

<b>Item No.</b>	<b>Classification:</b> Open	<b>Date:</b> 16 June 2011	<b>Decision Taker:</b> Cabinet Member for Transport, Environment and Recycling
<b>Report title:</b>		Preliminary Flood (and Surface Water) Risk Assessment in Southwark	
<b>Ward(s) or groups affected:</b>		All	
<b>From:</b>		Strategic Director for Environment	

## RECOMMENDATIONS

1. That the Cabinet Member notes the new duties, roles and responsibilities required of the council as a Lead Local Flood Authority (LLFA) with effect from 1 April 2011.
2. That the Cabinet Member notes the activities undertaken so far in line with the requirements of the Flood and Water Management Act 2010 and the Flood Risk Regulation 2009.
3. That the Cabinet Member notes the content of the Preliminary Flood Risk Assessment (PFRA) and approves the document for submission to the Environmental Agency (EA) (Appendix 1).
4. That the Cabinet Member notes the budget proposals (Appendix 2).

## BACKGROUND INFORMATION

5. Subsequent to severe flooding in parts of England, especially Yorkshire, Worcestershire, Gloucestershire and Oxfordshire in the summer of 2007, the government commissioned an independent review of flood risk management by a commission led Sir Michael Pitt. Among the recommendations from the report was the need for Local Authorities to lead on the management of local flood risk.
6. The Flood Risk Regulations 2009 (FRR) and Flood and Water Management Act 2010 (FWMA) were introduced to provide the legislative framework for the effective management of surface water flood risk in England and Wales.
7. The Flood Risk Regulation 2009 sought to transpose the European Union (EU) Flood Directive (Directive 2007/60/EC) into domestic law. The EU Floods Directive is a piece of European Community (EC) legislation specifically aimed at addressing flood risk by setting out a common framework for its measurement, reporting and management of flood risk.
8. A key requirement of the Flood Risk Regulations of 2009 is the preparation of the Preliminary Flood Risk Assessment (PFRA) which is due to be with the Environmental Agency (EA) by 22 June 2011.
9. Under the FWMA, Southwark Council has new responsibilities as Lead Local Flood Authorities (LLFAs) for managing flood risk from surface water, ground water and ordinary water courses.

10. Potential sources of flooding in Southwark include flooding from the Thames, possible sewer surcharging, surface water and groundwater flooding. However the management of the risk of fluvial flooding from the Thames River will remain with the EA, Thames Water will continue to manage the sewer system whilst reservoirs will be managed by the owners.
11. The recent surface water modelling undertaken as part of the drain London Project indicated that across Southwark, 33,220 residential properties and 2,870 non-residential properties could be at risk of surface water flooding of greater than 0.03m depth during a rainfall event with a 1 in 200 annual chance of occurring.
12. Also, approximately 560 residential properties and 80 non-residential properties are estimated to be at risk of flooding to a depth of greater than 0.5m during the same modelled rainfall event.
13. Historically there has been flooding incidents in Southwark. In 1828, there was fluvial flooding from the Thames River. Records also show that there was a minor flooding incidence in 2001. More recently on 27 April 2004, there was flooding from surface water that primarily affected the Dulwich area.
14. Available information indicates that the 2004 flooding event of 2004 cost £1 million excluding the cost to residents and loss of income for business.
15. It is also on record that it took over six months for some residents to return to their homes and some businesses could not run until after three months.
16. With effect from 1 April 2011 when the Council takes on the role of LLFA, the council could be liable to paying compensation if it could be proven that it was negligent in executing its duties under the Act.
17. With changing climate patterns, it is expected that storms of higher intensity will become increasingly common and therefore increase the risk of surface water flooding. It is therefore important that as a LLFA, the Council recognises and plans to minimise the likelihood of flooding or take steps to reduce the impact should they occur.
18. The impact of these events could cut across administrative boundaries, thus highlighting the need for collaborative working with both internal and external stakeholders in order to successfully discharge our obligations whilst effectively managing these risks.

## **KEY ISSUES FOR CONSIDERATION**

### **Requirements under Flood Risk Regulation 2009**

19. The Flood Risk Regulations which came into force on 10 December 2009 transposed the EU Floods Directive on flood risk management into domestic law. The regulations placed a duty on LLFAs to prepare Preliminary Flood Risk Assessments (PFRA). This involves;
  - Local flood risk assessment
  - Preparation of preliminary assessment report
  - Identification of flood risk areas

The deadline for the delivery of 1-3 above to the EA is 22 June 2011.

- Preparation of flood hazard and flood risk maps by June 2013.
  - Developing flood risk management plans with a deadline of June 2015.
20. In order to meet the deadline of 22 June 2011, the Department of Environment is working closely with Drain London's Consultant for Group 7 to undertake the Preliminary Flood Risk Assessment (PFRA) and Surface Water Management Plans (SWMP).
  21. The EA is expected to deliver a consolidated PFRA for England and Wales to European Union by 22 December 2011.
  22. Besides meeting legal requirements, completing the PFRA will also enable Southwark Council to:
    - Fully understand local flood risk issues
    - Take the opportunity to forge working partnerships and engage in information sharing with other authorities
    - Inform and prepare local communities
    - Develop expertise on local flood risk issues
  23. Initial surface water modelling undertaken for Southwark through Drain London Consultants has identified the following areas as potentially at risk of surface water flooding from a 1:100 rainfall event.
    - Herne Hill area (i.e Half Moon Lane, an area that experienced flooding about 100 years ago according to historical records. Records also show there was an old lake along the Lane). This particular area crosses the boundary between Southwark and Lambeth.
    - Champion Park area
    - The area between Peckham Park Road and Asylum Road.
    - The area bounded by Willow Brook, Commercial Way, Southampton Way, Well Way and Saint George's Way.
    - Area bounded by Camberwell Road, Camberwell New Road and Wyndham Road.
    - Dulwich Park area
    - Belair Park area along Croxted Road
  24. Detail investigations will be required to confirm the level of risk that these areas are exposed to.
  25. A key requirement of the PFRA is for LLFAs to outline their leadership and partnership arrangement for the management of flood risk especially in view of the fact that flooding could result from a combination of sources without regard for administrative boundaries.
  26. Across London, it is proposed to have borough partnerships that mirror the representation on the Regional Flood Defence Committee.
  27. Southwark and Lambeth Councils form the South Central Group in the Thames Regional Flood Defence Committee represented by Southwark's Cabinet Member for transport, environment and recycling.

28. It is proposed that the Directors for Environment in Southwark and Lambeth or their representatives together with representatives of major stakeholders such as the EA, Thames Water and Greater London Authority jointly constitute the Southwark-Lambeth Strategic Flood Group.
29. Underneath the strategic group, it is proposed to have an officer led Flood Risk Management Group made up of selected members from the internal flood risk partnerships of the respective boroughs.
30. At the operational level it is proposed to have within Southwark, a Flood Risk Management Team comprising representatives of the departments listed under paragraph 4 to facilitate Southwark's role as Lead Local Flood Authority.
31. The PFRA will need to be approved by the council prior to submission to the Environmental Agency. The Council therefore needs to make the necessary arrangements for the approval of the PFRA in time for final submission to the Environment Agency by 22 June 2011.

### **Requirements under the Flood and Water Management Act 2010**

32. The Flood and Water Management Act received Royal Assent on 8 April 2010 and introduced a new approach to flood and coastal erosion risk management. The primary responsibilities for LLFA under the Act are outlined below.

### **Power to request information**

33. This gives Southwark Council the power to request information from all persons in order to effectively fulfill the flood risk management responsibilities.

### **Flood Incident Investigation**

34. Investigate and record details of significant flooding incidents in the local area the LLFA becomes aware of and publish the results of the investigation.
35. Identify which partner authorities have relevant flood risk management functions and establish the action taken or intended to be taken in response.
36. Notify other risk management authorities where necessary and publish the result of any investigation carried out.

### **Assets Register**

37. Identify and collate details of structures that are likely to have significant effect on the management of flood risk.
38. Maintain a register of structures or features considered to have a significant effect on local flood risk.
39. Keep record of information about such structures or features, including information about ownership and state of repair at the minimum.
40. Make register available for inspection.

41. Contents of the register and records may be varied by regulations made by the Secretary of State.

### **Flood Risk Management Strategy**

42. Develop, maintain, apply and monitor a strategy for local flood risk management. Local flood risk sources include surface runoff, groundwater and ordinary watercourses (including lakes and ponds but excluding reservoirs and main rivers).
43. Proposed risk management measures aimed at addressing the impact of local sources of flooding must be consistent with the national flood and coastal erosion risk management strategy.
44. LLFA are required to consult other risk management authorities and the public on the preparation of the strategy and publish a summary.

### **Works Powers**

45. Have powers to carry out works to manage flood risk from surface runoff and groundwater consistent with the local flood risk management strategy.

### **Powers to Designate**

46. Along with the EA, have powers to designate private or third party structures and features affecting flood risk, in particular those features on private land. Owners of such designated structures must seek formal approval in advance of undertaking alterations, demolition or replacement of such structures.

### **Partnering**

47. Co-operate with other risk management authorities or agencies in exercising functions under the Act. These include; the Environment Agency, other lead local flood authorities, internal drainage boards, water companies and other highway authorities.

### **Sustainable Urban Drainage Systems (SuDS)**

48. Establish a SuDS approving Body (SAB) with responsibility for approving proposed drainage systems in new developments and redevelopments, subject to exemptions and thresholds. The SAB must approve all SuDS designs before the developer can commence construction. SuDS will be subject to national standards being developed by Defra (not published yet).
49. The SAB will be responsibility for adopting and maintaining SuDS serving more than one property subject to satisfactory completion. SuDS in public roads will be expected to be maintained by highways authorities and SuDS on private properties must be designated by the SAB.
50. The SAB will also approve all new surface water drainage systems that require connections to the public sewerage systems before any such connections are done.

51. In addition Southwark council will be required to take over the EA's role of making decisions as to whether particular third party works is likely to affect water flow while maintaining membership of the Thames Region Flood Defence Committee.

### **Collaborative Working**

52. Whereas there is nothing within the Act to stop a group of LLFAs working together to produce a strategy covering their combined areas, it requires that each LLFA takes responsibility for their own areas.
53. Any collaborative working will be more effective at the regional level among boroughs in a particular catchment area. On that basis, it will be preferable for Southwark to develop stronger collaborative working with Lambeth Council in managing flood risk across the two boroughs.
54. The two boroughs have common flooding issues spanning their boundaries and a joint approach to dealing with the risks will be mutually beneficial. There is also the potential for both boroughs to have a joint SuDS approving body in the future in order to derive more efficiencies.

### **Policy implications**

55. The FRR 2009 and FWMA 2010 introduced completely new roles and responsibilities to the Council as a LLFA.
56. They also require a commitment to collaborative working across administrative boundaries to ensure common local flood risk issues are addressed more effectively.
57. The Act also gives powers to the LLFA to require information from and provide information to others needed to facilitate the local flood risk management functions. This makes it important for all LLFAs to ensure the right structures are put in place and the necessary information is available. In some cases the minister of state may also require information to be supplied.
58. It is proposed that the Environment Department leads on the formulation of flood policy, development of flood risk strategy and facilitate coordination among other departments in the Council.

### **Community impact statement**

59. Recommendations set out in this report will have no particular impact on people with protected characteristics, namely age, disability, faith/religion, gender, race and ethnicity and sexual orientation.
60. Initial surface water flooding modelling has identified the areas listed under paragraph 22 as particularly susceptible to surface water flooding. As part of the duties and responsibilities of the council as a LLFA, such communities should be engaged and involved in preparing community flood risk management plans.

## **Resource implications**

61. The additional responsibilities set out in this report will require resources to manage the process, undertake the technical reviews and ensure the Council fulfils its duties and obligations under the FWMA 2010 and the FRR 2009. Specifically specialist resources will be required to assist to undertake the Flood Risk Assessment and to support the SuDS Approval Body (SAB) that LFA by April 2012 to review and approve all SuDS proposed for new developments.
62. In recognition of the additional burdens on Local Authorities arising from the Flood and Water Management Act 2010, the Government announced £21million of grants in 2011/12 rising to £36million for 2012/13 and subsequent years of this Spending Review 'to help councils manage flood risk, protect and support their own community'.
63. Based on the EA's Surface Water Vulnerability and Flood Risk Maps Southwark has 43161 properties at risk which is the highest in London. Southwark will therefore be receiving £182.8k in 2011/2012 and subsequently £438.2k for the period of the current spending review.
64. Details of the proposed budget allocation are set out in Appendix 2 and are within the allocation announced by the Government. In addition to salary costs, it proposed to set aside funds to engage with affected communities and to support the activities of other departments that will take on additional responsibilities as a consequence of the Council's role as LLFA and to cover other additional expenses.
65. The Council's allocation from the Government Grant to comply with Flood and Water Management Act 2010 is held as a restricted reserve. The release of funds from reserves requires the approval of the Finance Director on submission of a business case. Therefore the proposed budget is subject to this approval. Similarly the establishment of new posts is subject to approval of the Head of Human Resources and acceptance of the business case.

## **Human Resources Implications**

66. It is proposed to establish up to three posts (Flood risk manager and two drainage engineers). Although the skills required are of a specialist nature, recruitment from within the Council's existing workforce will be sought before seeking external recruitment.

## **Consultation**

67. The Drain London project which was set up to coordinate the development of PFRAs for London boroughs have held consultations with external stakeholders such as the Environmental Agency, Thames Water, the London Fire Brigade and the Metropolitan Police among others.
68. There is no legal requirement to consult the public on the PRFA.
69. An awareness raising and options workshop was held on 1 April 2011 which was attended by representatives from Housing, Regeneration & Neighbourhoods, Legal, Corporate Risk, Communication, Capital Projects, GIS/Data Management, Parks and Open spaces Development Planning and Control, Emergency

Planning and Resilience and Asset Management.

70. Additionally the PFRA was circulated to relevant departments for comments. Comments received have been incorporated.

## **SUPPLEMENTARY ADVICE FROM OTHERS**

### **Finance Director**

71. This report asks the Cabinet Member for Environment Transport and recycling to note the proposals for the allocation of the Lead Local Flood Authorities element of the Local Services Support Grant of £182.8k for 2011/12 and £438.2k in 2012/13 and thereafter.
72. However, as it was agreed by Council on 22 February that these funds would not be passed through to departments, but put into an earmarked reserve and released as required, this release of reserves requires a business case to be put to the Finance Director, until approval is given the funds cannot be released to individual departments.

### **Director of Communities, Law & Governance**

73. The Individual Cabinet Member is being asked to approve the preliminary flood risk assessment for submission to the EA. Under part 3D, paragraph 6 of the Constitution the Member for Regeneration and Corporate Strategy has the authority to do so.
74. The PFRA provides a high level summary of significant flood risk, based on available and readily derivable information, describing both the probability and harmful consequences of past and future flooding. The development of new information is not required, but new analysis of existing information may be needed. The PRFA that the Individual Member is being asked to approve for submission to the EA includes:
- A Preliminary assessment report
  - A Preliminary assessment report spreadsheet
  - A GIS layer of the Flood Risk Area(s)
75. By way of background Member states were required to transpose the Floods Directive into domestic law by November 2009. The Government was concerned that, due to Parliamentary time constraints, it would fail to meet the deadline for transposition if it included the relevant provisions in the FWM Bill. It, therefore, decided to transpose the Floods Directive by way of regulations made under the European Communities Act 1972. It hopes to consolidate the FRR 2009 with other legislation at a later date to achieve a single coherent set of provisions dealing with flood risk assessment and management. This is the reason why reference is frequently still made to the Directive as well as the Regulations.
76. The Floods Directive (Directive 2007/60/E) sets out a three stage process:-
- a. *Preliminary flood risk assessments (Article 4)*  
Member states must carry out a preliminary flood risk assessment for each of their river basin districts to assess the potential risks of future floods on human



health, the environment, cultural heritage and economic activity.

*b. Flood hazard maps and flood risk maps (Articles 5 and 6)*

Member states must identify from the preliminary flood risk assessments where significant flood risks are likely to occur. Flood hazard maps and flood risk maps must be drawn up showing areas with a low, medium and high probability of flooding and the potential adverse consequences.

*c. Flood risk management plans (Article 7)*

On the basis of the flood hazard maps and flood risk maps, member states must establish flood risk management plans. These will focus on reducing the potential adverse consequences of flooding on human health, the environment, cultural heritage and economic activity and on reducing the likelihood of flooding.

## **Responsibility in terms of Preliminary flood risk assessments**

### **The EA**

77. For each river basin district, the EA must prepare both of the following:-

- (i) A preliminary assessment map, showing the borders of the river basin and sub-basins, any coastline areas, the topography and land use.
- (ii) A preliminary assessment report on flooding from the sea, main rivers and reservoirs. This will give details of:
  - (x) past floods with significant harmful consequences for human health, economic activity or the environment (including cultural heritage); and
  - (y) the possible harmful consequences of future floods.

*(Regulation 9(1), FRR 2009).*

78. The EA must then determine if there is a significant flood risk from these sources and identify the affected part of the river basin district (flood risk area). It must take into account Government guidance for assessing whether a flood risk is “significant” (*regulation 13, FRR 2009*). The preliminary assessment maps and reports must be published by 22 December 2011 (*regulation 15, FRR 2009*). The EA must review them and its identification of flood risk areas by 22 December 2017 and then carry out further reviews at least every six years.

### **Lead local flood authorities**

79. The lead local flood authority (LLFA) (the council of a London Borough in London) must prepare a preliminary assessment report for any other sources of flooding in its area (excluding the sea, main rivers or reservoirs) (*regulation 10(1) and (2), FRR 2009*). The EA will review the LLFA’s report and may recommend modifications to it (*regulation 10(3), FRR 2009*).

80. The LLFA must determine whether there is a significant flood risk in its area (other than from the sea, main rivers or reservoirs). It must identify the flood risk area and take into account the Government’s guidance on assessing whether a flood risk is “significant”.

81. The EA will review the LLFA's determination of flood risk areas and may make recommendations. If the LLFA disagrees, the matter will then be referred to the Secretary of State (*regulation 14, FRR 2009*).
82. The preliminary assessment reports must be published by the Environment Agency by 22 December 2011 (*regulation 15, FRR 2009*). LLFAs must review their preliminary reports and identification of flood risk areas by 22 June 2017 and then a minimum of every six years

## BACKGROUND DOCUMENTS

Background Papers	Held At	Contact
Flood Risk Management Briefing Notes 1-6	Copeland Road Depot Blackpool Rd Peckham SE15 3SN	Mick Lucas 020 7525 1140
Sections from Flood Risk Assessment Report:-  Fig 1. pg 17 Surface Water Flooding and Fluvial Flooding Incidents Fig 2. pg 17 Groundwater Flooding Incidents and Increased Potential for Elevated Groundwater Fig 3. pg 17 Sewer Flooding Incidents  Fig 4. pg 27 Maximum Flood Depth – 1 in 200 chance of rainfall Fig 5. pg 28 Flood Hazard and Flow Direction Fig 6. pg 31 Maximum Flood Depth – 1 in 100 chance of rainfall  Annex 1. pg 1-1 Past Floods Annex 2. pg 2-1 Future Floods Annex 3. pg 3-1 Flood Risk Areas Annex 4. pg 4-1 Review Checklist Annex 5. pg 5-1 GIS Layer of Flood Risk Areas	Copeland Road Depot	Mick Lucas 020 7525 1140

## APPENDICES

No.	Title
1	Preliminary Flood Risk Assessment
2	Budget Proposals

## AUDIT TRAIL

<b>Lead Officer</b>	Gill Davies, Strategic Director, Environment	
<b>Report Author</b>	Des Waters, Head of Public Realm	
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<b>CONSULTATION WITH OTHER OFFICERS / DIRECTORATES / CABINET MEMBER</b>		
<b>Officer Title</b>	<b>Comments Sought</b>	<b>Comments included</b>
Strategic Director of Communities, Law & Governance	Yes	Yes
Finance Director	Yes	Yes
<b>Cabinet Member</b>	Yes	Yes
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