfinder, including engagement with partners and local communities, and efforts to secure Government support, acknowledging the limitations of the current national funding mechanism for flood defences.
- 9.5. That responsibility for finalising and submitting any required application, and negotiating with Government on the Groundwater Pathfinder, and for updating Hampshire’s Flood Risk Management Strategy in line with the catchment-based approach, be delegated to the Director of Economy, Transport and Environment, in consultation with the Executive Member for Economy, Transport and Environment.

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> Response To Flooding In Hampshire | <u>Reference</u> 5778 | <u>Date</u> 14 th April 2014 |
| Direct links to specific legislation or Government Directives | | |
| <u>Title</u> Flood and Water Management Act | | <u>Date</u> 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:** Age, disability, poverty and rurality have all been identified as having a potential medium impact. It is anticipated that in all cases these impacts are likely to be positive in the delivery of the proposals as they reduce the potential or effects of flooding on these already vulnerable groups. This will be monitored as part of the cost-benefit analysis of the work, and if necessary revised.

2. Impact on Crime and Disorder:

2.1. It is not anticipated that these proposal will have any direct impact on Crime and Disorder, however in flood situations where homes and communities have to be evacuated there is a potential increased risk of looting. By better management of flood risk, and reducing the impacts of flooding to communities, this will also have a potential to reduce the risk of looting or the requirement for additional security / policing in times of flooding.

3. Climate Change:

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

The proposal will not have any direct impact on the carbon footprint or energy consumption of the County Council.

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 future flood mitigation measures highlighted in this report will need to fully taken in to account the potential impacts of climate change and would by their nature be designed to be resilient to its longer term impacts.

Appendix 1
Local Levy received from Regional Flood and Coastal Committees by location.

| Location | District | Local Levy |
|--|-------------------------------------|-------------------|
| Buckskin, Basingstoke Flood Alleviation Scheme (FAS) | Basingstoke & Deane Borough Council | £50,000 |
| Candover Brook (Preston & Brown) | Basingstoke & Deane Borough Council | £30,000 |
| Lavant Valley – Finchdean & Rowlands Castle | East Hampshire District Council | £30,000 |
| Middleton Gardens, Cove FAS | Rushmoor Borough Council | £30,000 |
| Sycamore Road, Farnborough FAS | Rushmoor Borough Council | £48,000 |
| Rectory Road, Farnborough FAS | Rushmoor Borough Council | £49,000 |
| Winchester FAS | Winchester City Council | £50,000 |
| Monks Brook, Chandlers Ford | Eastleigh Borough Council | £20,000 |
| Romsey FAS | Test Valley Borough Council | £50,000 |

Appendix 2**Summary of flood funding announced for Hampshire on 2nd December 2014**

The announcement confirmed that the following schemes submitted by Hampshire County Council have been supported in the DEFRA Construction and Development programmes.

| Scheme Name | Total Value of Scheme (£) | Allocation in announcement (£) |
|---------------------------------------|---------------------------|--------------------------------|
| Buckskin, Basingstoke | 2,290,000 | 2,090,000 |
| Middleton Gardens, Rushmoor | 285,000 | 194,000 |
| Sycamore Road, Rushmoor | 327,000 | 235,000 |
| Rectory Road, Rushmoor | 233,000 | 140,000 |
| Candover Brook, Basingstoke and Deane | 345,000 | 15,000 |
| Upper Test, Basingstoke and Deane | 220,000 | 10,000 |
| Monks Brook, Eastleigh | 645,000 | 39,000 |
| Romsey, Test Valley | 5,235,000 | 455,000 |
| Hambledon, Winchester | 3,898,000 | 1,599,000 |
| Total | | £4,777,000 |

Bids submitted by Hampshire County Council which have not been allocated funding at this stage

| | | Programme bid submitted to: | |
|---|---------------------------|--|---|
| Scheme Name | Total Value of Scheme (£) | 6 Year Development Programme (2015 – 2021) | 7 Year + Pipeline Programme (2021 – 2028) |
| Mapledurwell, Basingstoke | tba | | ✓ |
| A32 Corridor (Farringdon), East Hants | tba | | ✓ |
| Chandlers Lane, Hart | tba | | ✓ |
| Church Lane East, Rushmoor | tba | | ✓ |
| Fleet Road Cove, Rushmoor | tba | | ✓ |
| Ringwood, New Forest | 754,000 | ✓ | |
| North Gorley, New Forest | 85,000 | ✓ | |
| Fordingbridge | 685,000 | ✓ | |
| River Lavant, Finchdean; East Hampshire | 170,000 | ✓ | |
| Appleshaw, Test Valley | 200,000 | ✓ | |
| Winchester | 8,620,000 | ✓ | |
| Local Groundwater ¹ | 755,000 | | ✓ |

¹ Includes: Kingsworthy, Headbourneworthy, Littleton, Micheldever / Northbrook, Sutton Scotney, Bishops Sutton, Bramdean, Cheriton, Kings Somborne, Owslebury, Chilbolton, The Pentons and Monxton, Stockbridge, Wester Tytherley and Longparish.

| | | | |
|--|---------|--|---|
| School Lane, Chandlers Ford; Eastleigh | 245,000 | | ✓ |
| New Forest Small Scale works, New Forest | 55,000 | | ✓ |
| Copythorne; New Forest | 920,000 | | ✓ |
| New Milton | 170,000 | | ✓ |
| Hythe; New Forest | 235,000 | | ✓ |
| Totton; New Forest | 240,000 | | ✓ |
| Bourne Rivulet; Test Valley | 120,000 | | ✓ |
| Upper Clatford; Test Valley | 35,000 | | ✓ |
| Pitt Village; Winchester | 200,000 | | ✓ |
| Hursley Village; Winchester | 375,000 | | ✓ |
| Bishops Waltham; Winchester | 185,000 | | ✓ |
| Twyford; Winchester | 230,000 | | ✓ |

A further nine bids were submitted by other agencies, e.g. the Environment Agency for projects within Hampshire which have been allocated funding. The proposed schemes are valued at £42.7m, with a Government funding allocation of £32.4m. A full breakdown of all schemes in Hampshire included in the announcement are set in the table that follows.

(Note - bids for projects within the local authority administrative areas of Portsmouth and Southampton were included in the announcement. The total cost of those projects is £93.2m, with a Government funding allocation of £49.8m, and this includes a major coastal defence scheme for Portsea Island, valued at £41.8m with allocated funding of £4.8m.)

| Project Name | Region | Risk Management Authority | Total Scheme value (£k) | | GiA allocation 2015/16 (£k) | Indicative up to 2021 (£k) | Indicative from 2021 (£k) | Expected earliest start date | Other contributions | | |
|---|----------|---------------------------|-------------------------|--|-----------------------------|----------------------------|---------------------------|------------------------------|---------------------|--|--|
| Construction Programme – projects already in construction (started before April 2015) | | | | | | | | | | | |
| Hambledon Groundwater Flood Alleviation | Southern | HCC | 3,743.0 | | | 1,599.0 | | | 2,144.0 | | |
| Sub total | | | | | | 1,599.0 | | | | | |
| South Hayling Island Beach Management Activities | Southern | Havant BC | 7,143.0 | | 288.0 | 1,553.0 | 4,606.0 | | | | |
| Sub total | | | | | 288.0 | 1,553.0 | 4,606.0 | | | | |
| Nore Farm Emsworth Flood Alleviation | Southern | Environment Agency | 322.8 | | 10.0 | | | | 100.0 | | |
| Sub total | | | | | 10.0 | | | | | | |
| Total | | | | | 298.0 | 3,152.0 | 4,606.0 | | | | |

| Projects in development , expected to start construction in future years, subject to approval of a full business case | | | | | | | | | | | |
|--|----------|-----|---------|--|--|---------|-------|--------------|-------|--|--|
| Candover Brook flood Alleviation | Southern | HCC | 345.0 | | | 15.0 | | 2021 on | 20.0 | | |
| Monks Brook (Chandlers Ford) Flood Alleviation | Southern | HCC | 645.0 | | | 39.0 | | 2021 on | | | |
| Romsey Flood Alleviation | Southern | HCC | 5,235.0 | | | 95.0 | 360.0 | 2021 on | | | |
| Upper Test Villages (Deane & Cole Henley) Flood Alleviation | Southern | HCC | 220.0 | | | 10.0 | | 2021 on | 10.0 | | |
| Buckskin Flood Alleviation, Basingstoke | Thames | HCC | 2,290.0 | | | 2,090.0 | | 2018 to 2021 | 190.0 | | |
| Middleton Gardens, Cove Flood Alleviation | Thames | HCC | 285.0 | | | 194.0 | | 2018 to 2021 | 36.0 | | |

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|--|----------|------------|-------|--|--|----------------|--------------|-----------------|------|--|--|
| Rectory Road, Farnborough FAS | Thames | HCC | 233.0 | | | 140.0 | | 2016 to 2018 | 5.0 | | |
| Sycamore Road, Farnborough FAS | Thames | HCC | 327.0 | | | 235.0 | | 2016 to 2018 | 5.0 | | |
| Sub total | | | | | | 2,818.0 | 360.0 | | | | |
| | | | | | | | | | | | |
| Phoenix Green FAS | Thames | Hart DC | 325.0 | | | 205.0 | | | 40.0 | | |
| Fareham Quay Coastal FERM | Southern | Fareham BC | 380.0 | | | 40.0 | | 2021 on | | | |
| Hill Head to Portsmouth Harbour Entrance Beach Management Plan | Southern | Fareham BC | 142.6 | | | 50.0 | | 2021 on | | | |
| Forton Lake (Gosport) Coastal FERM | Southern | Gosport BC | 300.0 | | | 195.0 | | 2018 to 2021 | | | |

| | | | | | | | | | | | |
|---|----------|--------------------|---------|--|--|-----------------|--|--------------|--|--|--|
| Seafield & Alverstoke Coastal FERM | Southern | Gosport BC | 1,320.0 | | | 1,320.0 | | 2018 to 2021 | | | |
| Eastsoke Drainage improvements | Southern | Havant BC | 3,500.0 | | | 3,500.0 | | TBC | | | |
| Christchurch Bay Beach Management Plan 2018/19 to 2022/23 | Southern | New Forest DC | 4,380.0 | | | 4,180.0 | | 2018 to 2021 | | | |
| Hurst Spit Beach Management Plan 2016/17 to 2020/21 | Southern | New Forest DC | 7,243.0 | | | 7,243.0 | | 2018 to 2021 | | | |
| Sub total | | | | | | 16,733.0 | | | | | |
| | | | | | | | | | | | |
| Bartley (New Forest) Fluvial FAS | Southern | Environment Agency | 200.0 | | | 45.0 | | | | | |
| Hythe Coastal FAS | Southern | Environment Agency | 415.0 | | | 25.0 | | 2018 to 2021 | | | |

| | | | | | | | | | | | |
|---|----------|--------------------|---------|--|-------|---------|--|--------------|---------|--|--|
| Wallington Shore Road, Fareham Tidal Flood Defence improvements | Southern | Environment Agency | 3,016.8 | | 322.0 | 2,406.2 | | 2016 to 2018 | | | |
| West Brook South FAS Emsworth | Southern | Environment Agency | 685.2 | | | 200.0 | | | | | |
| Winchester Fluvial Flood Alleviation | Southern | Environment Agency | 750.0 | | | 93.5 | | 2021 on | | | |
| North Yateley Flood Impact Reduction | Thames | Environment Agency | 492.0 | | | 148.1 | | 2016 to 2018 | | | |
| Tudor and Cricket Hill Stream | Thames | Environment Agency | 140.0 | | | 76.1 | | 2021 on | | | |
| Portchester Castle to Paulsgrove | Southern | Environment Agency | 9,100.0 | | 268.0 | 2,351.0 | | 2016 to 2018 | 5,420.0 | | |
| West Brook North Flood Alleviation | Southern | Environment Agency | 650.0 | | | 280.0 | | 2018 to 2021 | 320.0 | | |

| | | | | | | | | | | |
|------------------------------|----------|--------------------|---------|--|----------------|-----------------|----------------|--------------|--|------|
| Emsworth | | | | | | | | | | |
| Sub total | | | | | 590.0 | 5,624.9 | | | | |
| | | | | | | | | | | |
| Pipeline Programme | | | | | | | | | | |
| Lower Totton FAS | Southern | Environment Agency | 700.7 | | | 561.7 | | 2016 to 2018 | | 79.0 |
| Manor Farm , River Test RHCP | Southern | Environment Agency | 2,020.0 | | 970.0 | 300.0 | | 2016 to 2018 | | |
| Sub total | | | | | 970.0 | 1,361.7 | | | | |
| Total | | | | | 1,858.0 | 29,689.6 | 4,966.0 | | | |

Appendix 3

Diagram illustrating proposed catchment based approach.

