Local Flood Risk Management Strategy

Executive Summary

Date of last review: March 2017

Executive Summary

The Local Flood Risk Management Strategy sets out how flood risk is managed in Bexley, who is responsible for water from different sources and presents an action plan to reduce flood risk. It has been produced as part of the requirements of the Flood and Water Management Act 2010. Within the legislation the London Borough of Bexley has been made a Lead Local Flood Authority. This means that it is responsible for overseeing the strategic management of flooding from:

- Surface Water Flooding
- Ground Water Flooding
- Ordinary Watercourse Flooding

The strategy sets out Bexley's key priorities in managing flood risk, how it will work with its partners and also gives trigger levels for flood risk processes. It is intended to be a living document that will be revised every six years to take into account updates in legislation and changes to flood risk within the borough. This summary contains the key points from each section of the main document, highlighting what information is contained within and where users might find the information they require.

Introduction

Work to manage flooding requires cooperation between an array of people and organisations. It is supported by wide range legislation and policies. Within this strategy, responsibility for managing different sources of flooding are clearly stated, providing a starting point for whom to contact to resolve problems. Bexley Council has set several aims to help reduce the risk of flooding in the borough which are:

1. Improve knowledge of flooding within the London Borough of Bexley
2. Reduce flood risk within the Borough
3. Reduce the impact of flooding within the Borough

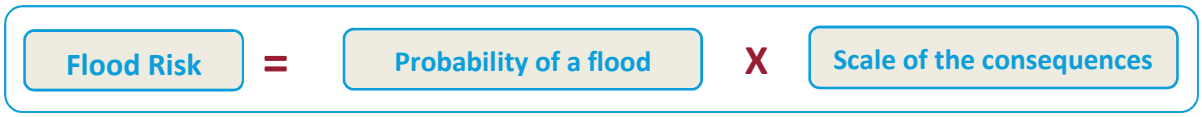
To achieve these aims the Council will work with neighbouring boroughs, the Environment Agency and Thames Water as part of the South East London Flood Risk Management Partnership to deliver the strategy and action plan.

Local Flood Risk

Flooding is defined as when '*land not normally covered by water becomes covered by water*'. In Bexley this can be from a variety of sources such as ground water, surface water, sewer flooding and river flooding. A lot of work has gone into understanding the risk of flooding across the borough including:

- Engagement with residents (particularly those affected by flooding)
- Flood Modelling (producing maps of areas at risk of flooding)
- Recording historic flooding (both observed and reported flooding)
- Flood Risk Assessments (Preliminary Flood Risk Assessment, Strategic Flood Risk Assessment, Surface Water Management Plan)
- Working with partner organisations (including Thames Water and Environment Agency)

When we talk about flood risk we look at the likelihood and consequence of flooding to establish how serious it could be. As such, high flood risk can be a very rare event with severe consequences or very frequent flooding which has limited impact.



Surface water is the largest risk of flooding in the borough with 13,000 properties at low risk and 660 at high risk. River flooding accounts for 40 Properties at high risk of flooding and 10,000 at low risk of flooding.

Roles and Responsibilities

Everyone has a role to play in reducing flood risk and it cannot be the sole responsibility of one organisation. Different organisations lead on distinct types of flood risk. These organisations are considered Risk Management Authorities. This section details their responsibilities with particular focus on the duties and powers of Bexley Council.

Set out in Table 1 are the Risk Management Authorities responsible for the strategic management of risk from the different sources of flooding. Each of the bodies have a duty to work together to reduce flood risk because often water can come from several sources. Each body can also take on the risk management functions of another RMA where both parties agree and all RMA's have a duty to be subject to scrutiny from the Lead Local Flood Authority's scrutiny process.

London Borough of Bexley		
	Surface Water Flooding	Flooding from heavy rains which run off the land causing flooding where it pools in low lying areas.
	Ground Water Flooding	Flooding where the water table rises above the level of the ground causing prolonged flooding. Normally this only follows long periods of heavy rain over weeks.
	Ordinary Watercourse Flooding	This is where small watercourses (streams and brooks), which are not Main River, come out of channel flooding the adjacent land.
	Reservoir Flooding	Flooding resulting from overtopping or failure of a dam or reservoir. Local Authorities must maintain a register of reservoirs in the borough, and in some cases are responsible for their maintenance. The London Borough of Bexley is responsible for Danson Dam.
Environment Agency		
	Main River Flooding	Flooding from watercourses which have been designated Main River.
	Coastal/Tidal Flooding	Flooding as a result of flooding from the sea or tidal rivers (such as the Thames).
	Reservoir Flooding	Flooding resulting from overtopping or failure of a dam or reservoir.
Thames Water		
	Public and Foul Sewer Flooding	Flooding that occurs from surface water or foul sewers not coping with volumes of water in the pipes.
Highway Authority		
	Sewer flooding from highway drains	Flooding occurring from drains which only capture water from the highway.

Table 1: Risk Management Authority responsibilities

Some land owners will have responsibilities where ditches and watercourses run through or next to their land. The land owner is responsible for maintenance of the watercourse to the middle of the channel. For more detailed information please see the Environment Agency booklet, 'Living on the Edge'.

Bexley Council Responsibilities

As lead local flood authority Bexley have a range of powers and duties. In exercising these functions Bexley must aim to make a contribution to achieve sustainable development.

1. *Duty to cooperate with other risk management authorities*. All risk management authorities are required to cooperate so that flooding is managed effectively.
2. *Duty to investigate flooding which is deemed necessary and appropriate.* Where 5 or more properties flood internally in one event or if 1 or more properties flood internally 3 times in 5 years an investigation will be carried out, which will then be published. The council may investigate in other situations as well.
3. *Duty to maintain a register of structures and features that are likely to have a significant effect on flood risk*. This duty ensures that features of the environment (walls, ditches, culverts) that help to reduce flood risk are known.
4. *Duty to consent to changes to ordinary watercourses that affect flow or flood risk.* This duty ensures that developments affecting watercourses do not make flood risk worse. Enforcement is possible where changes have been made without consent.
5. *Power to designate features and structures where they have an impact on flood risk.* This power can be used to ensure that infrastructure is protected from change where it is important for flood risk management. Changes to designated features require consent from the Lead Local Flood Authority.
6. *Power to carry out flood risk management works*. This allows works to be completed to help manage flood risk, or maintain existing defences.
7. *Power to request information in connection with Bexley's risk management functions*. This helps Bexley better understand flood risk. Information can be requested from any person or organisation.
8. *The Council is a statutory consultee for major planning applications*. Sustainable drainage systems (SuDS) are now expected in all developments and are mandatory for large developments (unless it is demonstrated as inappropriate). Through SuDS, water quality can be improved and flood risk reduced. The long term goal is for all sites to only discharge the same amount of water that would run off the site if it was a green field.
9. *Under the Civil Contingencies Act the council is a category 1 responder*. Meaning that Bexley play a lead role in response and recovery both during and following a flood. Further information is available on Bexley's website.

For more details on any of these responsibilities please look within the main document.

Objectives and Measures

Local strategies must take into account the National Flood and Coastal Erosion Risk Management Strategy, written by the Environment Agency. The key objective of both strategies is to reduce the risk of flooding. In addition three core objectives have been identified in Bexley's Local Strategy. These are in line with the corporate priorities of the Council.

- Grow a thriving community
    - Improve community understanding of local flood risk so they can take action to reduce the risk to themselves and their property
    - Reduce risk of flooding across the Borough and manage the residual risk, reducing the damage and disruption caused by flooding
    - Manage development to ensure flood risk is not increased, and opportunities are taken to reduce flood risk through well planned and designed developments

- Living long, fulfilling and independent lives
    - Ensure flood risk works are designed to achieve multiple benefits and enhance the location by adding amenity and biodiversity value
- Providing value for money
    - Take opportunities to apply for external flood risk funding, and use any funds in the most efficient way to reduce flood risk.

These three objectives will be delivered through the action plan, which is in Appendix B. This contains the plans and projects which will deliver the aims and objectives of this strategy. They include modelling, community awareness, managing development and improving drainage where possible. In all our schemes we look at additional benefits to the environment and improving the quality of water entering watercourses.

Funding and Delivery

Delivery of the action plan, and therefore the objectives and aims of this strategy, is highly dependent on the availability of funding, which changes over time. Projects often begin with limited information such as historic evidence of flooding and number of houses potentially affected by flooding. Funding is based on the benefits of a scheme (for example properties protected) against the cost of the scheme. Where schemes involve partnership working (often in conjunction with the Environment Agency and Thames Water), provide environmental benefits and help vulnerable people, they achieve a higher priority. The Council prioritises flooding schemes depending on the frequency and impact of the flooding, generally ranked by:

1. Internal property flooding
2. Highway flooding near shopping centres / important infrastructure
3. Highway flooding generally
4. Garden and open space flooding.

To ensure the council can access as much funding as possible, schemes and plans are proposed and put forward with the best information available. Often a phased approach allows small amounts of funding to be unlocked to improve the understanding of flood risk and ensure that the most appropriate, cost effective, schemes are delivered.

The main sources of funding are:

- Grant in Aid – Administered by the Environment Agency, this funding is available to schemes which reduce the risk of flooding to properties. It promotes working in partnership and gives greater weighting to schemes located where there is deprivation. Funds are bid for in a national programme
- Capital Project Funds – Schemes paid for by the council
- Local Levy – Funding from a joint pot of money, to which all lead local flood authorities and the Environment Agency contribute
- Community Infrastructure Levy – Funding which new developments may provide to improve infrastructure including flooding works.

For more sources of funding please see the main document.