# London in the Thames catchment

Business Case:

Flood Risk and the six year investment programme

## 1. Summary, Headline facts and statistics

**London's flood risk**

| | Surface Water | | | Rivers/Sea | | |
|---|---|---|---|---|---|---|
| | Residential | Non residential | Total | Residential | Non residential | Total |
| **High** | 59,000 | 7,000 | 66,000 | 11,000 | 3,000 | 14,000 |
| **Medium** | 96,000 | 13,000 | 109,000 | 29,000 | 5,000 | 34,000 |
| **Low** | 445,000 | 54,000 | 499,000 | 423,000 | 56,000 | 485,000 |
| **Total at risk** | **600,000** | **74,000** | **674,000** | **465,000** | **65,000** | **536,000** |

**The Six Year Investment Programme**

The Thames Regional Flood & Coastal Committee decide (RFCC) which projects make up the programme. The allocation of central Government funding to the projects is based on Defra Policy.

- £180m of Flood Defence Grant in Aid (FD GiA) investment planned in the Thames Estuary to maintain the World Class standard of protection for London from tidal flooding.
- £77m of FD GiA investment within London in the next six years to directly protect 10,000 properties from tidal flooding
- £36m of FD GiA investment planned to reduce the risk of river and surface water flooding to 6,800 properties in London
- At least £25m of contributions are required to unlock all of this investment over the next six years. Levy provides a mechanism for local authorities to pool resources to achieve this.

The return on the investment in flood risk management is high. Within Thames the average benefit to cost ratio's for schemes within the six year investment programme are;

- Protecting London from tidal flooding: 117:1
- Reducing the risk from river flooding: 10:1
- Reducing the risk from surface water flooding: 7:1

**Levy**

The levy is used only to part-fund capital projects led by either local authorities or the Environment Agency. All other Agency costs are met by central Government.

## 2. How flood risk management is funded and how value for money is ensured

The flood risks across London, an illustration of the impacts of local flooding during a typical year (2014) along with examples of what gets built through the investment is set out in a series of Annexe's (1 to 5) at the end of this paper. These are the factors that drive investment.

The core of this paper focuses on value for money, governance, funding and the six year programme.

**Ensuring value for money**

Every capital project has to pass a series of gateways to ensure they are economically and technically robust before construction can happen. The National Audit Office scrutinise these processes every two to three years. Their most recent report was published this November. Their conclusions on the flood and coastal risk programme are set out below:

"The Agency has a robust process in place to prioritise maintenance spend, based on the benefits and risk identified by flood risk model data. Annually, it undertakes an exercise to allocate funding for asset maintenance, using its national database of maintenance needs."

"Benefit–cost assessments for capital flood defence projects are robust and well thought through. The Agency's approach to benefit–cost analysis is consistent with HM Treasury's Green Book. The Agency has produced detailed guidance on identifying the typical benefits and costs of projects, and investment appraisals are clear and thorough."

"There is a healthy benefit–cost ratio for floods projects. The Agency anticipated it would achieve a programme benefit–cost ratio of at least 8:1 for its flood defence projects funded through grant-in-aid for the current spending review period. As of March 2014, it has achieved 9.5:1"

"The Agency has made efficiencies, including a saving of £44 million between 2011 and 2014 in respect of capital construction projects. However, the risk of more severe weather events will put pressure on existing budgets."

Source: NAO Report into Strategic Flood Risk Management, November 2014

http://www.nao.org.uk/wp-content/uploads/2014/11/Strategic-flood-risk-management.pdf

***How projects are assessed***

| Table One – How Projects are assessed | | |
|---|---|---|
| **Stage** | **The tests, costs and outcome** | **London Picture** |
| Pre-Gateway 0 – Decision to investigate a problem | Usually a short assessment of evidence to establish whether there *could* be a capital solution to a flooding problem. A high level assessment of costs and benefits to establish whether the project should be put forward onto a future programme. Generally carried out internally by Local Authorities or the EA. There is a need to produce sufficient evidence for the RFCC approve putting the project on the programme and developing a business case. | |
| Gateway 0 – Decision to develop a business case for a project. | All business cases are carried out using a common appraisal method that ensures compliance with MH Treasury rules. The business case needs to provide evidence to show:<br>• the economic return on a project is (lifetime costs, houses protected, commercial damages avoided)<br>• the costs of construction<br>• that the risks are understood and accounted for<br>• that the funding contributions are secure | 67 Projects<br><br>£27m of investment planned within the 6 year programme |

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| | | |
|---|---|---|
| | The work will involve some flood modeling, engineering assessment of options and consultation with the affected community.<br>On a simple project – for example to construct a flood wall to protect a small group of houses this stage may only take a few months. On a large complex project such as the £15m Lewisham and Catford scheme this phase can take 18 to 24 months. | |
| Gateway 1 – Approval of business case | If the business case is approved, the project can progress to detailed design. On larger projects, where the appraisal stage is particularly detailed we award 'Design and Build' contracts where it is more efficient to do so. This stage ensures that the option selected through the business case can be built for the cost expected. | 24 Projects<br><br>£26m of investment planned within the 6 year programme |
| Gateway 2 – Approval of detailed design | This gateway checks that the project design has been carried out in accordance with the approved business case and that the client has been involved in the design process and approves the detailed design. | |
| Gateway 3 – Construction Contract Award | This gateway checks that a contract may be awarded and that everything necessary is in place to ensure that there will be value for money. This will include ensuring the procurement strategy is in place, that all land, legal and planning agreements are secure, ensuring sufficient time for mobilisaion and that risks will be managed. | 26 Projects<br><br>£68m of investment planned |

**Flood Risk Management funding**

There are three main sources of funding for Flood Risk projects;

- Flood Defence Grant in Aid from central Government
- Local levy contributions
- Partner / beneficiary contributions

The maximum amount of central Government funding on offer to each project is based on the value of qualifying benefits for each of the outcomes set by Defra.

Those projects that have large outcomes relative to their cost are eligible for 100% funding from central Government. For example, works to the tidal defences through London are eligible for full funding.

Many projects to address surface water, groundwater and river flooding do require contributions to secure the central Government funding and progress. The RFCC take the decisions on where levy contributions should be used to achieve this. Across the 6 year programme in Thames the RFCC have agreed that levy should be used to make up the difference between central Government funding (and beneficiary contributions) and the total cost of a project for surface water and groundwater projects being implemented by Local Authorities. This approach recognises that Local Authorities have only had these responsibilities for a few years and there is a very significant surface water risk across urban locations in Thames.

**Governance & roles**

| | |
|---|---|
| Regional Flood & Coastal Committee | The RFCC brings together members appointed by Lead Local Flood Authorities and independent members with relevant experience:<br>• to ensure there are coherent plans for identifying, communicating and managing flood and coastal erosion risks across catchments and shorelines;<br>• to promote efficient, targeted and risk-based investment in flood and coastal erosion risk management that optimises value for money and benefits for local communities;<br>• to provide a link between the Environment Agency, LLFAs, other risk management authorities, and other relevant bodies to engender mutual understanding of flood and coastal erosion risks in its area |
| Environment Agency | The EA is responsible for taking a strategic overview of the management of all sources of flooding and coastal erosion. This includes, for example, setting the direction for managing the risks through strategic plans; providing evidence and advice to inform Government policy and support others; and providing a framework to support local delivery.<br>The Agency also has operational responsibility for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea.<br>The EA requires the consent of the Regional Flood & Coastal Committee to implement its programmes. |
| Lead Local Flood Authority | Lead Local Flood Authorities (upper tier councils) are responsible for developing, maintaining and applying a strategy for local flood risk management in their areas and for maintaining a register of flood risk assets.<br>They also have lead responsibility for managing the risk of flooding from surface water, groundwater and ordinary watercourses. |
| Water and sewerage companies | Water and Sewerage Companies are responsible for managing the risks of flooding from water and foul or combined sewer systems providing drainage from buildings and yards. |
| All Risk Management Authorities | Under the Flood and Water Management Act 2010 all risk management authorities mentioned above have a duty to co-operate with each other and to share data. A key theme of the Pitt Review was for flood risk management authorities to work in partnership to deliver flood risk management better to the benefit of their communities. |

## 3. The six year programme

Each of the twelve RFCCs across the country have submitted their 6 year investment proposals to

Defra. On the 3rd December the Chancellor will announce where the £2.2bn of investment will be targeted over the six year period.

The Thames Committee have taken a catchment-wide and long-term approach for many years now and this is strongly reflected in the programme put forward.

The catchment approach is very important because flooding happens across political and administrative boundaries. Within the programme, London benefits from work being proposed outside of its boundary;

- Flood storage is being developed on the River Roding in Essex to hold water back to protect property and infrastructure in North East London .
- Options to reduce groundwater risks in Surrey are being developed to reduce the risk in South London boroughs.
- Works in Hertfordshire are being implemented to ensure that the River Lee Flood Alleviation Scheme continues to operate effectively reducing the risk of flooding through Central North London.

London also benefits from very large scale schemes that cross borough boundaries. Most notably the River Thames Scheme will benefit Windsor & Maidenhead, Surrey and the London Borough's of Richmond and Kingston. The Thames Estuary 2100 Plan, which ensures London will maintain its World Class standard of protection from tidal flooding extends across Essex, Kent and London.

A list of the projects within London in the six year plan is shown in Annexe 6. In summary, within London the six year plan comprises;

- £21m of investment at the Thames Barrier to ensure it continues to operate to a World Class standard,
- £43m of investment in the walls and embankments along the Thames to ensure that all of London is protected from tidal flooding. This is the first phase of £1.2bn of investment over the next 25 years in the tidal defences.
- £15m of investment to start to reduce the risks from surface water flooding in London.
- £42m of investment to reduce the risk of flooding from rivers including large scale schemes for Bromley, Kingston, Ealing, Hillingdon, Redbridge, Waltham Forest, Brent and Harrow. These are areas at high risk of river flooding where there is the opportunity to reduce the risk of flooding to property, businesses and infrastructure before a serious flood happens.

All of the projects have very healthy benefit cost ratio's (typically between 5:1 and 15:1) but under the Governments Partnership Funding policy some require contributions.

## 4. Levy Options

The Thames RFCC have built up a Major Project Fund to help implement some of the larger projects across the Thames catchment within the six year plan. At present this fund stands at £8.7m.

The table 3 below shows the levy income year on year (based on no increase and also the 1.99% annual increase recommended by the RFCC sub-committee) and indicative levy spend based on the agreed 6 year programme.

| Table 3: Impact of levy on the Major Project Fund | | | | | |
|---|---|---|---|---|---|
| Year | Indicative Investment | Levy (with no annual increase) | Major Projects Fund (with no levy increase) | Levy (with a 1.99% annual increase) | Major Projects Fund (with a 1.99% annual increase) |
| 2015/16 | 8,976 | 10,500 | 10,224 | 10,708 | 10,432 |
| 2016/17 | 10,082 | 10,500 | 10,642 | 10,922 | 11,272 |
| 2017/18 | 17,855 | 10,500 | 3,287 | 11,139 | 4,556 |
| 2018/19 | 15,717 | 10,500 | -1,930 | 11,361 | 200 |
| 2019/20 | 11,138 | 10,500 | -2,568 | 11,587 | 449 |
| 2020/21 | 11,601 | 10,500 | -3,669 | 11,817 | 665 |

This shows that the programme can be delivered with a 1.99% annual increase but that the Major Projects Fund would be drawn down and would therefore impact on the Committee's ability to take forward major projects into the next Spending Review period. By way of comparison, if levy was held at current levels through the 6 year period, £3.7m of projects would need to be removed from the programme for it to be affordable whilst a 5% annual increase would lead to the Major Project Fund being £8.0m at the end of the six years.

The Environment Agency's role is to advise Members on the programme and the potential implications of decisions relating to levy.

On this matter we have advised Members that there are factors that could push the demand for funding upwards (which would place even greater demands on levy contributions or contributions from other partners) and some factors that would take the demand downwards and therefore reduce the demand.

Factors likely to drive the total levy demand up include;

- Cost inflation for all schemes,
- Lead Local Flood Authority schemes arising from investigations in 2015/16 – our judgement is that the costs for these schemes will be higher than currently estimated,
- Strengthening of the business case development in Years 4 to 6 in readiness for the next programme period,
- Strengthening of the business case development in Years 2 to 4 to replace delayed and abortive schemes.

Factors that could drive demand down;

- Efficiencies attained in delivery. The EA has a target to achieve a further 10% efficiencies in the delivery of the capital programme,
- Environment Agency led schemes where a solution is not yet certain (up to approx £10m),
- Lead Local Flood Authority schemes that prove abortive,
- External contributions not available so schemes are not financially viable and cannot progress.

The figures quoted in Table 3 above are the best available information available now, but there are factors that will lead to changes up and down through this period.

**David Bedlington**

**Area Flood & Coastal Risk Manager, Environment Agency**

**Annexe One:**
**Overview of the flood risk in London & the Thames**

London is at risk from tidal, groundwater, river and surface water flooding. These sources all have very different characteristics.

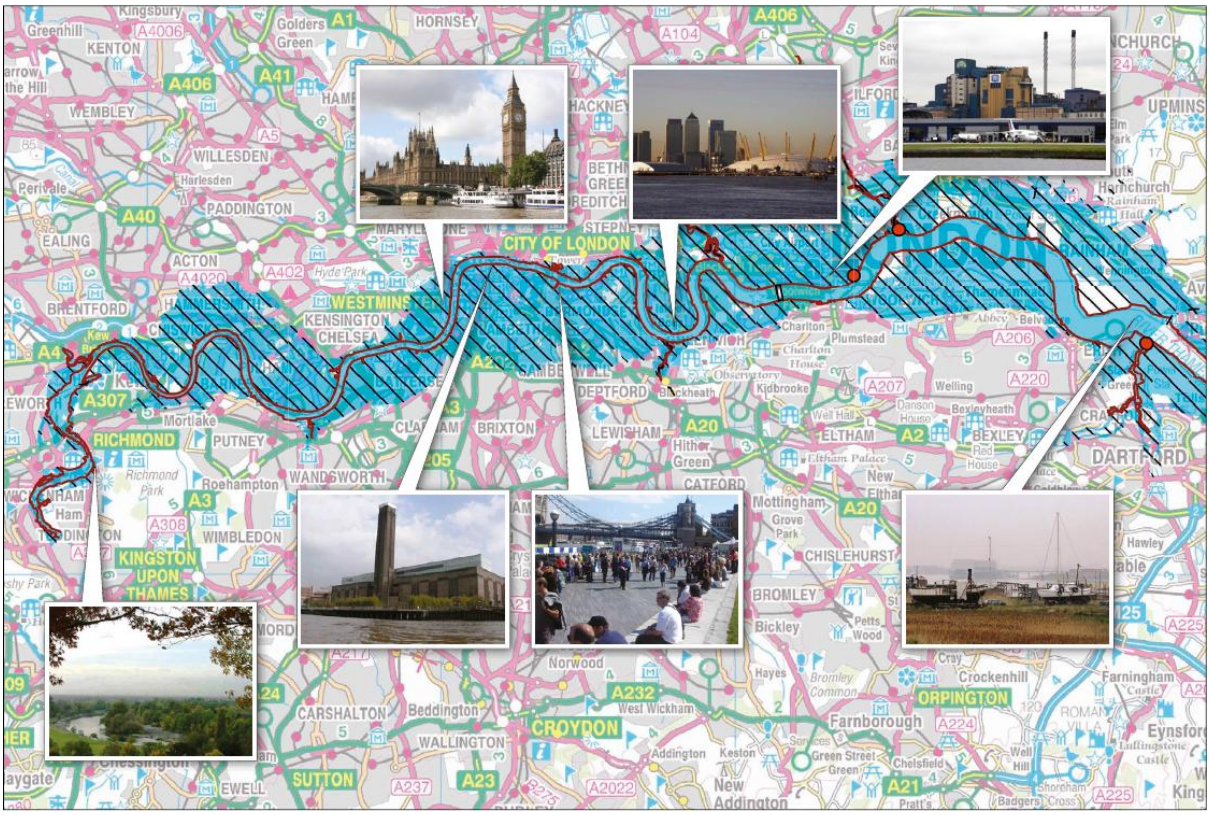
*Surface Water*

If the rainfall that fell across central Southern England on the 20th July 2007 had fallen fifty miles further east over London the impacts on the city would have been severe. A map showing what is at risk from surface water flooding and would have been impacted in a 2007 type event over London is shown in Annexe 3.

Surface water flooding will happen in any year. A description of the events in 2014 – a normal year for surface water flooding – is provided in Annexe 4.

*Tidal Flooding*

London has a World Class standard of protection from the Thames Barrier and 197km of walls and embankments along the Thames. Those defences protect the area shaded blue:




Within this tidal floodplain is £200bn of assets including 500,000 homes, 40,000 commercial properties, 35 tube stations, 1000 electricity sub-stations and 400 schools.

£180m of Flood Defence Grant in Aid will be invested over the next ten years to ensure that the defences in the Thames Estuary continue to provide this World Class standard of protection. £77m will be invested within London in the next six years. This investment has a benefit to cost ratio of over 100:1.

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**Annexe Two:**

**Reducing the risk of flooding through capital investment – what gets built?**

The purpose of this section is to show Members what is created through capital investment.

All of the levy is only used for capital investment by Local Authorities and the EA. All of the EA operational work, including staff costs, incident response, flood warning and maintenance are funded entirely from central Government.

## Surface Water flooding

Local Authorities carry out works to reduce the risks from surface water flooding. These projects are funded in exactly the same way as those carried out by the Environment Agency to reduce the risks from river and tidal flooding; through Flood Defence Grant in Aid along with levy and partner contributions.

In general projects to manage risks from these sources utilise open spaces to store water so that it can then be released slowly without causing damage. This also helps safeguard green space and often to enhance or restore public open spaces and parks.

Works being carried out by LB Southwark this Autumn. This shows construction of a flood storage area to stop water flooding homes and businesses. This project is funded through levy contributions, FD GiA and Thames Water.

**River Flooding**

In general the projects carried out to reduce the risks from river flooding achieve similar outcomes; reducing risks to homes and businesses along with enhancements and provision of green space.

This photograph shows the Quaggy Scheme in LB Greenwich. The scheme to protect property in Greenwich and Lewisham involved creating a large flood storage area in the park. It also opened up the river, which was in culvert, to create an open space and park that is used by local residents.

**Tidal Flooding**

**Thames Tidal Defences work**
Over £60m of investment is planned within the six year programme to ensure London is protected from tidal flooding. This includes work on the Thames Barrier and the tidal walls through London. This is a typical example of how this investment is used. This work cost £3.25m.

Minoco Wharf is a wharf on the River Thames in Newham. The 200m long timber frontage had deteriorated and in places, voids were beginning to appear. Works to repair or replace the wall were urgently required. 2,540 properties are at risk of flooding should the frontage fail completely.

The repair works were approved in 2013 as part of the Thames Tidal Frontages Programme. The Environment Agency entered into a legal agreement with the landowner, the agreement compelled the

Minoco Wharf: before repair

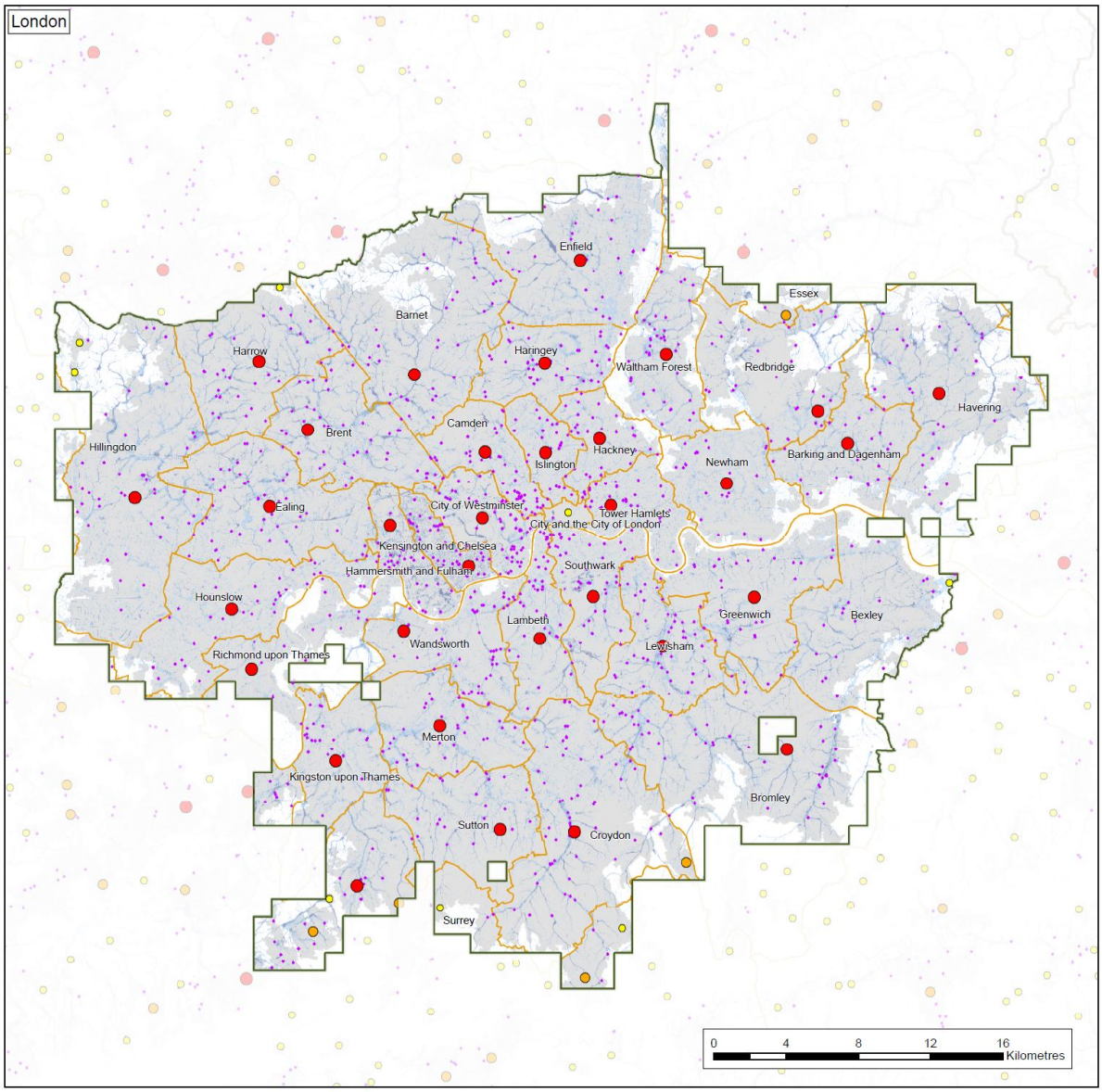
Minoco Wharf: post-construction

landowner to complete the works to the Environment Agency's programme with the landowner responsible for 70% of the final costs.

The works to rebuild the frontage at Minoco Wharf were completed in early 2014. The dilapidated timber frontage was removed and a new steel sheet pile wall was installed.

A tidal terrace has been installed on the riverside of the wall which will provide intertidal habitat and the new frontage will provide a 1in1000 standard of protection to 2065.

## Annexe Three: Surface water risk in London




**Surface Water Flood Risk Map**

**Thames River Basin District (part 1)**

**Risk to People**

**Flood Risk Source**

**Surface Water**

- High
- Medium
- Low

**Reporting Boundaries**

- Flood Risk Area
- Flood Risk Area (Neighbouring)
- River Basin District
- River Basin Districts (Neighbouring)
- Lead Local Flood Authorities

**People at Risk**

- 0 - 1000
- 1001 - 5000
- 5001 +

- Services at Risk
- Built-up Areas

Environment Agency

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**Annexe Four: Impacts of surface water & groundwater flooding in 2014**

Surface water flooding happens regularly and impacts would normally happen several times in any year. This summer for example there were numerous flooding incidents across London. London Borough's are still carrying out their investigations and will report in due course, but some of the known impacts are listed below.

In July 45 minutes of intense rainfall led to serious flooding in Hillingdon. The impacts included;

- The A40 shut for a day
- The Metropolitan and Piccadilly line closed
- South Ruislip Station closed
- 15 properties flooded with residents unable to return until the New Year
- 19 other roads flooded

*A40 underpass flooding leading to the route being closed for a whole day*

In mid-August London Fire Brigade attended 30 flooding incidents across Greenwich and Lewisham with people having to be rescued from basement properties after 90 minutes of intense rainfall.
In September flooding across parts of North London was most concentrated in Hackney where up to 90mm fell in less than an hour. Hackney Borough are working with residents to establish how many properties flooded but the wider impacts included closure of the A106 junction with the A12 and A12 Hackney Wick Tunnel.

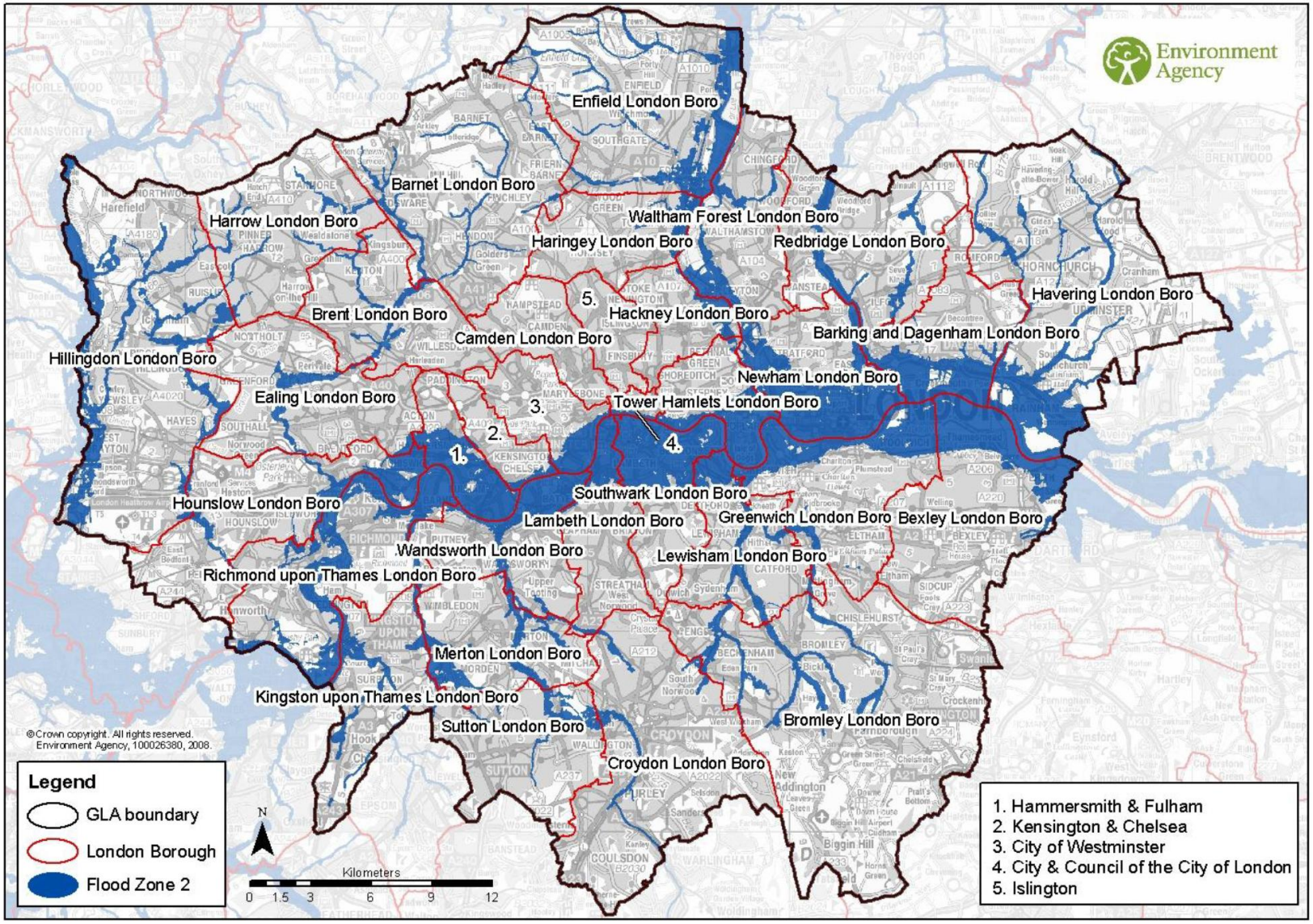
Hackney had already started work funded by FD GiA and levy to investigate the options to reduce flooding in these locations. Development and implementation of these schemes are part of the six year programme.

This summer was not unusual and we saw events in different parts of London throughout July, August and September.

During last winter, South London experienced serious and prolonged Groundwater flooding with the most significant impacts in Croydon. The multi-agency operational response necessitated a tactical Silver and Bronze command through all of February into early March with a Strategic Gold Command from the 8th to 28th February. Resources and temporary defences were brought in by the EA, Water Company and LFB to assist Croydon protect property but also the Kenley water Treatment plant that supplies drinking water to 42,000 local residents. Without this multi-agency response drinking water would have been cut off to those residents.

*Temporary defences put in place at Kenley (February 2014)*

**Annexe Five: Areas at risk from tidal and river flooding in London**



**Annexe Six: Projects in the six year plan**

| Partnership | Project Name | Borough | Risk Management Authority | 6 Year Grant-in-Aid funding | 6 Year Local levy proposed contribution |
|---|---|---|---|---|---|
| London - Central North | Thames Estuary Phase 1 Programme (TTD) | London | EA | 43,113,675 | - |
| London - Central North | TBAG Drive Equipment | London | EA | 21,978,848 | - |
| London - Central North | Thames Tidal Frontages Programme 1 | London | EA | 10,000 | - |
| London - Central North | Highgate Flood Alleviation Scheme | London Borough of Camden | LA | | 15,000 |
| London - Central North | Islington Central | London Borough of Islington | LA | 20,000 | 20,000 |
| London - Central North | Islington North | London Borough of Islington | LA | 20,000 | - |
| London - Central North | Islington South | London Borough of Islington | LA | 20,000 | - |
| London - Central North | Westminster North West Strategy | London Borough of Westminster | LA | 1,203,000 | 1,716,000 |
| London - Central North | Westminster Central Strategy | London Borough of Westminster | LA | | - |
| London - Central North | Westminster South Strategy | London Borough of Westminster | LA | | - |
| London - Central South | Streatham Vale Flood Alleviation Scheme | London Borough of Lambeth | LA | 680,000 | - |
| London - Central South | East Camberwell Flood Alleviation Scheme | London Borough of Southwark | LA | 517,427 | 782,573 |
| London - Central South | Peckham Rye Flood Alleviation Scheme | London Borough of Southwark | LA | 2,794,000 | - |
| London - Central South | West Camberwell Flood Alleviation Scheme | London Borough of Southwark | LA | 50,000 | - |
| London - Central South | North Peckham Flood Alleviation Scheme | London Borough of Southwark | LA | 47,000 | 263,000 |

| | | | | | |
|---|---|---|---|---|---|
| London - Central South | Central Camberwell Flood Alleviation Scheme | London Borough of Southwark | LA | 58,000 | - |
| London - Lee | Salmons Brook FAS | London Borough of Enfield | EA | 900,000 | - |
| London - Lee | Enfield LA Projects | London Borough of Enfield | LA | | 200,000 |
| London - Lee | Queensway Access Ramp & Track | London Borough of Enfield | EA | | - |
| London - Lee | CDA_029: Lordship Rd, Grazebrook Road, Stoke Newington | London Borough of Hackney | LA | | - |
| London - Lee | Wick Road CDA 17 SWFAS LB Hackney | London Borough of Hackney | LA | 72,000 | - |
| London - Lee | Norcott Road CDA 19 SWFAS LB Hackney | London Borough of Hackney | LA | 60,000 | - |
| London - Lee | Hackney Wick CDA 12 SWFAS LB Hackney | London Borough of Hackney | LA | 82,000 | 100,000 |
| London - Lee | Amhurst Road Dalston Lane SWFAS LB Hackney | London Borough of Hackney | LA | 60,000 | - |
| London - Lee | Larkspur Close Tottenham SWFAS LB Haringey | London Borough of Haringey | LA | 10,000 | 50,000 |
| London - Lee | Moselle Brook Culvert Refurbishment | London Borough of Haringey | EA | | 612,500 |
| London - Lee | Ching Brook Flood Alleviation Scheme | London Borough of Waltham Forest | EA | | 30,000 |
| London - Lee | HNL Refurbishment Package: Leyton Tidal Flap, Leyton - Modification Works | London Borough of Waltham Forest | EA | | - |
| London - Lee | HNL Refurbishment Package: Dagenham Brook Flap Valve, Leyton - Replacement of Flap Valve | London Borough of Waltham Forest | EA | | - |
| London - Lee | FILLEBROOK SURFACE WATER INVESTIGATION | London Borough of Waltham Forest | LA | | 25,000 |
| London - Lee | SOUTH CHINGFORD SURFACE WATER INVESTIGATION | London Borough of Waltham Forest | LA | | 25,000 |
| London - NE | HNL Refurbishment Package: Horseshoe Corner, Dagenham - Replacement Hinges | London Borough of Barking and Dagenham | EA | | - |
| London - NE | Dagenham Brook Flood Alleviation Scheme | London Borough of Barking and Dagenham | EA | 1,391,610 | 245,000 |
| London - NE | Mayes Brook & Ripple Road, Barking - actuator improvements | London Borough of Barking and Dagenham | EA | 150,000 | - |
| London - NE | Fords Pits, Dagenham - Access Improvements | London Borough of Barking and Dagenham | EA | | - |
| London - NE | Mayes Brook - Clare Gardens and Westrow Drive | London Borough of Barking and Dagenham | EA | | 10,000 |
| London - NE | Wandle Weirs Investigation | London Borough of Barking and Dagenham | EA | | - |
| London - NE | Beam Tidal Sluice & Horseshoe Corner, Dagenham - Cladding Removal | London Borough of Barking and Dagenham | EA | | - |
| London - NE | Ravensbourne Access | London Borough of Barking and Dagenham | EA | | - |
| London - NE | HNL Refurbishment Package: Coldharbour Lane, Rainham - Flap Valve and Penstock | London borough of Havering | EA | | - |

| | | | | | |
|---|---|---|---|---|---|
| London - NE | Ray Park Embankment Repair, Woodford | London Borough of Redbridge | EA | | - |
| London - NE | Illford, Seven Kings Water Flood Alleviation Scheme | London Borough of Redbridge | EA | 35,000 | - |
| London - NE | Chadwell Heath Flood Alleviation Scheme | London Borough of Redbridge | LA | 175,000 | 25,000 |
| London - NE | Clayhall Flood Alleviation Scheme | London Borough of Redbridge | LA | 125,000 | - |
| London - NE | Mayes Brook SWFAS LB Redbridge | London Borough of Redbridge | LA | 85,000 | - |
| London - NE | Loxford Water Seven Kings Surface Water Alleviation Scheme LB Redbridge | London Borough of Redbridge | LA | 20,000 | - |
| London - SE | Darent Industrial Estate Fluvial Flood Alleviation Scheme Works | London borough of Bexley | EA | 500,000 | - |
| London - SE | Wyncham Stream Catchment | London Borough of Bexley | LA | | - |
| London - SE | Ravensbourne West Wickham to Shortlands flood alleviation study and works | London Borough of Bromley | EA | 6,010,000 | 4,490,000 |
| London - SE | The Beck (East Branch) at Langley Park flood alleviation study | London Borough of Bromley | EA | 30,000 | - |
| London - SE | Ravensbourne West branch Integrated flood risk study (inc groundwater mitigation measures) and Main River Culvert improvement works. | London Borough of Bromley | LA | 115,000 | - |
| London - SE | Culvert Capacity and Trash Screen Investigation and replacement / removal Kidbrooke in the vicinty of Bromley. | London Borough of Bromley | EA | 36,430 | 3,570 |
| London - SE | Mottingham Lane Trash Screen Effectiveness Investigation, Quaggy, Bromley | London Borough of Bromley | EA | | - |
| London - SE | Culvert Capacity and Trash Screen Effectiveness Investigation on the Spring Brook, Bromley | London Borough of Bromley | EA | | - |
| London - SE | Ravensbourne (East Branch) at Southborough flood alleviation study | London Borough of Bromley | EA | | - |
| London - SE | Culvert Capacity and Trash Screen Effectiveness Investigation on the Quaggy River in the vicinty of Eltham, Greenwich | London Borough of Greenwich | EA | 150,000 | - |
| London - SE | RBG Groundwater preperation | London Borough of Greenwich | LA | 505,000 | - |
| London - SE | Wickham Valley Water Course Flood Storage Scheme | London Borough of Greenwich | LA | 20,350 | 24,650 |
| London - SE | Clothworkers Wood - Wet Woodland Flood Storage Scheme | London Borough of Greenwich | LA | 16,350 | 33,650 |
| London - SE | Lewisham and Catford FAS | London borough of Lewisham | EA | 9,920,242 | 4,383,500 |
| London - SE | Quaggy at Hither Green flood alleviation study | London borough of Lewisham | EA | 30,000 | - |
| London - SE | Culvert Capacity and Trash Screen Effectiveness Investigation on the Casterbridge and Lee Road Screens | London borough of Lewisham | EA | | - |
| London - SW | Welcomes Road and Kenley Station surface water flood alleviation scheme, Croydon | London Borough of Croydon | LA | 282,000 | - |
| London - SW | Beddington Park | London Borough of Croydon | EA | 110,500 | - |
| London - SW | Caterham Bourne Flood alleviation scheme | London Borough of Croydon | LA | 970,000 | - |

| | | | | | |
|---|---|---|---|---|---|
| London - SW | Kingston Town Centre Flood Alleviation Scheme | London borough of Kingston upon Thames | EA | 2,597,000 | 2,103,000 |
| London - SW | Seely Road Flood Alleviation Scheme | London Borough of Merton | LA | 285,000 | 50,000 |
| London - SW | Cottenham Park Flood Alleviation Scheme | London Borough of Merton | LA | 520,000 | - |
| London - SW | East Merton Flood Alleviation Scheme | London Borough of Merton | LA | 34,674 | - |
| London - SW | Derwent Road Flood Storage Area Improvements | London borough of Merton | EA | | - |
| London - SW | Mereway Sluice Gate Replacement | London Borough of Richmond on Thames | EA | 350,000 | - |
| London - SW | Mereway Sluice, Twickenham - Gate Replacement | London Borough of Richmond upon Thames | EA | 385,000 | - |
| London - SW | Beverley Brook Tidal Flap valve improvements | London Borough of Richmond upon Thames | EA | | - |
| London - SW | St Margaret's Community at Risk, Richmond on Thames London Flood Alleviation Scheme | London Borough of Richmond upon Thames | EA | | - |
| London - SW | Teddington Weir "A" | London Borough of Richmond upon Thames | EA | | - |
| London - SW | Waldergrave Road FAS | London Borough of Richmond upon Thames | LA | | - |
| London - SW | Hampton Court Road | London Borough of Richmond upon Thames | LA | | - |
| London - SW | Burton's Road FAS | London Borough of Richmond upon Thames | LA | | - |
| London - SW | Anton Crescent FSA | London Borough of Sutton | EA | | 122,500 |
| London - SW | CDA 33 Hackbridge Town Flood Alleviation Scheme | London Borough of Sutton | LA | | 55,000 |
| London - SW | CDA 28 Carshalton Centre Flood Alleviation Scheme | London Borough of Sutton | LA | | 65,000 |
| London - SW | Flood Storage Area at Overton Grange Playing Field | London Borough of Sutton | LA | | - |
| London - SW | Beddington Gardens Flood Alleviation Scheme | London Borough of Sutton | LA | | - |
| London - SW | Clapham Junction Flood Alleviation Scheme | London Borough of Wandsworth | LA | 845,000 | 50,000 |
| London - SW | Graveney FAS | London Borough of Wandsworth | EA | | - |
| London - SW | Tooting & Earlsfield Flood Alleviation Scheme | London Borough of Wandsworth | LA | 50,000 | - |
| London - SW | CDA 18 Hook Kelvin Grove Flood Alleviation Scheme | Royal Borough of Kingston upon Thames | LA | | 95,000 |
| London - SW | CDA 09 New Malden North Flood Alleviation Scheme | Royal Borough of Kingston upon Thames | LA | | 95,000 |
| London - SW | RB Kingston-Upon-Thames Surbiton Stream refurbishment | Royal Borough of Kingston upon Thames | LA | | 55,000 |
| London - SW | CDA 08 Acre Road Kingston Flood Alleviation Scheme | Royal Borough of Kingston upon | LA | | 65,000 |

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|---|---|---|---|---|---|
| | | Thames | | | |
| London - SW | Robinhood Way Replacement Trash screen | Royal Borough of Kingston upon Thames | LA | | 45,000 |
| London - W | Decoy Brook Catchment (CDA 018) Flood Alleviation Scheme. | London Borough of Barnet | LA | 266,300 | 128,700 |
| London - W | Mill Hill Circus CDA Option 3 flood storage south of st Josephs College Grounds | London Borough of Barnet | LA | | 25,000 |
| London - W | Pymmes Brook Flood Alleviation Scheme | London borough of Barnet | EA | | - |
| London - W | Bury Farm Flood Storage Area and Edgwarebury Park Flood Storage Area Access Track | London Borough of Barnet | LA | | - |
| London - W | North Circular at Brent Cross Flood Alleviation Scheme | London Borough of Brent | LA | | 10,000 |
| London - W | Tokyngton & Stonebridge FAS (LB Brent Tokyngton) | London Borough of Brent | EA | 2,865,000 | 1,135,000 |
| London - W | CDA 008 Northfield Avenue | London Borough of Ealing | LA | | 60,000 |
| London - W | Critical Drainage Area 007 - High Street Acton Flood Alleviation Scheme | London Borough of Ealing | LA | | 37,000 |
| London - W | CDA 001 Aintree Road, Perivale | London Borough of Ealing | LA | | 530,000 |
| London - W | Greenford FMS | London Borough of Ealing | EA | 48,950 | 161,050 |
| London - W | Upminster FAS | London Borough of Ealing | EA | 21,109 | 10,891 |
| London - W | HNL Refurbishment Package: George V Flood Storage Area, Pinner - Telemetry kiosk refurbishment | London borough of Harrow | EA | | - |
| London - W | Headstone Flood Alleviation Scheme | London borough of Harrow | EA | | 90,000 |
| London - W | Wealdstone Brook FAS | London Borough of Harrow | EA | 130,000 | 2,520,000 |
| London - W | Bentley Priory FSA | London Borough of Harrow | EA | | - |
| London - W | Kendall Close / Ullswater Close / Charville Lane | London Borough of Hillingdon | LA | | 50,000 |
| London - W | The Common West Drayton Middlesex UB7 7HQ | London Borough of Hillingdon | LA | | 10,000 |
| London - W | Hydraulic Ram Replacement at Huntsmoor Weir | London Borough of Hillingdon | EA | | - |
| London - W | Yeading Brook West Flood Storage Area - Decommissioning - Northolt - Middlesex | London borough of Hillingdon | EA | | - |
| London - W | Pinn FAS | London Borough of Hillingdon | EA | 88,440 | 51,560 |
| London - W | Cannon Brook & Mad Bess Brook FMS | London Borough of Hillingdon | EA | 60,000 | - |
| London - W | Huntsmoor Weir Site Access Track | London Borough of Hillingdon | EA | | - |
| London - W | River Crane Banks Repair/Replacement | London borough of Hounslow | EA | | - |
| London - W | HNL Refurbishment Package: Kidds Mill Sluice- Electrical kiosk refurbishment | London borough of Hounslow | EA | | - |
| London - W | Brentford | London borough of Hounslow | EA | | 10,000 |