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## Record of meeting

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|----------------|----------------------------------|-------------|---------------|
| <b>Project</b> | Hampshire LFRMS                  | <b>Date</b> | 6 August 2012 |
|                |                                  | <b>Ref</b>  |               |
| <b>Subject</b> | LFRMS Steering Group - Meeting 2 | <b>Page</b> |               |

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**Venue** Discovery Centre, Winchester

**Date held** 6 August 2012

**Present** Representatives from the following organisations

Hampshire Association of Local Councils

Basingstoke and Deane Borough Council

New Forest District Council

East Hampshire District Council

Hampshire County Council

Thames Water

Wessex Water

Fareham Borough Council

Eastern Solent Coastal Partnership

Environment Agency

Southampton City Council

Winchester City Council

Rushmoor Borough Council

Portsmouth City Council

Highways Agency

Hart District Council

Halcrow

### Apologies

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**Action****Update**

Halcrow gave a presentation to update the Steering Group (SG) on progress since the last meeting. For full details please see presentation slides. In brief...

- The objectives have been amended following comments from first SG meeting - an explanatory note was circulated in advance of the meeting.
- The timescales for the strategy have been firmed up. The strategy will cover a 15 year period - to be in line with emerging Local Plans and the NPPF. The action plan will be reviewed annually. There will be a programmed review of the LFRMS after 6 years.
- Halcrow briefed the SG on the issues raised at the Tier 2 stakeholder workshop. The presentation contains full details.
- Halcrow provided a recap on the available data. It was explained that data provided by the emergency services cannot be used to inform the LFRMS as it does not differentiate between types of flooding. Water company data is also not used in the assessment. Wessex Water suggested they might be able to provide data on flooding which they consider to be a shared problem. This was felt to be helpful but other water companies were uncertain whether they could provide the same level of detail.
- District Council data was highlighted as a possible additional source of information. This should have been passed through the SWMP officer group, but councils were asked to respond to the forthcoming online consultation to ensure that all known flood incidents were recorded.
- Halcrow explained the methodology for the assessment of flood risk and flood consequence. A technical note setting out the methodology in more detail was circulated. A revised version of this will be circulated with the revised risk assessment maps in the near future. SG members (especially those not present) are asked to pass back comments on this by **September 7<sup>th</sup>**. Halcrow asked for particular comment on the assumptions made around the assumed duration of groundwater flooding, and the assumed multiplier applied to groundwater flooding costs.
- Halcrow explained that the data would be presented at ward level. There was some discussion about this and members of the SG questioned whether

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**Action**

catchment areas would be more meaningful. It was noted that wards may cover more than one catchment. There was general agreement that catchments should be shown on plans, even if not used as the basis for presentation/analysis.

- The need for the LFRMS to define and seek a minimum level of protection was discussed. Halcrow explained the study will not do this and has instead taken an approach of considering economic cost as a basis for prioritising action. Halcrow felt that a standard level of protection based approach would be likely to lead to over-investment in low risk areas.
- It was noted that whilst the Water Companies themselves may not prioritise high cost/low impact schemes there may be opportunity for joint working and partnership/top up funding to deliver improvements beyond Water Companies normal priorities as part of the LFRMS. This will be considered further and incorporated into the funding strategy section of the LFRMS.
- The need for the LFRMS to include a hierarchy of intervention/sequential approach was discussed. This was generally considered important and it was noted that the SEA process may feed into this work.
- Halcrow gave an overview of the types of measures that the strategy is likely to recommend. Education and resilience was noted as important, but there was some discussion around whether this should be split into two separate categories. It was agreed that they should be split into two measures.

**Break out 1**

This session provided an opportunity to discuss the flood risk/consequence assessment in more detail. The group split into two.

- It was agreed that the maps need to be provided at District scale. A problem with the key (0-9/20-40) was noted.
- There was some concern that the general pattern of flooding shown by the shaded areas on the plans did not look quite right. Generally there was a feeling that some problem areas may be being 'lost' because of the ward level analysis. A sensitivity test was requested to explore the impact that different scales of presentation have on the overall pattern of the data.

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**Action**

- A series of maps would be appreciated - for example showing risk of flooding to housing, separately from infrastructure. Separate plans for fluvial and groundwater flooding would also be appreciated. Plans by Water Company area would also be useful.
- HCC's definition of flooding was questioned, especially in terms of reported highways flooding issues. HCC's protocol for Investigations (under the FWMA) which explains how HCC categorise and define flooding is copied at the end of this document.
- In categorising the measures, temporary property level resilience should be separated from permanent.
- Critical infrastructure should include landfill sites.
- It was noted that there is now an updated resilience data set for critical infrastructure - Halcrow need to obtain this.
- Ward boundaries have also changed - Halcrow to speak to HCC to obtain latest data.

**SEA**

Halcrow gave an introduction to the SEA process, highlighting the range of baseline data that will be included in the Scoping Report and focussing particularly on the SEA objectives as these will form the basis of a matrix assessment. For full details please see the presentation slides.

- The Steering Group would like the opportunity to comment on the SEA Scoping Report.

**Break out 2**

The group split into two to discuss the SEA in more detail.

- There was a question around whether the SEA objectives should be more explicit about seeking to 'improve' in addition to 'conserve' and 'protect'.
- A question was raised about how the SEA considers cost. For example, measures that may rank well in the SEA assessment but be unaffordable - how

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**Action**

is this considered?

- Weighting the SEA objectives was considered important - population and human health should have the highest weighting.
- The objectives should be amended to reflect quality of life and in particular social issues linked to the stress and personal disruption that can be caused by flooding.
- Should there be a criteria which considers risk from current rainfall as well as thinking about the future implications of climate change?
- Each group looked at the LFRMS objectives against the SEA objectives and generally found no significant areas of conflict.
- Questions were raised about how the SEA can reflect opportunity cost - for example the benefits that might be missed when one approach is taken over another. Similarly questions were raised about how to assess measures which are a temporary fix, but do not address the underlying cause.
- Material assets should consider critical infrastructure, which should include waste management facilities.
- The tables at the end of this document show the comments on the draft SEA objectives and how they have been amended to take the comments into account.
- A number of further comments were also noted on the LFRMS objectives.
  - Objective 5 - Ensure that local planning authorities take full account of flood risk, **both on and off site**, when allocating land and considering permitting development
  - Objective 6 - Engage with ~~community groups~~ **local communities** to increase public awareness and reporting of flooding and promote appropriate individual and community level planning and action.
  - Objective 8 - Identify national, regional and local funding mechanisms to deliver flood risk management interventions. Clarify what we mean by local i.e not just local government funding, but also businesses,


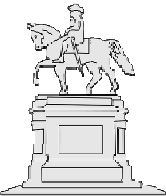

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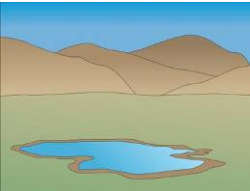
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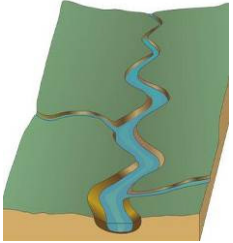


partners etc.




**Next Steps**

- Halcrow outlined the next steps and in particular the plans for the Draft LFRMS and SEA Environmental Report to be subject to a consultation period over the autumn. The importance of SG members helping to publicise the consultation was emphasised.
- Further questions or comments should be directed to HCC or Halcrow.

| SEA Topic(s)  | General SG Workshop Feedback  |
|---|---|
| <p>Biodiversity, flora and fauna</p>                           | <p>Need to consider Hampshire Green Infrastructure (GI) Strategy as a key document at all stages of SEA. SEA needs to demonstrate the wider environmental and social benefits of the Strategy and how it can link in with GI.</p> <p>Need to consider how to assess the new Nature Improvement Area designation – South Downs Way Ahead NIA covers large parts of Hampshire and Sussex. Need to discuss further with Natural England.</p> <p>Improving ecological conditions of water bodies with respect to the WFD – EA have done some work on this – need to contact Kate Potter – need contact details.</p> |
| <p>The Historic Environment Landscape and Visual Amenity</p>  | <p>Conservation Areas in the urban environment are likely to be the key heritage assets at risk from the LFRMS.</p>   |
| <p>Landscape and Visual Amenity</p>                          | <p>Remove Country Parks, Green Belt and Heritage Coast from assessment of landscape impacts. Need to consider National Parks, AONB and county landscape character assessment. Retention ponds etc offer opportunities to enhance landscape.</p>   |


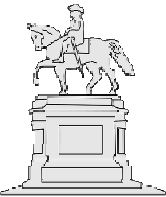
| SEA Topic(s)  | General SG Workshop Feedback  |
|---|---|
| <p>Water and Hydromorphology</p> <p>Population and Human Health, Biodiversity, Flora and Fauna</p>   | <p>Consider point source and diffuse pollution. Consider waste centres and landfill sites and contaminated land information where available. Consider ways in which water retention can be improved in dry periods.</p> <p>There is an EA programme to implement WFD actions for ordinary water courses</p> |
| <p>Water and Hydromorphology</p> <p>Population and Human Health, Biodiversity, Flora and Fauna</p>  | <p>Water resource availability – consider groundwater recharge.</p>   |
| <p>Water and Hydromorphology</p>  |   |



| SEA Topic(s)   | General SG Workshop Feedback   |
|--|--|
|   |  |
| <p>Climate change</p>                     | <p>Consider sea level rise/ tide locking in terms of in-combination impacts.</p> |
| <p>Soils, Geology and Geomorphology</p>  | <p>Consider impact pathway as well as source.</p>                                |
| <p>Material Assets</p>   | <p>Need to consider waste recovery infrastructure</p>                            |

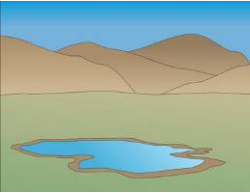
| SEA Topic(s)   | General SG Workshop Feedback   |
|--|--|
|                                       |  |
| <p>Population and Human Health</p>    | <p>Need to consider recreation access to coast and green infrastructure network.</p>   |
| <p>Population and Human Health</p>  | <p>Strategy needs to consider how developments can be safe for people in terms of flood risk and reduce the fear of flooding.</p> <p>Quality of life should be considered where information is available. <b>This should take into account the stress that flooding can cause.</b></p> |
| <p>Cross-cutting</p>   | <p>Need to use Green Infrastructure information in the SEA to help identify LFRMS GI enhancement opportunities. Assessment of environmental impacts could consider LFRMS timescales – e.g. will there</p>  |

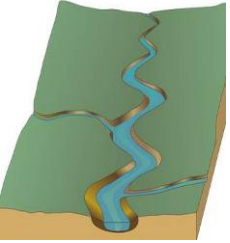

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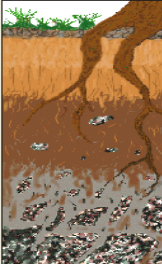

| <b>SEA Topic(s)</b> | <b>General SG Workshop Feedback</b>   |
|---------------------|---|
|                     | be impacts within the 15 year timeframe of the strategy or the 6 year LFRMS review cycle? |



| SEA Topic(s)   | Draft LFRMS SEA Objective   | Underlying Assessment Criteria (showing changes as result of workshop in tracked changes)<br><br>Would the LFRMS, in combination with other plans...   |
|--|---|--|
| <p>Biodiversity, flora and fauna</p>                            | <p>1. To conserve and seek to enhance the biodiversity, flora and fauna of Hampshire.</p>   | <ul style="list-style-type: none"> <li>• result in damage to, fragmentation or loss of existing designated wildlife sites, wildlife corridors and habitats?</li> <li>• support opportunities to enhance biodiversity?</li> <li>• maintain or improve existing water levels and water quality?</li> <li>• improve the ecological conditions of water bodies, with respect to the Water Framework Directive?</li> <li>• address biodiversity risk associated with low flow conditions?</li> <li>• reduce the risk of spreading non-native invasive species?</li> </ul> |
| <p>The Historic Environment Landscape and Visual Amenity</p>  | <p>2. Conserve and seek to enhance the County's historic environment and heritage assets of historic, archaeological, architectural or artistic interest and their settings</p> | <ul style="list-style-type: none"> <li>• cause visual intrusion to historic landscapes, or the loss of or damage to the significance of other heritage assets and their setting?</li> <li>• promote schemes that enhance the condition and character and promote understanding of the significance of conservation areas and other heritage assets and their settings?</li> <li>• cause any direct or indirect physical impacts on the County's features of historic, archaeological, architectural or artistic interest, or their settings?</li> </ul>              |
| <p>Landscape and Visual</p>  | <p>3. Protect and seek to enhance the unique</p>  | <ul style="list-style-type: none"> <li>• cause permanent visual intrusion in areas of notable landscape character or alter the character of locations regarded as locally</li> </ul>   |

| SEA Topic(s)  | Draft LFRMS SEA Objective                    | Underlying Assessment Criteria (showing changes as result of workshop in tracked changes)<br><br>Would the LFRMS, in combination with other plans...  |
|---|--|---|
| Amenity<br><br>  | setting and landscape character of Hampshire | distinctive?<br><br><ul style="list-style-type: none"> <li>• relieve intrusion or disturbance from existing areas of high landscape value?</li> <li>• enhance the range and quality of the public realm, including viewpoints and open spaces?</li> </ul>   |
| Water and Hydromorphology<br><br>Population and Human Health, Biodiversity, Flora and Fauna<br><br> | 4. Minimise adverse effects on water quality | <u>Drainage</u> <ul style="list-style-type: none"> <li>• result in improved drainage and attenuation (e.g. installation of SuDS), so that surface run-off is controlled to reduce pollution of soils and watercourses as well as run-off rates?</li> </ul> <u>Water quality</u> <ul style="list-style-type: none"> <li>• improve water retention in dry areas?</li> <li>• reduce risk of sewerage overflow and resulting pollution to water courses?</li> <li>• result in deterioration of the physical, chemical or biological status of surface freshwater (including lakes, streams and rivers), groundwaters, estuaries, or coastal waters out to one mile from low-water?</li> <li>• prevent or assist future improvement of the physical, chemical or biological status of surface freshwater, groundwaters,</li> </ul> |

| SEA Topic(s)  | Draft LFRMS SEA Objective  | Underlying Assessment Criteria (showing changes as result of workshop in tracked changes)<br><br>Would the LFRMS, in combination with other plans...   |
|---|--|--|
|   |  | estuaries, or coastal waters out to one mile from low-water?   |
| <p>Water and Hydromorphology</p> <p>Population and Human Health, Biodiversity, Flora and Fauna</p>  | 5. Minimise adverse effects on water resource availability                 | <ul style="list-style-type: none"> <li>• result in changes in flow regime (e.g. low flow, variability of flow/ levels)</li> <li>• affect the quantity (total storage capacity) or quality of water used for abstraction?</li> <li>• affect groundwater recharge?</li> </ul>  |
| Water and Hydromorphology   | 6. Minimise adverse effects on water hydromorphology and natural processes | <ul style="list-style-type: none"> <li>• improve or reduce the morphological status of ordinary water courses – i.e., will it;               <ul style="list-style-type: none"> <li>a) minimise changes to hydromorphology and/or improve current status?;</li> <li>b) cause changes to bank structure;</li> <li>c) result in opening of existing culverts?;</li> <li>d) increase potential for bankside erosion?;</li> <li>d) lead to loss of floodplain wetlands;</li> </ul> </li> </ul> |

| SEA Topic(s)  | Draft LFRMS SEA Objective  | Underlying Assessment Criteria (showing changes as result of workshop in tracked changes)<br><br>Would the LFRMS, in combination with other plans...  |
|---|--|---|
|                    |  | <ul style="list-style-type: none"> <li>e) lead to loss of bankside vegetation;</li> <li>f) result in removal of sediment or gravels;</li> <li>g) result in the installation of in-channel structures?</li> </ul> <ul style="list-style-type: none"> <li>• help restore riparian corridors, including floodplain connectivity and natural processes?</li> </ul>  |
| Climate change<br> | 7. Adapt new and existing development to the impacts of climate change | <ul style="list-style-type: none"> <li>• take into account UKCP09 and other climate change scenarios with respect to predicted maximum high and low temperatures, freeze-thaws, rainfall and storminess?</li> <li>• help reduce flood risk to receptors across the range of SEA topic areas?</li> <li>• help reduce the <i>impact of</i> flood risk across the range of SEA topic areas?</li> </ul>   |
| Soils, Geology and Geomorphology  | 8. Protect soils and geological resources in the county                | <ul style="list-style-type: none"> <li>• require or encourage LFRM scheme construction on previously undeveloped or greenfield land?<br/>reduce risk of soil contamination, e.g. through remediation of contaminated land or reducing pollution from the sewerage network?</li> <li>• retain or affect sections of geological or geomorphological importance (SSSIs and Regionally Important Geomorphological or Geological sites (RIGS))?</li> </ul> |

| SEA Topic(s)   | Draft LFRMS SEA Objective   | Underlying Assessment Criteria (showing changes as result of workshop in tracked changes)<br><br>Would the LFRMS, in combination with other plans...   |
|--|---|--|
|                           |   | <ul style="list-style-type: none"> <li>• retain or enhance groundwater levels to improve soils?</li> <li>• retain or enhance flood attenuation rates and water retention capacity of soil where necessary to protect soil structure or soil biodiversity?</li> <li>• protect or increase vegetation and/or organic debris cover of soil?</li> <li>• protect soil function and structure, i.e. reduce risk of compaction and sealing and promote best practice land management during construction of any FRM measures?</li> <li>• reduce soil erosion caused by flooding?</li> </ul> |
| <p>Material Assets</p>  | <p>9. Minimise adverse impacts of local flood risk on key infrastructure and properties</p> | <ul style="list-style-type: none"> <li>• improve protection of existing or proposed key transport routes (recreational and commercial) or infrastructure e.g. closures/restrictions?</li> <li>• ensure the protection of services, including water, power and telecommunications?</li> <li>• reduce flood risk to properties?</li> <li>• have a positive impact on the local economy? e.g. through improved flood protection or enhanced recreation opportunities</li> </ul>   |
| <p>Population and Human</p>  | <p>10. Conserve and seek to enhance open spaces,</p>  | <ul style="list-style-type: none"> <li>• protect open spaces, recreational areas, facilities and rights of</li> </ul>  |

| SEA Topic(s)  | Draft LFRMS SEA Objective            | Underlying Assessment Criteria (showing changes as result of workshop in tracked changes)<br><br>Would the LFRMS, in combination with other plans...   |
|---|--------------------------------------|--|
| Health<br><br>                       | recreational areas and rights of way | way in the long term?<br><br><ul style="list-style-type: none"> <li>• allow for appropriate signage if open spaces or rights of way are changed (for example, used as temporary or permanent sacrificial flood relief), to protect health and safety?</li> <li>• affect any recreational fisheries associated with ordinary watercourses?</li> </ul>   |
| Population and Human Health<br><br> |                                      | <ul style="list-style-type: none"> <li>• reduce flood risk and the risk of direct physical impacts of flooding on people?</li> <li>• reduce risk of sewerage overflow and contamination of the local environment?</li> <li>• restrict people's access to medical services, such as hospitals, doctor's surgeries and pharmacies?</li> <li>• help provide safe development?</li> <li>• reduce fear of flooding?</li> <li>• create areas of standing water or new water channels that could become a potential health hazard due to safety or increased disease risk?</li> </ul> |

## **Hampshire County Council Flood Investigation Guidance**

### **Introduction**

Hampshire County Council, within their role as Lead Local Flood Authority, have a responsibility to record and investigate flood incidents, as detailed in Section 19 of Part 3 of the Flood and Water Management Act 2010. This section states:

**PART 1  
FLOOD AND COASTAL EROSION RISK MANAGEMENT  
3. Supplemental powers and duties**

**Section 19: Local authorities: investigations**

- 1) On becoming aware of a flood in its area, a lead local flood authority must, to the
- 2) extent that it considers it necessary or appropriate, investigate –
  - (a) which risk management authorities have relevant flood risk management functions, and
  - (b) whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to flood.
- 3) Where an authority carries out an investigation under subsection 1) it must –
  - (a) ~~publish the results of its investigations; and~~
  - (b) notify any relevant risk management authorities.

As a result, this document has been produced to provide guidance as to when and how a flood investigation should be carried out, how the various stakeholders and relevant parties will be contacted and involved in the investigation process and also how this information will be used and communicated to all relevant parties. This document is designed for use by professional partners who are likely to be 'first on the scene' when a flood occurs.

For the purposes of this document, the Determining Officer will be the Head of Highways and the Investigating Officer will be the Highway Manager or other equivalent nominated person.

### **Guidance and Considerations**

Upon learning of a flood event, the County Council will consider whether an investigation should be carried out under Section 19 of the Flood and Water Management Act in order to determine which risk management authorities have relevant flood risk management functions and whether each of those risk management authorities has exercised or is proposing to exercise those functions in response to the flood. The County can chose to commission others to carry out an investigation on their behalf, although there are likely to be cost implications for this, and if an initial investigation shows that the cause of flooding falls solely under another organisations responsibility (i.e. main river flooding), they can request that the relevant authority carry out the required investigation and report on their findings.

Officers will use the following guidance and considerations to determine whether an investigation should be carried out. Severe consequences or implications in any one of these areas will be sufficient to trigger an investigation. Equally, minor negative impacts in a wide variety of areas could likewise prompt action.

Investigation under the provisions of the Flood and Water Management Act does not always include scrutiny of the emergency response to a flooding event. Investigations of this kind may take place under different provisions e.g. the Civil Contingencies Act or local authority scrutiny processes.

### ***Number of Residential Properties Affected***

This is perhaps the most common concern for Hampshire residents following a flooding incident. However, the Council will not need to carry out an expensive, formal investigation every time a property is flooded. The determining factors here should be whether there have been unusually severe consequences in terms of: number of properties flooded, period for which they are flooded, depth of flooding.

### ***Accident, Injury, and Health Implications***

The investigating officer(s) should consider whether there have been any reported cases of personal injury, the nature of the injury, and the number of people injured. These injuries could have been sustained inside or outside a building, on the highway, inside or outside a vehicle, on the site of key infrastructure, on private property, or in a public space. A single fatality that is proven to have been caused by the flooding event will probably be sufficient to trigger an investigation.

Another important consideration is the effect of foul water flooding or other water borne pollution and the threat posed to public health. If this is thought to be serious, then an investigation should be initiated. This is equally true if oil or chemicals from a flooded commercial area contaminate the drinking supply via rivers or chalk aquifers. Here, as elsewhere in this guidance, "serious" is a matter for the discretion of the investigating officer(s).

### ***Frequency of Flooding***

Even a minor flooding event may be worthy of consideration if it recurs frequently, causing damage or posing a public nuisance. Equally, a more intense event, the causes of which are clear, may be unworthy of investigation if it is a rare or very infrequent occurrence.

### ***Critical Infrastructure***

The investigating officer should consider whether critical infrastructure sites been affected or seriously threatened by the event. Such sites include: motorways, A roads, railways and railway stations, port facilities, electricity sub-stations and switching centres, power generating facilities, oil refineries, bridges, flood defences, water treatment works, etc. These are all sites where flood risk should already be sufficiently managed, and an event that floods such sites in spite of this should probably be investigated.

### ***Vulnerable Individuals***

This category includes younger people, older people, and people with disabilities or health problems. The key indicator is the effect of the flooding event upon such amenities as hospitals, care and nursing homes, schools, etc. The investigating officer(s) should obviously take into consideration the severity of the flooding effects. Clearly a substantial puddle in a garden area is not necessarily going to trigger an investigation. Internal flooding at such places, on the other hand, will usually be considered for

investigation. If any vulnerable individuals are placed at risk, or if the services provided to them are disrupted, then this should warrant action.

### ***Economic Disruption***

This is difficult to quantify and is probably the area where the investigating officer(s) judgement will most come into play. Officers should consider the relative impacts of flooding of commercial property. In some cases, flooding of a single commercial property could no more warrant investigation than flooding of a single residential property; but in other cases, the serious flooding of a large, single property could be extremely disruptive to the economic functioning of a community or have significant impact on a local or regional economy, and would therefore certainly trigger an investigation. Other causes of economic disruption should hopefully be covered by consideration of impacts upon infrastructure.

### ***Environmental / Bio-diversity Considerations***

This relates to the threat posed by flooding to ecosystems and nationally and internationally protected habitats and species. Particular priority may be given where flooding could impact upon either principle habitats or species identified by Local Authorities' Local Biodiversity Action Plans (BAPs). Common causes for concern are coastal erosion and coastal flooding of protected or important wetland habitats, or the threat posed to biodiversity by polluted water flooding inland areas.

### ***No Clear Responsibility***

The overall purpose of the statutory duty to investigate is to enable lead local flood authorities to establish which authorities had relevant flood risk management responsibilities for the flood event, and whether they have or will exercise their powers accordingly. If the cause of a flood is unknown, or the responsible authorities are otherwise difficult to identify, then an investigation should follow. It should be noted that flooding incidents will often have multiple causes and therefore responsibility may be attributable to more than one flood risk management authority.

### ***Investigation Request***

The weight of public interest in an investigation might be taken into consideration. If the Council is inundated by requests from the public for an investigation, or if there is widespread interest among parish councils, district and county councillors, and local MPs then, as a democratic institution, the Council may give additional consideration to carrying out an investigation.

In all cases, officers should remember that the key purpose of an investigation is to establish which risk management authorities hold relevant functions and whether they have or are intending to exercise them in response to the flood. These guidelines should enable a consistent approach to be taken to deciding whether or not an investigation should be carried out. Taken together they comprise a framework within which a decision should be taken. The guidelines deliberately do not set numerical thresholds and/or precise triggers in recognition of the fact that all floods will be different and a certain amount of officer discretion will be required in order to implement this duty effectively.

### ***Data Confidentiality***

The Investigating officer must be aware of data sensitivities not only with regard to the data protection act but also commercial sensitivities. Investigating officers should familiarise themselves with the data protection act and be mindful that flood investigation reports will be published.

## Reporting Flooding

In order to collate the required level of detail on flooding incidents, a template has been created so that all floods are recorded in the same manner and with the same level of information. This allows these floods to be assessed using the same criteria and allows for an appropriate level of quality management.

This template should be used to record all flooding regardless as to whether it is considered to require a formal investigation. Even if a flood does not meet the criteria at this stage, if it becomes a recurring issue, it may require investigation in the future and the historic data is invaluable.

Once a template is completed, it must be forwarded to [FWM@hants.gov.uk](mailto:FWM@hants.gov.uk) where it will undergo an initial 'severity check' before being forwarded to the relevant area in which the flood occurs either for consideration for a formal investigation or to be dealt with under the normal Highway function.

This template is appended to this report.

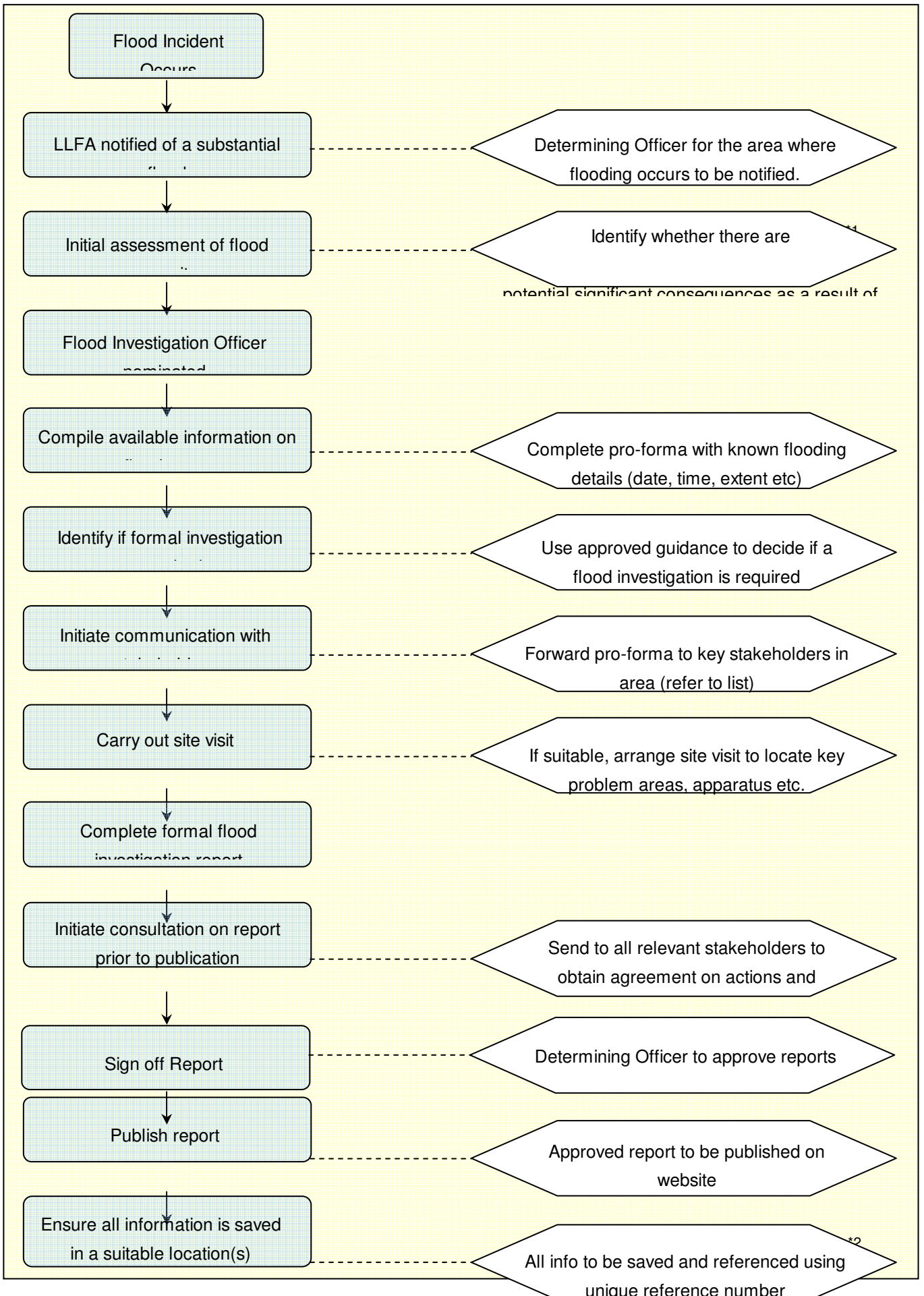
## Investigation Protocol

The following flow chart and associated notes set out the procedure that will be undertaken by the LLFA in response to notification of a flooding incident.

### Notes:

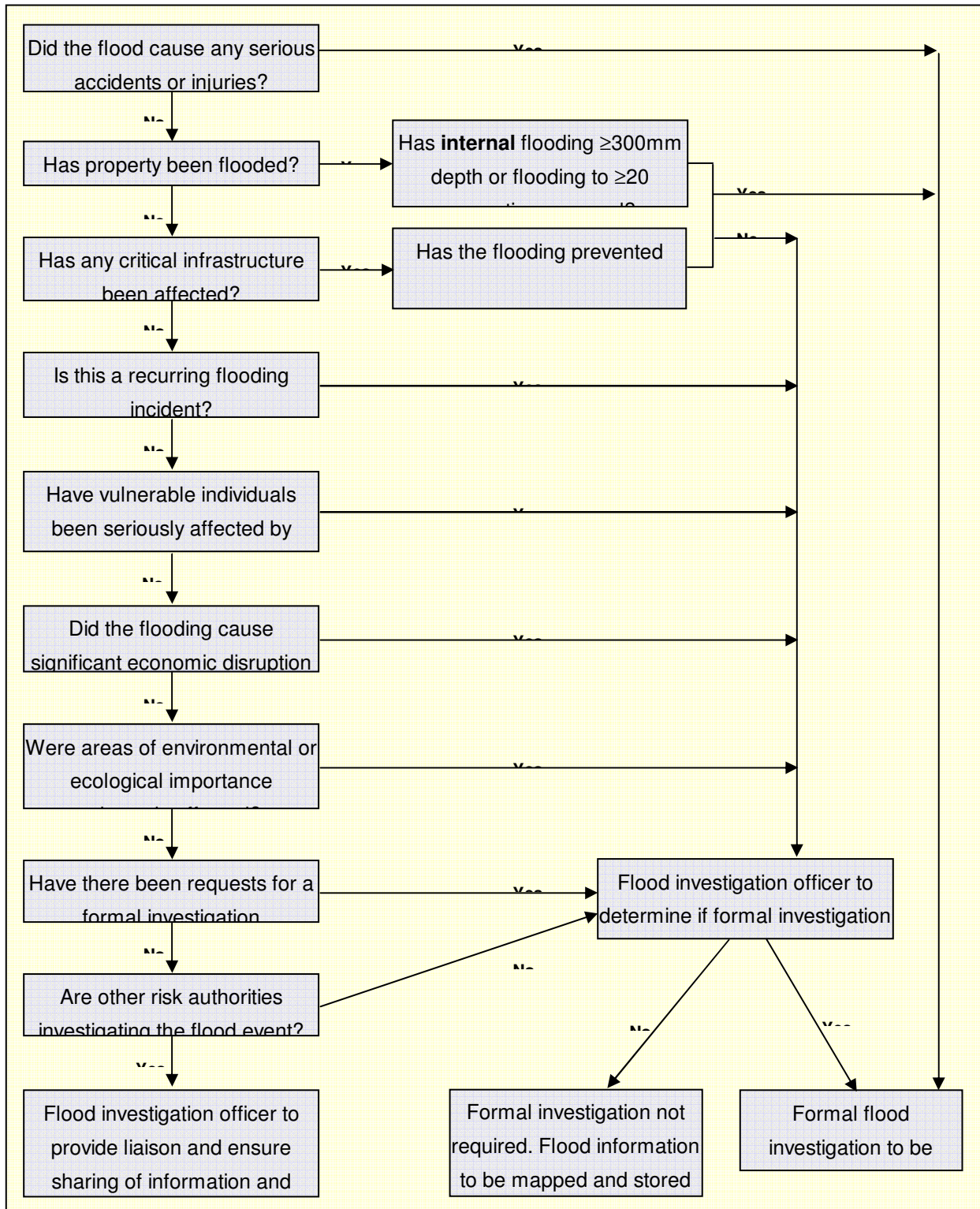
\*1 – This should be an initial 'first glance' assessment to determine the likelihood that the flood could be considered as significant in accordance with the criteria in section 2 of this document. If the incident is unlikely to meet these criteria, it must be recorded on the relevant template and forwarded onto the relevant department / organisation for investigation or action in relation to specific infrastructure. All flood incidents with adverse consequences must be recorded on the flooding database regardless of severity.

\*2 – It is essential that all information is stored appropriately using a unique flood reference number which is generated by the date, borough or district initials and flood number i.e. yymmdd/wcc/01. All information will be added to the flooding database and associated mapping. If works are required, this can be identified on the pro-forma and will be put forwards for consideration on local, regional or national programmes dependant on the type of works required. For schemes to be included on future programmes, certain cost benefit assessments will be required and there is no guarantee of works obtaining the required funding. Each flood investigation report will form part of surface water management plans for each district and will form the basis of justification for future works programmes.



## Investigation Requirements

For each individual flood, the following flow chart has been developed to provide additional guidance for Investigating Officers and this shall be used in conjunction with the guidelines set out in section 2 of this document.



## Communication

On becoming aware of a flood that requires a formal flood investigation, the Investigating Officer will contact each of the relevant flood risk authorities to identify what apparatus they have in the flooded area, whether any structures or features are included on the register and record and to determine if there are any known issues relating to that infrastructure.

In addition, information will be requested on

- When the flood risk authority were aware of the incident;
- What response was made;
- What maintenance / works has been carried out in that area; and
- If any further action is anticipated.

For all authorities with a level of responsibility for a particular flood incident, they will be asked to provide information on the flood from each individual viewpoint and following completion of the investigation, there will be opportunity for comment and agree the recommendations prior to publication of the report.

For complex flood investigations where the cause is difficult to determine, meetings will be called by the Investigating Officer to discuss the progress and findings of the flood investigation. This is also to ensure all parties are satisfied that an appropriate level of investigation is being undertaken.

## Flood Risk Authorities and other Stakeholders

The following is a list of the key authorities who have a formal responsibility for flood risk management as well as a list of other authorities / organisations who may have flood related infrastructure in different areas of Hampshire. It is important to be aware that within each organisation, there may be a number of different departments who could contribute to a flood investigation. This list is not exhaustive and the Investigating Officer should determine if there are other organisations that should be included on a site specific basis. Consideration should be given as to whether the County legal team should be consulted to fully assess the impact of the final report and to ensure compliance with the relevant legislation.

Key Flood Risk Authorities:

- Hampshire County Council
- District, Borough and City Councils
- Environment Agency
- Water Companies (sewerage)
- Network Rail
- Highways Agency

Other authorities and organisations:

- Adjoining Upper Tier Authorities
- Parish Councils and Town Councils
- Water companies (Supply)
- Farnborough Airport – TAG Aviation
- Ministry of Defence
- Southampton Airport - BAA Southampton
- National Park Authority (New Forest and South Downs)
- Forestry Commission
- Associated British Ports
- Esso Refinery
- Basingstoke Canal Authority
- Local Resilience Forums (to access emergency services called out)
- Major land owners
- Major property owners
- Riparian owners

If a surface water management plan has been completed for the area in which the flood occurs, the relevant authorities and major organisations will already have been identified and this document should be reviewed prior to confirming the relevant organisations to be contacted.

## **Timescales**

The length of time a flood investigation will take will relate directly to the complexity and scale of the flood. It is not possible to set out a generic timeframe in which the flood investigation will be complete. However, it should be commenced within 14 days of becoming aware of the flood and updates should be provided as to which floods have been reported and the estimated timeframe for the initiation, and where possible, expected completion date of the flood investigation.

## **Investigation Report Template**

For those floods that require a formal flood investigation, they should follow a standard format. A template has been developed setting out the information that is required for a report to ensure consistency and to allow for the information to be located quickly in the future.

The report template has been written to allow a varying level of detail. If a flood is complex or had a number of significant consequences, more work will be required to complete the document. Conversely, if a flood has relatively minor consequences or the cause of flooding is obvious, less detail is required.

The report template is appended to this document.

The completed report will be signed off by the Head of Highways or equivalent and will then be published on the County Council's Flood Risk Management website.

**Author**      Halcrow

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