

South East Hampshire Catchment Flood Management Plan

Summary Report December 2009



managing
flood risk

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Introduction



I am pleased to introduce our summary of the South East Hampshire Catchment Flood Management Plan (CFMP). This CFMP gives an overview of the flood risk in the South East Hampshire catchment and sets out our preferred plan for sustainable flood risk management over the next 50 to 100 years.

The South East Hampshire CFMP is one of 77 CFMPs for England and Wales. Through the CFMPs, we have assessed inland flood risk across all of England and Wales for the first time. The CFMP considers all types of inland flooding, from rivers, groundwater, surface water and tidal flooding, but not flooding directly from the sea (coastal flooding), which is covered by Shoreline Management Plans (SMPs). Our coverage of surface and groundwater is however limited due to a lack of available information.

The role of CFMPs is to establish flood risk management policies which will deliver sustainable flood risk management for the long term. This is essential if we are to make the right investment decisions for the future and to help prepare ourselves effectively for the impact of climate change. We will use CFMPs to help us target our limited resources where the risks are greatest.

This CFMP identifies flood risk management policies to assist all key decision makers in the catchment. It was produced through a wide consultation and appraisal process, however it is only the first step towards an integrated approach to flood risk management. As we all work together to achieve our objectives, we must monitor and listen to each others progress, discuss what has been achieved and consider where we may need to review parts of the CFMP.

The main source of flood risk is from river flooding and to a lesser extent surface water flooding, groundwater

flooding and highway flooding of drainage systems. At present over 2600 properties are at risk in the catchment in a 1% event (taking into account flood defences). This will increase to approximately 3500 properties in the future and these are concentrated in the settlements of Portsmouth, Havant, Hambledon and Wallington.

We cannot reduce flood risk on our own, we will therefore work closely with all our partners to improve the co-ordination of flood risk activities and agree the most effective way to management flood risk in the future. The key partners we have worked with are Portsmouth City Council, Havant Borough Council, Fareham Borough Council, East Hampshire AONB, East Hampshire District Council, Gosport Borough Council, Natural England, Hampshire County Council, Defra, Winchester City Council, Southern Water, Hampshire Wildlife Trust.

This is a summary of the main CFMP document, if you need to see the full document an electronic version can be obtained by emailing enquiries@environment-agency.gov.uk or alternatively paper copies can be viewed at any of our offices in Southern Region.

A handwritten signature in blue ink that reads "T. Willison".

Toby Willison
Regional Director, Southern Region

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The purpose of a CFMP in managing flood risk

CFMPs help us to understand the scale and extent of flooding now and in the future, and set policies for managing flood risk within the catchment. CFMPs should be used to inform planning and decision making by key stakeholders such as:

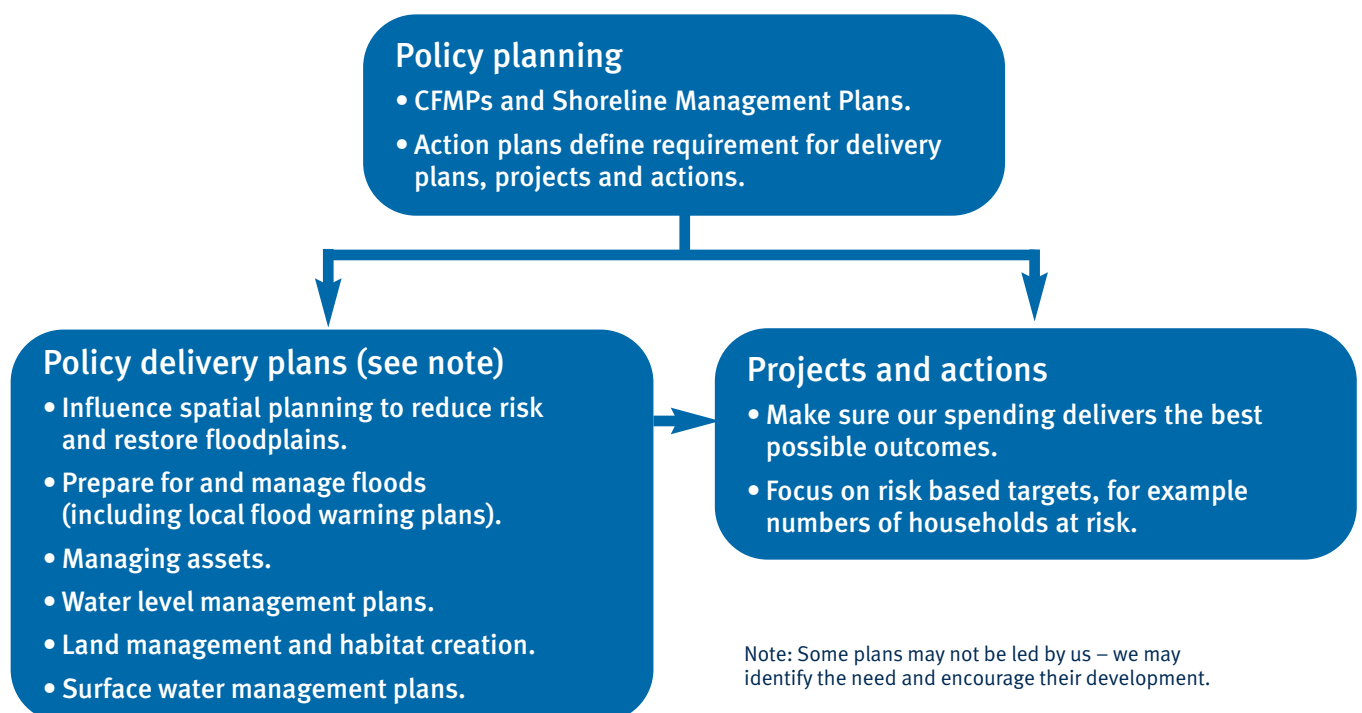
- The Environment Agency, who will use the plan to guide decisions on investment in further plans, projects or actions;
- Regional planning bodies and local authorities who can use the plan to inform spatial planning activities and emergency planning;

- IDBs, water companies and other utilities to help plan their activities in the wider context of the catchment;
- Transportation planners;
- Land owners, farmers and land managers that manage and operate land for agriculture, conservation and amenity purposes;
- The public and businesses to enhance their understanding of flood risk and how it will be managed.

CFMPs aim to promote more sustainable approaches to managing flood risk. The policies identified in the CFMP will be delivered through a combination of different approaches. Together with our partners, we will implement these approaches through a range of delivery plans, projects and actions.

The relationship between the CFMP, delivery plans, strategies, projects and actions is shown in figure 1.

Figure 1. The relationship between CFMPs, delivery plans, projects and actions.



Catchment overview

The area of the South East Hampshire CFMP has a population of approximately 460,000 covers 500 square kilometres and is drained by the River Hamble, River Meon, Wallington River, River Alver, West Brook and Hermitage and Lavant Streams. It is a mixture of rural and urban areas with three quarters of the land used as agricultural.

The main urban areas are located at Havant, Waterlooville, Portsmouth, Fareham, Gosport, and Hedge End. The catchment also includes the South Downs Area of Outstanding Natural Beauty (AONB) to the north.

Here it is mainly rural, with the population generally dispersed across small towns and villages. The catchment drains into a number of designated sites of national and international importance for nature conservation, such as the Solent and Southampton Special Protection Area/Ramsar site or the Solent Maritime Special Area of Conservation. It also contains important wetland sites such as the Titchfield Haven Site of Special Scientific Interest.

The northern part of the catchment lies on chalk while the southern part of the catchment consists of

tertiary deposits, such as more impermeable clays. The River Meon flows over chalk for approximately half of its length. Tributaries of the other large sub-catchments also flow over chalk but are ephemeral (short-lasting) streams that only appear when groundwater levels are higher. The underlying geology has a significant impact on the hydrology of the area. Rainfall on chalk areas tends to soak into the ground, recharging groundwater stores rather than rapidly entering the river system as run-off.



← Warren Dam, reducing flood risk to residents of Leigh Park, Havant.

Map 1. Overview map of South East Hampshire catchment.



‘The underlying geology is significant as chalky areas tend to soak up rainfall, recharging ground water stores rather than rapidly entering the river system as run-off.’

Current and future flood risk

Overview of the current flood risk

Flood risk is the combination of the probability of flooding and its impact, that is, the chance of it happening and the damage that occurs if it does happen. In the South East Hampshire catchment the CFMP has considered flooding from rivers, surface water and sewage flooding from the drainage system, as well as groundwater flooding. There are approximately 3,500 properties in the catchment that have a 1% chance of flooding in any one year from rivers or groundwater. We have assessed flood risk across the CFMP area using broad-scale computer modelling, through making best use of existing knowledge and models where appropriate. Flood risk figures take into account current flood defences.

The most significant flooding of recent times within the South East Hampshire catchment occurred in 2000/01. During this time, prolonged heavy rain fell over a number of months throughout late autumn and winter. The high groundwater levels from all this water was considered to be the most significant cause of the widespread flooding. While places such as Hambledon or Wallington were badly affected by the flooding, the distribution of incidents in the historic record tends to show relatively small numbers of properties flooding in a large number of places.

Where is the risk?

The main sources of flooding in the South East Hampshire CFMP area are from groundwater and surface water although there is also a risk from river flooding (fluvial flooding) which can be made worse by tidal conditions. The map on page 10 illustrates the consequences of a 1% annual probability event (1 in 100 year) occurring within the CFMP area. The areas with the highest concentration of properties at risk from river flooding are tabulated on page 9.



↑ Titchfield Harbour.

How we currently manage the risk

Major urban areas have developed next to the major watercourses, subsequently river structures and flood defences have also developed as an integral part of these towns. Existing defence infrastructure acts to defend the urban areas at risk and we are therefore looking for opportunities to revert the catchment back to its natural state. Our activity is prioritised on a risk basis and our main activities include:

- **Maintenance of existing and commission of new flood defences and structures.** There are culverted channels and maintained channels on the River Hamble at Hedge End and Whiteley, and along the Hermitage and Lavant Streams in Havant.
- **Flood forecasting and warnings,** which are currently sent to approximately 840 properties and aim to give at least two hours lead time ahead of river flooding.
- **Development control** to influence spatial planning so that new developments are sited away from flood risk areas, or take appropriate mitigation measures.
- **Flood risk mapping.** Flood mapping has been updated on the Wallington River and Hermitage and Lavant Streams in Havant.
- **Strategic planning** to plan long term investment.

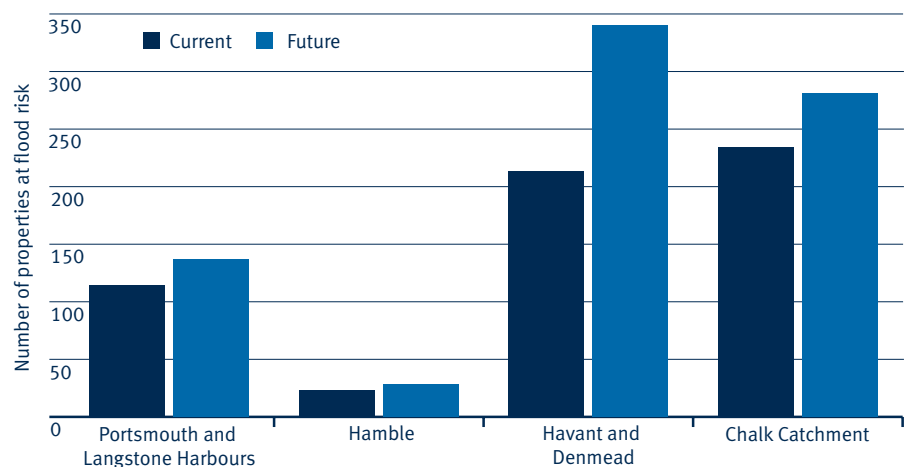
Table 1. Locations of towns and villages with 25 or more properties at risk in a 1% annual probability river flood.

Number of properties at risk	Locations
>1000	None
500 to 1000	None
100 to 500	Portsmouth and Langstone Harbours, Havant, Chalk Catchment, Wallington Town
50 to 100	Hamble
25 to 50	None

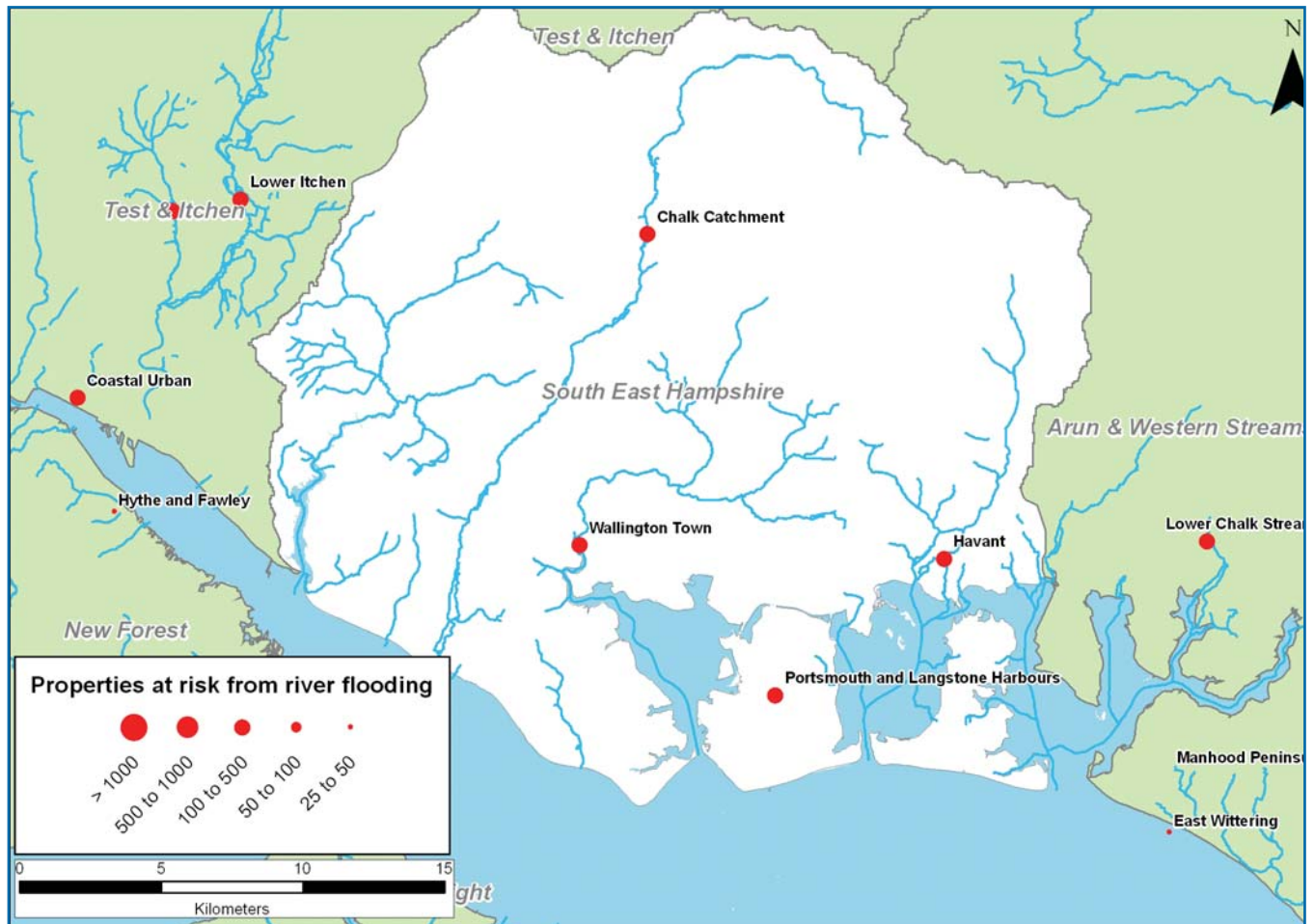
Table 2. Critical infrastructure at risk:

6 electricity sub stations, 2 sewage/water treatment works, 2 schools

Figure 2. Current and future (2100) flood risk to property from a 1% annual probability river flood, taking into account current flood defences.



Map 2. Flood risk to property in a 1% annual probability river flood, taking into account current flood defences.



The impact of climate change and future flood risk

The effect that flooding will have in the future is influenced by a range of issues such as climate change, changes in land use such as development, and changes in how land is managed. Land use and land management are the main influences of change in the upper parts of the catchment. However, the underlying chalk geology means that runoff from agricultural land in this area is not a main cause of flood risk and changes are not likely to affect larger event flood peaks in the wider catchment. The test on the impact on people and property from both the climate change and urban development scenarios found that the biggest increase in impact was for the more frequent

events. Climate change has a greater impact than urban development.

Predictions of future change are based on understanding the existing condition of the catchment, an extrapolation of trends over the long term (up to 100 years), and a high level review of likely future change based on research findings and knowledge. The scenario which has the greatest effect on future flood risk is climate change with up to 20% increase in peak flood flows. This scenario is used to assess likely impacts in the catchment. In the South East Hampshire catchment the future flood risk is likely to be caused from river and surface water flooding. Our

appraisal of the future risk in the catchment reveals the number of properties at risk to the 1% annual probability event will increase from over 2600 to approximately 3500 properties by the year 2100. The majority of these properties are located in Portsmouth, Havant, Wallington and Hambledon.

The key trends are:

- More frequent and intense storms causing more widespread and regular flooding from drainage systems and some rivers.
- More rain in winter increasing the likelihood of large scale flood events.

Future direction for flood risk management

Approaches in each sub-area

We have divided the South East Hampshire catchment into seven distinct sub-areas which have similar physical characteristics, sources of flooding and level of risk. We have identified the most appropriate approach to managing flood risk for each of the sub-areas and allocated one of six generic flood risk management policies, shown in Table 3.

To select the most appropriate policy, the plan has considered how social, economic and environmental objectives are affected by flood risk management activities under each policy option.

Map 3. Sub-areas and flood risk management policies.

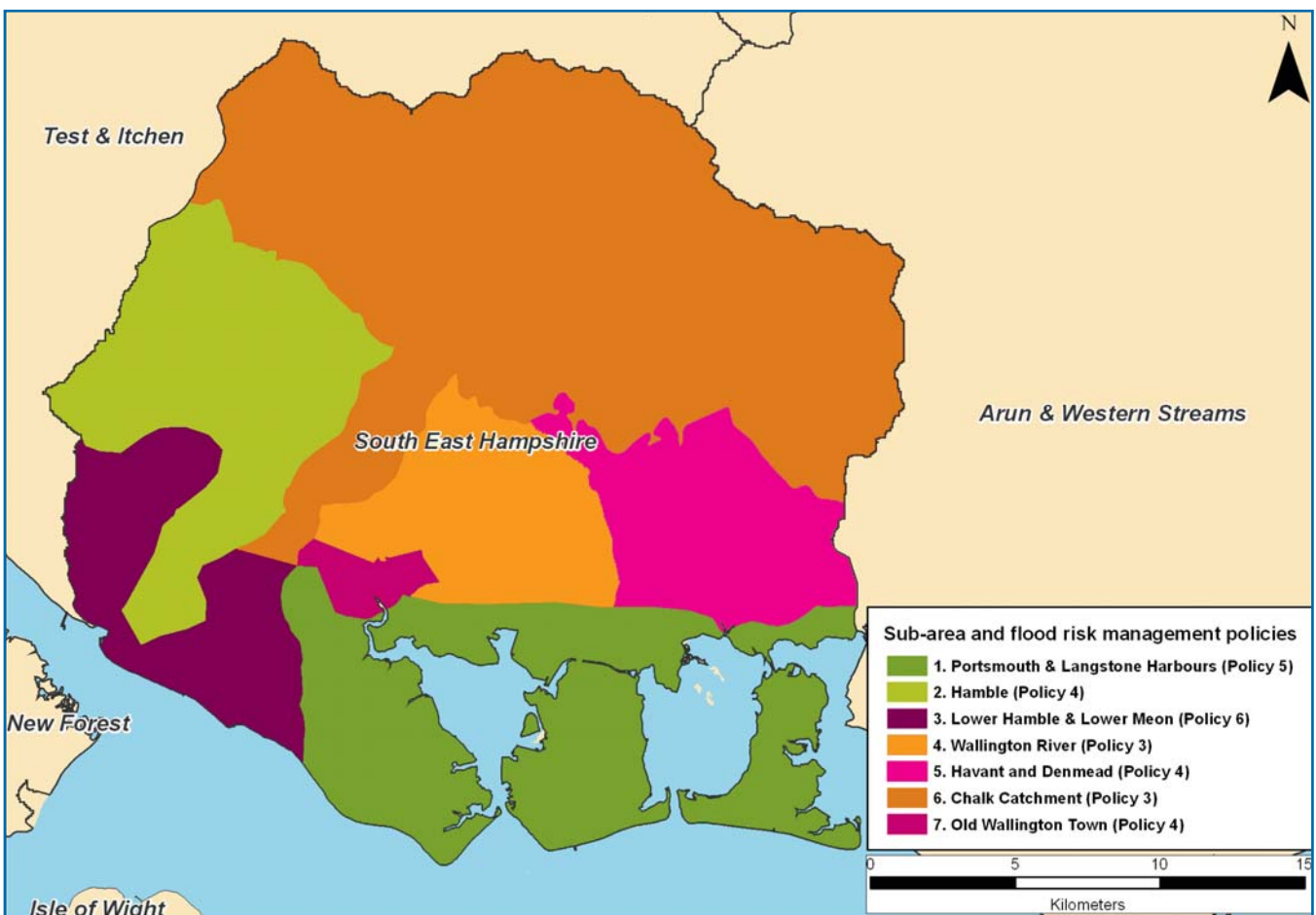


Table 3. Policy options.

→ Policy 1

Areas of little or no flood risk where we will continue to monitor and advise

This policy will tend to be applied in those areas where there are very few properties at risk of flooding. It reflects a commitment to work with the natural flood processes as far as possible.

→ Policy 2

Areas of low to moderate flood risk where we can generally reduce existing flood risk management actions

This policy will tend to be applied where the overall level of risk to people and property is low to moderate. It may no longer be value for money to focus on continuing current levels of maintenance of existing defences if we can use resources to reduce risk where there are more people at higher risk. We would therefore review the flood risk management actions being taken so that they are proportionate to the level of risk.

→ Policy 3

Areas of low to moderate flood risk where we are generally managing existing flood risk effectively

This policy will tend to be applied where the risks are currently appropriately managed and where the risk of flooding is not expected to increase significantly in the future. However, we keep our approach under review, looking for improvements and responding to new challenges or information as they emerge. We may review our approach to managing flood defences and other flood risk management actions, to ensure that we are managing efficiently and taking the best approach to managing flood risk in the longer term.

→ Policy 4

Areas of low, moderate or high flood risk where we are already managing the flood risk effectively but where we may need to take further actions to keep pace with climate change

This policy will tend to be applied where the risks are currently deemed to be appropriately-managed, but where the risk of flooding is expected to significantly rise in the future. In this case we would need to do more in the future to contain what would otherwise be increasing risk. Taking further action to reduce risk will require further appraisal to assess whether there are socially and environmentally sustainable, technically viable and economically justified options.

→ Policy 5

Areas of moderate to high flood risk where we can generally take further action to reduce flood risk

This policy will tend to be applied to those areas where the case for further action to reduce flood risk is most compelling, for example where there are many people at high risk, or where changes in the environment have already increased risk. Taking further action to reduce risk will require additional appraisal to assess whether there are socially and environmentally sustainable, technically viable and economically justified options.

→ Policy 6

Areas of low to moderate flood risk where we will take action with others to store water or manage run-off in locations that provide overall flood risk reduction or environmental benefits

This policy will tend to be applied where there may be opportunities in some locations to reduce flood risk locally or more widely in a catchment by storing water or managing run-off. The policy has been applied to an area (where the potential to apply the policy exists), but would only be implemented in specific locations within the area, after more detailed appraisal and consultation.

Portsmouth and Langstone Harbours

Our key partners are:

Portsmouth City Council

Gosport Borough Council

Fareham Borough Council

Havant Borough Council

Hampshire County Council

Southern Water

Impact of a 1% annual probability flood event

	Today	Future (2100)
Number of properties at risk	117	137*

*Future scenario figure extrapolated from similar catchment modelling in Southern region.

The issues in this sub-area

The main inland flood risk in this sub-area comes from surface water flooding where the urban drainage network is overwhelmed or unable to fully discharge to sea. There is very little fluvial flood risk from the overtopping of river banks. It is important to note however that the greater risk in the sub-area is from tidal flooding considered by the North Solent Shoreline Management Plan.

During the floods of 2000/01, 114 properties were flooded within the sub-area, particularly in Portsmouth and Gosport, causing disruption to almost 275 people. In addition it is

estimated that 2,000 people were affected by the flooding of infrastructure. The 2000/01 flood was estimated to be a 2% annual probability event. Also the surface water flood event in 2006 affected a few dozen properties. These were contaminated with sewage, posing a threat to human health.

The key future driver of flood risk within this sub-area is climate change. Increased urban development and infill will put increasing pressure on the combined sewer network. There is not expected to be increased risk to the environmentally designated sites.

The vision and preferred policy

Policy Option 5 – areas of moderate to high flood risk where we can generally take further action to reduce flood risk.

Surface water flooding will worsen with increased rainfall and more intense storms in the future. Opportunity for drains to discharge to the sea will be limited by sea level rise. More will need to be done both now and in the future which is best achieved through Policy 5.

The key messages

- Increased storminess resulting from climate change will put increased pressure on the urban drainage network.
- We will need to work with our partners to promote greater resilience to flooding through flood proofing, emergency planning and flood warning.
- New developments will need to manage drainage so that there is no net increase in flood risk.

Proposed actions to implement the preferred approach:

- Encourage local planning authorities to apply Planning Policy Statement 25 (PPS25), avoiding inappropriate development in the areas at risk of flooding, and influence local development frameworks.
- Seek funding partnerships in connection with new or redevelopment.
- Undertake System Asset Management Plans (SAMPs) to review maintenance regimes, to assess future investment needs and to reduce the current level of risk.
- Develop a collaborative Surface Water Management Plan (SWMP) to address current and future pressures on the drainage network.
- Develop an emergency response plan to mitigate flood risk in Portsmouth and Gosport, linking in with existing civil contingencies.



↑ Flooding in Portsmouth (copyright of Portsmouth news, Sept 2000).



↑ Langstone Harbour.

Hamble

Our key partners are:

Winchester City Council

Fareham Borough Council

Eastleigh Borough Council

Hampshire County Council

Southern Water

The issues in this sub-area

Flooding in the middle reaches of the River Hamble is dominated by surface water flooding as a result of the overwhelming of the drainage network; there is very little recorded flooding from the overtopping of the banks of the River Hamble itself. Current fluvial flood risk is low and existing defences are effective.

At present it is estimated that up to 85 residential and 29 commercial properties are at flood risk during a 1% annual probability fluvial flood event. These properties are mainly located at Botley and Bishop's Waltham.

The particular concern in this sub-area is that the capacity of existing surface water drainage will be exceeded especially where extensive urban development has taken place. There are plans for future development within the sub-area including up to 6,000 homes proposed close to Hedge End.

Impact of a 1% annual probability flood event

	Today	Future (2100)
Number of properties at risk	85	102*

*Future scenario figure extrapolated from similar catchment modelling in Southern region.

The vision and preferred policy

Policy Option 4 – areas of low, moderate or high flood risk where we are already managing the flood risk effectively but where we may need to take further actions to keep pace with climate change.

The most sustainable approach to managing future flood risk will be to bring about long-term adaptation of the urban environment under the Policy 4.



↑ The River Meon at East Meon.

The key messages

- Surface water flooding will worsen with increased rainfall and more intense storms in the future.
- Mitigation measures against surface water flooding are required to reduce the flood risk to properties, including ensuring that drainage pathways are not blocked.
- New developments are expected to manage drainage so that there is no net increase in flood risk.

Proposed actions to implement the preferred approach:

- Encourage local planning authorities to apply Planning Policy Statement 25 (PPS25), avoiding inappropriate development in the areas at risk of flooding, and influence local development frameworks.
- Seek funding partnerships in connection with new or redevelopment.
- Undertake System Asset Management Plans (SAMPs) to review maintenance regimes, to assess future investment needs and to maintain current level of risk.
- Improve data mapping information and understanding of flood risk by undertaking S105 modelling, concentrating on Hedge End and Whiteley.
- Develop a collaborative Surface Water Management Plan (SWMP) to address current and future pressures on the drainage network.



↑ River Hamble.

Lower Hamble and Lower Meon

Our key partners are:

Fareham Borough Council

Eastleigh Borough Council

Natural England

Impact of a 1% annual probability flood event

	Today	Future (2100)
Number of properties at risk	7	8*

*Future scenario figure extrapolated from similar catchment modelling in Southern region.

The issues in this sub-area

The flood risk in this sub-area is low with fewer than 10 properties in total flooded during the 2000/01 storms (2% annual probability event). The lower River Meon is protected from coastal flooding by a sea wall and a tidal sluice that prevents upstream tidal inflow into the river. The tidal sluice on the Lower Meon maintains the freshwater marsh of Titchfield Haven by protecting against tidal flooding.



↑ New housing development.

The vision and preferred policy

Policy Option 6 – areas of low to moderate flood risk where we will take action with others to store water or manage run-off in locations that provide overall flood risk reduction or environmental benefits.

We need to work sustainably with natural river processes to make space for water to reduce flood risk. This is best achieved under the Policy 6 option.

The key messages

The level of flood risk to people and property is relatively low in this sub-area, and there are no priority actions to reduce flood risk. The sub-area has an environmentally important site which requires periodic controlled flooding and is subject to a water level management plan.

Proposed actions to implement the preferred approach:

- Implement the Titchfield Haven Water Level Management Plan (WLMP) to meet the needs of flood risk management and the enhancement of wetland habitat.
- Undertake a System Asset Management Plan (SAMP) to review maintenance regimes and seek to maximise flood storage for the benefit of environmental habitats.
- Undertake a pre-feasibility study to investigate maximising flood storage and habitat creation potential.

Wallington River

Our key partners are:

Fareham Borough Council

Winchester City Council

Riparian landowners

Impact of a 1% annual probability flood event

	Today	Future (2100)
Number of properties at risk	12	14*

*Future scenario figure extrapolated from similar catchment modelling in Southern region.

The issues in this sub-area

Current fluvial flood risk is low. It is estimated that 12 properties are at flood risk during a 1% annual probability flood event. The properties at risk are located throughout the sub-area with a small cluster in Southwick.

The vision and preferred policy

Policy Option 3 – areas of low to moderate flood risk where we are generally managing existing flood risk effectively.

Although flood risk is relatively low in this sub-area, by maintaining current investment, the downstream risk to the sub-area Old Wallington Town can be reduced, therefore the most appropriate option is Policy 3.

The key messages

- Flood risk management activities are required in order to maintain the dam at Southwick Park Lake to ensure that there is no increase in downstream flood risk in Wallington Town and to comply with the Reservoirs Act 1975. There is a relatively low level of flood risk associated with a failure of the dam itself, but the reservoir at Southwick Park Lake provides flood storage reducing peak river flow, and also acts as a store of sediment.



↑ Wallington River.

Proposed actions to implement the preferred approach:

- Undertake System Asset Management Plans (SAMPs) to review maintenance regimes and to maintain current level of investment.

Havant and Denmead

Our key partners are:

Fareham Borough Council

Winchester City Council

Hampshire County Council

Southern Water

Impact of a 1% annual probability flood event

	Today	Future (2100)
Number of properties at risk	213	340

The issues in this sub-area

Flooding in Havant is predominantly from a combination of high groundwater levels and run-off from heavy rainfall. This can overwhelm channel capacity and existing drainage networks. The existing fluvial defences are effective for flooding more frequent than the 1% annual probability event, although the flooding can be made worse by the build-up of debris within the modified channel network at key points. These blockages can restrict downstream flow and lead to the water backing up.

Presently, up to 160 residential properties and 53 commercial are at flood risk during a 1% annual probability flood. The current defences are effective in reducing risk to Havant and should defences be removed the number of properties at risk would increase to several thousand, mainly located in Havant and Denmead.

The historic flood record suggests that surface water flooding is of great concern and more frequent in nature than fluvial flooding, particularly in Havant. During 2000/01, 30 properties were flooded in the Havant, Denmead and Purbrook areas with disruption to local roads and the flooding of a school.

The vision and preferred policy

Policy Option 4 – areas of low, moderate or high flood risk where we are already managing the flood risk effectively but where we may need to take further actions to keep pace with climate change.

The most sustainable approach to managing future flood risk will be to bring about long-term adaptation of the urban environment under the Policy 4 option.

The key messages

- We need to improve channel capacity and conveyance through Havant by seeking to remove the constraints from urban development. This will reduce the probability of flooding through sustainable means. For example, re-creating river corridors will increase space for the river to flow and flood more naturally.
- Improved maintenance is required to reduce the risk of fluvial flooding from blockages of grills.
- Increased storminess resulting from climate change will put increased pressure on the urban drainage network.
- New developments are expected to manage drainage so that there is no net increase in flood risk.

Proposed actions to implement the preferred approach:

- Encourage local planning authorities to apply Planning Policy Statement 25 (PPS25), avoiding inappropriate development in the floodplain, and influence local development frameworks.
- Seek funding partnerships in connection with new development or redevelopment.
- Undertake System Asset Management Plans (SAMPs) to review maintenance regimes, to assess future investment needs and to maintain current level of risk.
- Improve flood warning on the Hermitage and Lavant streams by seeking to expand the service, reducing lead-in times and developing better predictive tools.
- Undertake the Hermitage and Lavant streams river restoration project considering options to naturalise river corridors through Havant.
- Develop a collaborative Surface Water Management Plan (SWMP) to address current and future pressures on the drainage network.
- Raise awareness of the impacts of blocked drainage pathways from the build up of obstructions in the watercourses.



↑ Restored concrete lined channel on stretch of the Hermitage Stream.



← Concrete lined channels are typical in South East Hampshire. Work is ongoing to restore more natural watercourses.

Chalk catchment

Our key partners are:

Winchester City Council

East Hampshire District Council

Hampshire County Council

Southern Water

Natural England

National Farmers Union

England Catchment Sensitive Farming Delivery Initiative

Local Flood Wardens

Various Parish Councils

The issues in this sub-area

Flood flows in the sub-area are dominated by emergent groundwater and baseflow from the chalk aquifer (a natural store of water under the ground). As such the frequency of flooding is less than on the lower catchment tributaries, but when flooding does occur it generally results from excessive seasonal rainfall through the autumn and winter, and therefore tends to be prolonged for up to several months.

At present it is estimated that 234 properties are at flood risk during a 1% annual probability flood event, as experienced in 2000/01. Local roads and infrastructure throughout the villages can be at risk from groundwater flooding.

Impact of a 1% annual probability flood event

	Today	Future (2100)
Number of properties at risk	234	281*

*Future scenario figure extrapolated from similar catchment modelling in Southern region.

The vision and preferred policy

Policy Option 3 – areas of low to moderate flood risk where we are generally managing existing flood risk effectively.

While the consequences of flooding can be great in the upland chalk areas, frequencies are low. Although it is not clear how climate change will affect groundwater flooding, we have estimated that it will not worsen. Therefore, the most sustainable approach is to adopt the Policy 3 option.

The key messages

- Reducing the frequency of groundwater flooding is not always feasible so alternative actions need to be taken to reduce flood risk, such as improving maintenance of the drainage pathway and local improvements in high risk areas like Hambledon and Wickham.
- Flood resilience measures will be required to reduce the consequences of flooding.

Proposed actions to implement the preferred approach:

- Encourage local planning authorities to apply Planning Policy Statement 25 (PPS25), avoiding inappropriate development in the areas at risk of flooding, and influence local development frameworks.
- Seek funding partnerships in connection with new or redevelopment.
- Undertake System Asset Management Plans (SAMPs) to review maintenance regimes and to maintain current level of investment.
- Review the feasibility of the flood alleviation schemes for Hambledon and Wickham.
- Develop a Land Management Plan to reduce the occurrence of muddy floods and to reduce run-off during flood events.
- Improve data mapping information to better understand flood risk by undertaking modeling, concentrating on Wickham, Corhampton, Meonstoke, Warnford, Exton, West Meon, East Meon, and Frogmore.
- Develop a collaborative Surface Water Management Plan (SWMP) to address current and future pressures on the drainage network.
- Raise awareness of groundwater flooding and promote flood-proofing schemes where appropriate, including improved flood resilience.
- Develop a groundwater flood warning plan to improve the levels of service across the Rural Chalk sub-area.



← Flooding in Wickham.

Old Wallington Town

Our key partners are:

Fareham Borough Council

Hampshire County Council

Southern Water

Impact of a 1% annual probability flood event

	Today	Future (2100)
Number of properties at risk	149	179*

*Future scenario figure extrapolated from similar catchment modelling in Southern region.

The issues in this sub-area

Flood flows on lower reaches of the Wallington River are dominated by flow created by rainfall run-off but with increased groundwater from the upstream chalk aquifers during the winter and spring months.

The vision and preferred policy

Policy Option 4 – areas of low, moderate or high flood risk where we are already managing the flood risk effectively but where we may need to take further actions to keep pace with climate change.

The key messages

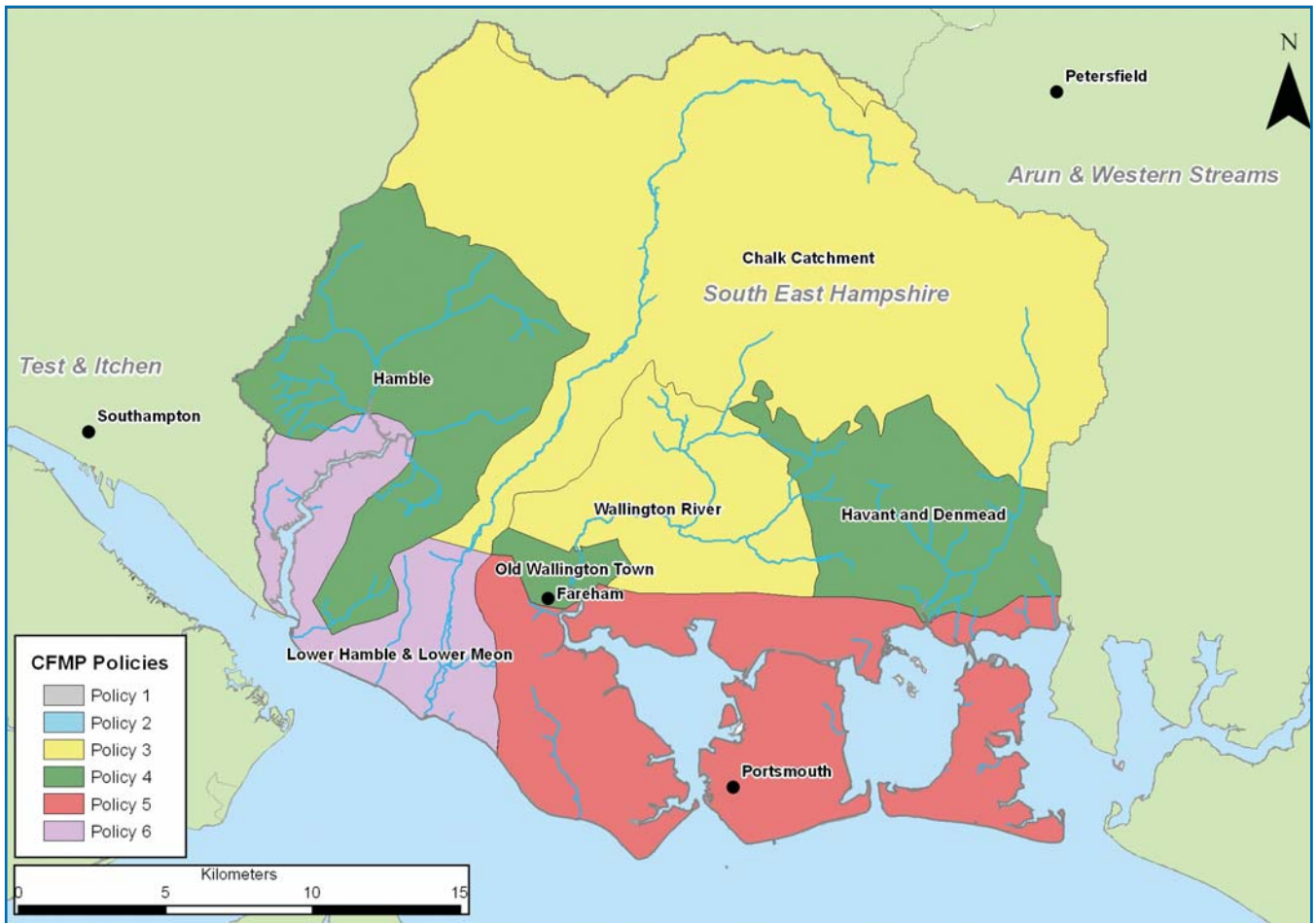
- We need to improve conveyance along the River Wallington by seeking to remove the constraints from urban development. This will reduce the probability of flooding through sustainable means.
- Defences may need to be improved to cope with more intense rainfall during storms.
- We will need to work with our partners to promote greater resilience to flooding through flood proofing and flood warning.

Proposed actions to implement the preferred approach:

- Encourage local planning authorities to apply Planning Policy Statement 25 (PPS25), avoiding inappropriate development in the areas at risk of flooding, and influence local development frameworks.
- Seek funding partnerships in connection with new development or redevelopment.
- Undertake a System Asset Management Plan (SAMP) to review maintenance regimes, to assess future investment needs and to maintain the current level of risk.
- Undertake an initial feasibility study into local improvements to reduce flood risk into the future.
- Develop a collaborative Surface Water Management Plan (SWMP) to address current and future pressures on the drainage network.

Map of CFMP policies

Map of the policies in the South East Hampshire catchment.



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or about your environment?**

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