Draft Local Flood Risk Management Strategy Consultation xx 2014

Revision History
To be deleted before Draft Final is issued for consultation

Issue/date	Amendments	Issued to
Draft Outline Strategy (v1.0) 19 September 2012		Chris Brown (Oxfordshire County Council)
Draft Outline Strategy (v2.0) 1 October 2012	*Minor amendments (see OCC Strategy development and actions log .xls for details, note internal document only)*	Strategic Flooding Group and Flooding Steering Group members – issued from Chris Brown of Oxfordshire County Council
Draft Outline Strategy (v3.0) January 2013	*Comments from all Risk Management Authorities added following individual meetings with partners*	
Draft Outline Strategy (v4.0) October 2013	*Amendments from meeting with Colin Bailey, Chris Brown and Gordon Hunt*	Colin Bailey, Chris Brown, Gordon Hunt
Draft Outline Strategy (v5.0) December 2013	*Further amendments from discussion with Colin Bailey, Chris Brown, Gordon Hunt*	Colin Bailey, Chris Brown, Gordon Hunt
Draft Outline Strategy (v6.0) December 2013	*Governance amendments*	Cllr Rodney Rose, Steve Smith, Colin Bailey, Chris Brown, Gordon Hunt
Draft Outline Strategy (v7.0) December 2013	*Service amendments from Steve Smith and Cllr Rose*	Cllr Rodney Rose, Steve Smith, Colin Bailey, Chris Brown, Gordon Hunt
Draft Outline Strategy (v8.0) March 2014	*Amendments following flood summit and members event*	Mark Kemp, Steve Smith, Colin Bailey, Chris Brown, Gordon Hunt, Dave Etheridge, Nathan Travis, Maggie Scott
Draft Outline Strategy (v9.0) March 2014	*Further amendments to working arrangements, Riparian responsibilities and community resilience.*	Mark Kemp, Steve Smith, Colin Bailey, Chris Brown, Gordon Hunt, Dave Etheridge, Nathan Travis, Maggie Scott

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Introduction

The Government has recently given local authorities new powers to help manage local flood risk in a more coordinated way. These new responsibilities relate primarily to 'local' flood risk, namely from surface water, groundwater and ordinary watercourses (smaller rivers, streams and ditches). Oxfordshire County Council has taken on the role of Lead Flood Authority for Oxfordshire and as part of that duty has a statutory requirement to produce a Local Flood Risk Management Strategy. The strategy has been developed in partnership with the City and District Councils and the Environment Agency, however Oxfordshire County Council remains the lead authority in developing and delivering the strategy.

Background

Following significant river flooding in 2000, 2003 and 2007 which affected the whole country, including Oxfordshire, the national Pitt Review (2008) made a series of recommendations which included that clear roles and responsibilities should be established for flood risk and that greater consideration should be given to flooding caused by heavy localised rainfall. Flash flooding in 2012 has further highlighted how vulnerable our communities are to local flooding events. The Pitt Review recommendations have been crystallised in the Flood and Water Management Act (2010)

Oxfordshire County Council became the Lead Local Flood Authority under this act and now has the duty to "develop, maintain, apply and monitor" a flood risk management strategy.

Oxfordshire County Council along with District Councils, the Environment Agency and Thames Water became Risk Management Authorities, all have a duty to co-operate. The public organisations must "act consistently" when undertaking flood risk management functions, while water companies (which are private bodies) must "have regard" to it.

Oxfordshire County Council also has the responsibilities, duties and powers to enable it to manage flood risk from all local[1] sources of flooding across the County.

The Local Flood Risk Management Strategy:

- Sets a long term programme for the reduction of flood risk.
- Sets procedures for identifying the relative priorities of measures for reducing flood risk.
- Establishes how to identify areas where a holistic approach to flood risk management will achieve multiple benefits.

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[1] 'Local sources' exclude flooding from designated Main Rivers, reservoirs, water mains and sewers (unless sewer flooding is due to exceptional rainfall)

- Establishes how to identify affordable measures for implementation to agreed time frames.
- Will facilitate engagement and consultation with the community and all our partners.
- Encourage public awareness and self-help where appropriate.

This strategy sets out how the lead local flood authority will manage flood risk in the future including lessons learnt from recent flooding events including 2014.

Exclusions

This strategy does not cover any emergency planning activities as a response to flooding and any effects of a flooding event such as the clean-up operation. The strategy takes into account severe weather in the managing and informing of flood risk but does not cover incidents arising from severe weather. The local authority is directly responsible for surface water and ground water and not for main river flooding or sewer flooding which are covered by other agencies in partnership, as is the deployment of non-fixed flood defences.

In the event of flooding the Thames Valley Local Resilience Forum implement their Adverse Weather Plan under the Civil Contingencies Act 2004[2] duties of Category 1 responders.

About Oxfordshire

Oxfordshire has an estimated population of 661,000 in an area of 2,600km^2 - one of the lowest population densities in the south east region. At its centre is the historic university city of Oxford (population 152,500). The other urban areas (including Banbury, Abingdon, Bicester, Witney and Didcot) have populations of 47,000 or fewer, whilst one third of the population lives in settlements of fewer than 10,000 people.

The county is predominantly rural, with almost 75% of the land devoted to agricultural use and almost 25% with three 'Areas of Outstanding Natural Beauty', including the Chiltern Hills, the Cotswolds and the North Wessex Downs.

Oxfordshire is almost entirely within the Thames River Basin District (96.6%) of the Environment Agency's South East Region. Small areas drain to the Anglian (2.6 %) and Severn (0.8 %) River Basin Districts.

The topography is dominated by the major river valley of the Thames, with its many tributaries and predominantly comprises of low rolling hills. White Horse Hill is the highest point, at 260m above Ordnance Datum.

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[2] https://www.gov.uk/preparation-and-planning-for-emergencies-responsibilities-of-responder-agencies-and-others

The underlying bedrock geology follows bands running in a south west to north east direction, which dip to the south east. The oolitic limestone of the Cotswolds in the northwest is followed progressively by overlying bands of Oxford clays, mudstone, siltstone and sandstone culminating in the chalk to the south and southeast which form the hills of the North Wessex Downs and the Chilterns.

Oxfordshire County Council administers first tier local government functions across Oxfordshire. It works in partnership with the second tier local authorities who administer the areas shown on the map:

- Cherwell District Council
- Oxford City Council
- South Oxfordshire District Council
- Vale of White Horse District Council and
- West Oxfordshire District Council.

Local Government Administration Boundaries

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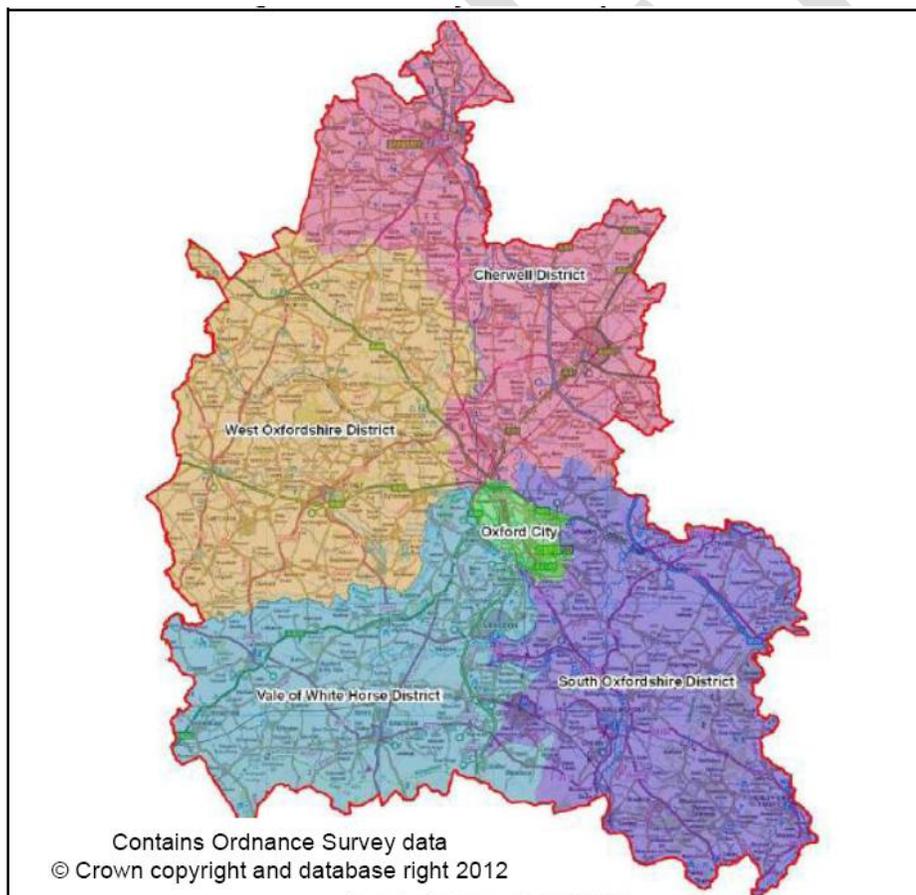
Vision

Oxfordshire County Council plans to improve the approach to reducing flood risk and thereby increasing the resilience of communities across the county.

Objectives

The strategy is a source of information for all those individuals, communities and businesses prone to flood risk. It is also of relevance to authorities with flood risk management responsibilities, and other partners, to ensure that there is a common understanding of roles, responsibilities and priorities within Oxfordshire.

Our objectives reflect the requirements of the Flood and Water Management Act 2010 and the National Flood and Coastal Erosion Risk Management Strategy, 2011.

The National Strategy can be found at:
http://www.environment-agency.gov.uk/research/policy/130073.aspx

Oxfordshire County Council and Local Authorities have agreed objectives which enable the setting of targets, so that progress can be measured in managing flood risk.

The objectives for the strategy align with the objectives of the National Strategy

Managing Flood Risk

(Source: National Strategy)

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High Level Objectives for Oxfordshire

1. Improve Understanding of flood risks and ensure that all stakeholders understand their roles and responsibilities for flood risk management.
2. Take a Collaborative Approach to reducing flood risks, using all available resources and funds in an integrated way and in so doing derive enhanced overall benefit.
3. Prevent an Increase in Flood Risk from development where possible, by preventing additional flow entering existing drainage systems and watercourses.
4. Take a Sustainable and Holistic Approach to flood risk management, seeking to deliver wider environmental and social benefits, climate change mitigation and improvements under the Water Framework Directive.

Appendix 1 provides more detail of the approaches within these high-level objectives. The objectives also take account of corporate priorities for each of the authorities as listed in Appendix 3.

The action plan at Appendix 2 details how the strategy objectives will be delivered, including timescales and funding.

1. Improve Understanding

The Flood and Water Management Act (2010) defines a flood as:

> *"including cases where land not normally covered by water becomes covered by water and can be the result of water emanating from a number of sources".*

Flooding can occur at different times, for different reasons and may come from different sources. This strategy aims to assess the risks from all sources of flooding, including:
- Local sources (direct responsibility)
    - surface water (overland runoff),
    - groundwater
    - ordinary watercourses (which are not on the Environment Agency map of Main Rivers)
    - highway drains
- Other sources (responsibility of others)[3]
    - Main rivers (Environment Agency)
    - Sewers   (Water Companies)

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[3] Although Oxfordshire County Council is responsible for managing only some sources of flooding, DEFRA policy on "Flood and Coastal Resilience Partnership Funding" encourages risk management authorities to consider investment needs for all sources of flooding in the Local Strategy.

Oxfordshire County Council undertook a comprehensive review of flooding for the Preliminary Flood Risk Assessment. See:

http://www.oxfordshire.gov.uk/cms/content/oxfordshire-preliminary-flood-risk-assessment-pfra

That document has informed this Strategy. National datasets have been used to create interactive mapping to enable the public, and our partners, to locate areas of Oxfordshire at risk of flood from both main river and local sources.

The risk of flooding from surface water in your local area can be viewed on the Environment Agencies interactive flood map which can be found here:
http://watermaps.environment-agency.gov.uk/wiyby/wiyby.aspx?topic=ufmfsw#x=358047&y=355108&scale=2

Flood predictions have been combined with records of past events and survey results to improve the understanding of public perception and principal concerns about flood risk. The Strategic Environmental Assessment considers environmental impacts.

Interaction between different sources of flooding is often complicated, so Oxfordshire County Council and other risk management authorities will ensure a co-ordinated approach to all flood management, whether new schemes, maintenance, development planning or emergency planning. This will help to reduce flood risk, whilst acknowledging that it cannot be eliminated.

Oxfordshire County Council will understand and manage flood risk by:

- Working in partnership with other risk management authorities.
- Having an appreciation of where flooding is likely to occur, how often and its potential impact.
- Taking reasonable steps to reduce the probability of events occurring.
- Identifying and implementing (where funding permits) measures that reduce the consequences of flooding when this does occur.
- Building on the information prepared for the Preliminary Flood Risk Assessment.
- Developing a clear picture of the flooding caused by different sources and how they interact.
- Understanding the causes of historic flood events and understanding likely impacts in the future.

Principles for understanding and managing flood risk

- Promote the use of more sustainable drainage systems to reduce flood risk and impact on the sewer system and to improve water quality.

- Require better management of surface water through increasing above ground storage and reuse, ground absorption, more storage above ground, and routing away from foul sewers.

- Increase public awareness of the causes and consequences of surface water run-off and what can be done to minimise the risks of flooding.

- Promote and insist on sustainable solutions that enhance the environment where possible on new developments/redevelopments.

- Encourage new development only where flood risk is low and away from flood risk areas.

- Take a holistic approach to the assessment of risk and identify measures that provide multiple benefits.

- Lead on application, monitoring and maintenance of the Local Flood Risk Management Strategy.

- Lead on managing flood risk and flood events at strategic, tactical and operational levels.

- Encourage self-help and ensure that people have appropriate and timely information.
- Improve understanding of riparian landowners and their responsibilities.

Defining Flood Risk

Flood Risk is defined as the combination of the probability of flooding occurring (which is often expressed as a return period or Annual Exceedance Probability) as defined by the Environment Agency.

In this report we have expressed flood probability as an Annual Exceedance Probability. Hence a flood with a 1% Annual Exceedence Probability has a 1 in 100 chance of happening in any one year or a return period of 100 years. Return periods can be misleading however as they suggest that such a flood might not happen again for another 100 years. Thus it is possible to define flood risk as:

Flood Risk = (Probability of a flood) x (scale of the consequences)
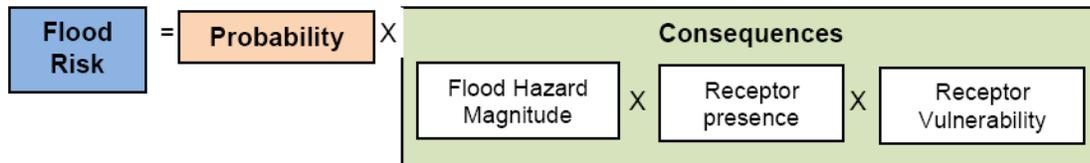
Recording Flood Events

The Strategy takes account of both historic records and information collected more recently through questionnaires. We will continue to investigate flood events in order to update the database and welcome any information about past events that will help to refine understanding. For each event we aim to record:
- Where
- When
- Duration
- Why (Cause)
- How (Flood mechanisms) and
- What happened (Impact).

Investigations of flooding incidents

The Lead Local Flood Authority (Oxfordshire County Council) and its partners investigate flooding incidents in their area to identify which organisation is responsible for the relevant flood risk management function and what that organisation has done or intends to do. Oxfordshire County Council will then publish the results of any investigation, and notify any relevant risk management authorities.

This complies with the Flood and Water Management Act 2010 which says:

> "*On becoming aware of a flood in its area, a lead local flood authority must, to the extent that it considers it necessary or appropriate, investigate -*
> *(a) which risk management authorities have relevant flood risk management functions, and*
> *(b) whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to the flood.*"

The duty is not to investigate the flood event per se – that happens already under other emergency planning procedures and legislation. The role of Oxfordshire County Council is to investigate the process by which the various flood risk management authorities undertook their duties in responding to the flood in order to learn lessons which can minimise flood risk in future.

Risk Management Authorities and Responsibilities

The Act defines who the Risk Management Authorities are. Flood risk management is a cross-cutting activity that engages a number of their functions. Many County Council functions including Highways, Spatial Planning, Emergency Planning and Sustainability and Climate Change, have a bearing on flood risk management.

District Councils similarly have a range of functions which impact on flood management and all local authorities in Oxfordshire also have responsibilities as riparian land owners.

Risk Management Authorities and Responsibilities

Risk Management Authority	Strategic Level	Responsibilities	Activities
Environment Agency	Strategic Overview for all sources of flooding National Strategy Reporting and general supervision	Main rivers (Permissive Powers) Reservoirs Developing long-term plans for sustainable flood risk management. Powers to request information from any person in connection with the Environment Agency's flood and coastal erosion risk management functions A duty to report to Ministers on flood risk management including implementation of the strategies Statutory consultee to the sustainable drainage systems approving body on sustainable drainage Ability to issue levies to lead local flood authorities	Maintaining designated main rivers, including flood defences Consenting and enforcement Environmental issues Working with Riparian owners concerning maintenance Issuing flood warnings and ensuring public awareness of flood risk
Lead Local Flood	Input into the National Strategy	Partnership working with relevant	Improvement to Highway Drainage

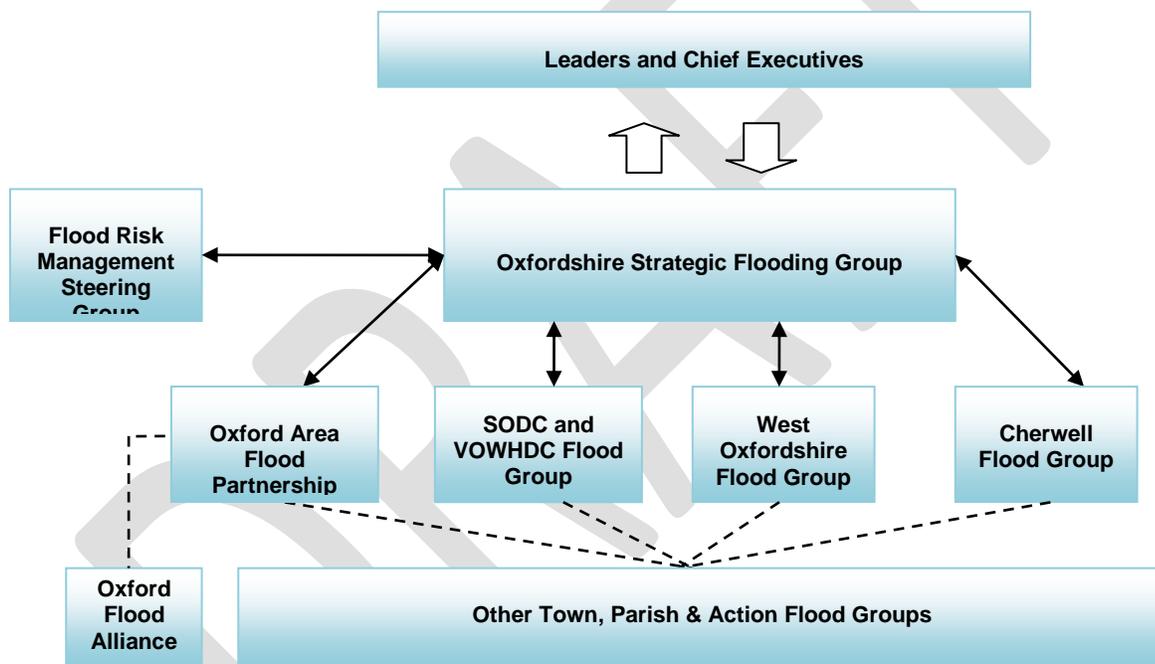| Authority (Oxfordshire County Council)	Produce the Local Flood Risk Management Strategy Strategic leadership of local flood risk management authorities	authorities Powers to request information from any person in connection with the authority's flood risk management functions. Responsible for : • Surface water • Ground water • Highway drains Responsibility for the sustainable drainage systems approving body with responsibility for approval, adoption, inspection and maintenance of new sustainable drainage systems	Assets Maintenance of Highway drainage Assets inc. gullies, manholes, culverts etc. Consenting and enforcement on ordinary watercourses Maintenance of Flood and Structure registers Checking planning applications for drainage design on developments of 10 units and over Maintain adopted SUDS web based GIS register Working with Riparian owners on ordinary watercourses
Oxford City Council, West Oxfordshire District Council, South Oxfordshire and Vale of White Horse District Council, Cherwell District Council	Input into the National and Local Strategies	Ordinary watercourses (Permissive Powers) Approving planning applications	Maintaining and clearing ordinary watercourses Consenting and enforcement on ordinary watercourses on behalf of the LLFA Working with Riparian owners on ordinary watercourses
Thames Water	Input into the National and	Public Foul and Surface Water sewers	Checking planning applications for foul

	Local Strategies	and pumping stations	water
British Waterways Canal and River trust (Not a risk management authority)	Comment on Local Strategies	Canals including the licencing of new and changed structures affecting the canal network	Maintaining and clearing canals
Highways agency (Not a risk management authority)	Comment on Local Strategies	Managing motorways and strategic A roads on behalf of the Department for Transport.	Responsible for operating, maintaining and improving the strategic road network
Network Rail (not a risk management authority)	Comment on Local Strategies	Managing the rail network nationally	Responsible for operating, maintaining and improving the strategic rail network
Local Resilience Forum (not a risk management authority)	Multi-agency planning and co-ordination of emergency response to and recovery from wide-area flooding	Multi-agency risk assessment and emergency planning / Exercising of plans / Sharing Information / Warning & informing the public and the commercial sector (local authority) / Business Continuity Management of own resources.	Preparation, planning & exercising of emergency plans / Co-ordination, co-operation, deployment & management of response and recovery resources for major wide area flooding events
Regional Flood and Coastal Committee (not a risk management authority)	Strategic overview role	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	Providing coherent plans for managing flood risk across the Thames region
Utility Companies (not a flood risk management authority)	Comment on Local Strategies	Maintaining their networks and sub stations	Responsible for operating, maintaining and improving their networks

2. Taking a Collaborative Approach

Working arrangements

The Oxfordshire Strategic Flooding Group was formed after the floods in July 2007. Its purpose was to facilitate a joined up approach to flood risk management, and the recommendations of the Pitt Review, through the work of its partners. It has since adopted a more strategic role in response to legislation including the Flood Risk Regulations (2009) and Flood and Water Management Act (2010). The diagram below identifies the governance arrangements.

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                    ┌─────────────────────────────────────┐
                    │   Leaders and Chief Executives      │
                    └─────────────────────────────────────┘
                                   ⇧  ⇩
┌──────────────┐      ┌─────────────────────────────────────┐
│ Flood Risk   │◄────►│ Oxfordshire Strategic Flooding Group│◄──┐
│ Management   │      └─────────────────────────────────────┘   │
│ Steering     │              ↕         ↕                        │
│ Group        │                                                 │
└──────────────┘                                                 │
   │                                                             │
   │  ┌────────────┐  ┌────────────┐  ┌────────────┐  ┌────────────┐
   │  │ Oxford Area│  │ SODC and   │  │ West       │  │ Cherwell   │
   │  │ Flood      │  │ VOWHDC     │  │ Oxfordshire│  │ Flood Group│
   │  │ Partnership│  │ Flood Group│  │ Flood Group│  │            │
   │  └────────────┘  └────────────┘  └────────────┘  └────────────┘
   │
┌──────────┐  ┌─────────────────────────────────────────────────┐
│ Oxford   │  │ Other Town, Parish & Action Flood Groups        │
│ Flood    │  └─────────────────────────────────────────────────┘
│ Alliance │
└──────────┘
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The Oxfordshire Strategic Flooding Group meets quarterly and includes senior representatives from:

- Environment Agency
- Oxfordshire County Council
- Cherwell District Council
- Oxford City Council
- South Oxfordshire District Council
- Vale of White Horse District Council
- West Oxfordshire District Council
- Thames Water

It is chaired by the Lead Local Flood Authority Cabinet Member for flooding and reports to Leaders of all authorities. The group is responsible for the prioritisation of schemes to be put forward to the Environment Agency.

This group oversees the Flood Risk Management Steering Group which is a county wide group; membership includes engineers and planning officers from each of the Districts along with Thames Water and Environment Agency. It considers engineering and operational aspects in more detail.

The Oxford Area Flood Partnership formed in 2003 enables liaison on flood management issues and projects in Oxford City and the adjoining part of Vale of White Horse District Council. Details of the group, minutes and papers are available on Oxford City Council website.[4] The group meets four times a year and the partners are:
- Environment Agency
- Oxfordshire County Council
- Oxford City Council (Chair)
- Vale of White Horse District Council
- Thames Water
- Network Rail

The Oxford Flood Alliance (OFA) was formed in 2007 to campaign to reduce the risk of flooding in Oxford. Visit the Oxford Flood Alliance website for full details of their work.[5]

In addition there are district led groups:

- South Oxfordshire and Vale of White Horse Flood Group,
- West Oxfordshire Flood Group
- Cherwell Flood Group

These groups have representatives from the District Council, TWA and the EA along with Senior Drainage Engineers from OCC. They usually meet quarterly to discuss Land, Highway, Planning or Foul drainage problems within the District. At these meetings the future programs are discussed for each body and OCC updates the other Engineers on the LLFA.

From the most recent floods it was apparent that more work needs to be done to maintain vital infrastructure including utilities and rail networks. Engaging with these organisations at an earlier stage and understanding the options available will allow us to have a better future response and reduced impacts. This will be considered as part of the action plan.

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[4] http://www.oxford.gov.uk/PageRender/decCD/Oxford_Area_Flood_Partnership_occw.htm
[5] http://www.oxfordfloodalliance.org.uk/

Governance Arrangements

The governance arrangements in the above diagram relate only to the management of this strategy and not to the prioritisation of schemes and allocation of funding which follow existing Oxfordshire County Council and District Council governance.

Prioritisation of schemes to manage local flood risk

Oxfordshire County Council and its partners will identify potential schemes from past flood events including information and evidence received from Parish Councils and residents of Oxfordshire. These potential schemes will be assessed and prioritised by the relevant Risk Management Authorities and submitted to the Oxfordshire Strategic Flooding Group for approval and to bid for additional funding where appropriate.

It will assess those schemes in accordance with the rules that apply to funding applications to establish the relative priority of those schemes. See Appendix 4 for details.

Oxfordshire County Council will work with partners to co-ordinate and submit bids to the Environment Agency as part of the grant funding in line with the prioritisation.

In this process the relative priority of applications might be adjusted to take account of other factors including the availability of alternative sources of funding, interaction with other policies, and other matters that would influence a holistic pan Oxfordshire approach.

3. Prevent an Increase in Flood Risk

The prevention of flooding to properties in Oxfordshire cannot be eliminated, however, by working collaboratively with our partner organisations we can seek to reduce the effects of flooding and the damage it causes. The County Council's policy of promoting Sustainable Drainage on all proposed developments and redevelopments goes a long way to help reduce the flooding of properties.

By working with the correct agencies and utility companies this risk can be minimised with better responses and reduced impacts.

- Major permanent flood alleviation projects – Government & EA main responsible bodies, with local flood risk authorities as main local stakeholders
- Planned large scale temporary demountable flood defences (e.g. Osney Island) – EA, with local flood risk authorities as main local stakeholders
- Smaller scale temporary demountable flood defences (e.g. Bullstake Close) – OCC & district councils, with local residents as main stakeholders

In addition to this we will focus on riparian responsibilities of land owners with water courses on or adjacent to their land. The Environment Agency[6] has outlined the following:

- You must let water flow through your land
- You must accept flood flows through your land
- You should maintain the bed and banks of the watercourse
- You should leave the bank edge development free
- You must keep any structures clear of debris
- You should not cause obstructions
- You have a legal obligation to inform the relevant people if you plan to build or alter a structure

Improving communication and working with riparian land owners around roles and responsibilities should see a proactive approach to managing watercourses reducing the likelihood of future flooding.

4. Take a Sustainable and Holistic Approach

The strategy takes account of strategic development areas in order to identify opportunities for holistic approaches to managing flood risk which will achieve multiple benefits. The information, which is used to map a general overview of Oxfordshire, comes from the City and District Councils' Core Strategy documents. (See Appendix 5)

How flood risk may change in the future

Adverse Weather Incidents

The most recent climate projections for the UK indicate that Oxfordshire will see a number of changes in climate over the next 50 years including warmer, drier summers, milder, wetter winters, more frequent extremes of temperature, rainfall and wind, reduced air quality and higher levels of ozone 3.[7]

The National Climate Change Risk Assessment identifies the South East as especially vulnerable to flooding with 25% of properties estimated to be at risk of some sort of flooding (Environment Agency).[8]

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[6] http://www.environment-agency.gov.uk/homeandleisure/floods/31626.aspx
[7] http://www.ukcip.org.uk/
[8] https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-government-report

Severe weather has been identified and rated within the Thames Valley Community Risk Register; flooding and storms being two of the highest risks for Oxfordshire. The register can be found on the Thames Valley Local Resilience Forum website:[9] Information concerning Climate Change can be found on the Oxfordshire County Council website.[10]

Oxfordshire County Council will adopt a precautionary principle, to the extent permitted by methods for assessing scheme priorities. The normal approach will be to adopt the most likely scenario, whilst assessing the risks should the best and worst scenarios occur. (The flood precautions proposed could be much more costly than necessary under best case conditions or, in worst case conditions, much less effective than needed).

In following this strategy, Oxfordshire County Council will take account of climate change modelling and will be informed by the most reliable evidence that becomes available.

Catchment Flood Management Plans

Oxfordshire comes within the Environment Agency's Thames Catchment Flood Management Plan, which establishes flood risk management policies for long term sustainability, which the strategy must allow for[11].

Oxfordshire largely falls within the areas of low to moderate flood risk. In these areas 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.

Part of the Cherwell District Council area falls within the Great Ouse Catchment Flood Management Plan[12]: Bedford Ouse Rural and Eastern Rivers.

See Appendix 6 for details of the policies which apply to each area.

River Basin Management Plans

Oxfordshire is covered by two River Basement Management Plans, Thames and Anglian. The Thames plan identifies four separate catchment areas within Oxfordshire. The Anglian plan identifies one. (See Appendix 7)

The River Basin Management Plan for the Thames establishes methods to protect improve and promote the sustainable use of water for the benefit of wildlife and for the people in the area.

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[9] http://www.thamesvalleylrf.org.uk/useful-links/publications/risk-register.ashx
[10] http://www.oxfordshire.gov.uk/cms/content/climate-change-oxfordshire
[11] A small part of the South Oxfordshire District Council area falls within the Thames Catchment Flood Management Plan for "**Colne tributaries and Wye**", but this is not shown on the map
[12] No map has been included for this.

The Thames River Basin District is one of the driest in the UK with annual rainfall levels below the national average, so the plan identifies that maintenance and improvement of groundwater quality is a high priority. The plan has identified Oxford and Didcot as growth points within Oxfordshire, which Government has targeted as a focus for housing growth, regeneration and economic development. It has identifies North West Bicester as an eco-town.

The overall aim is to ensure that all watercourses achieve a "good status" by 2015, so Oxfordshire County Council has a major role in this and will work with the Environment Agency to ensure that all relevant actions are identified, prioritised, resourced and implemented.

Community Resilience

Feedback from the 2014 member's forum identified community resilience played a critical role in being prepared for and during flooding events. Following the 2007 floods a number of communities across the county have developed community or parish flood plans. Increasing this community approach and removing barriers such as concerns around volunteers clearing ditches and watercourse will help prevent future flood events.

Improving communication through the communities and parishes in preparation of flood events such as roles and responsibilities of authorities, agencies and organisations can help in community action and response. This also allows for a more localised approach to managing the needs of the most vulnerable residents.

This further enhances the riparian land owners roles and responsibilities outlined in section 3.

Funding for managing flood risk

In May 2011, DEFRA introduced a new policy on allocating funding for flood risk management under the Flood and Coastal Resilience Partnership. It sets out how this funding, Flood Defence Grant in-Aid, will be assessed for potential schemes, taking into account several outcome measures including: the number of households protected; the damage prevented; and other deliverable project benefits. The map overleaf outlines the potential areas likely to receive funding.

Fig. 4.1 Potential areas of Flood Defence Grant in Aid Contributions
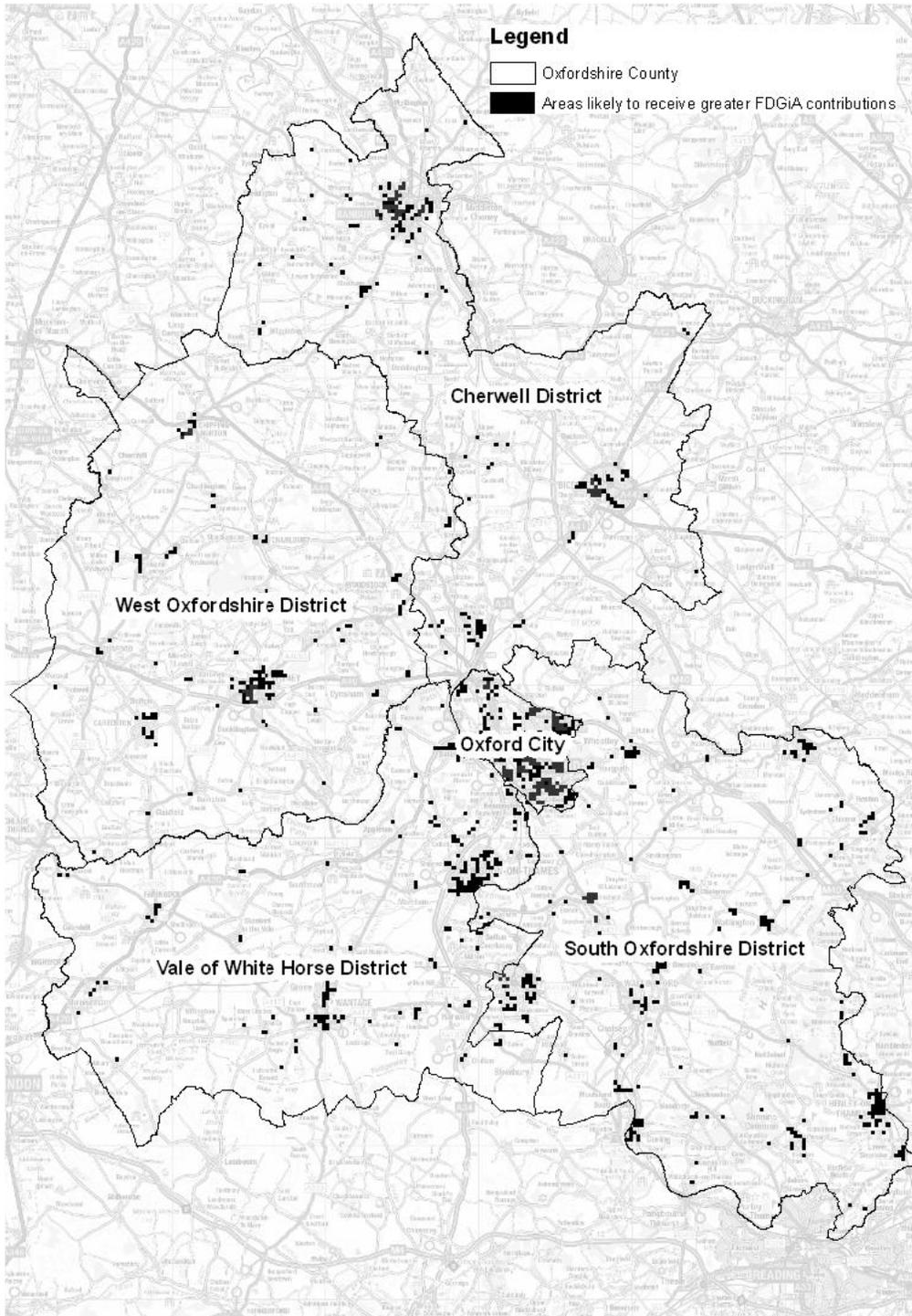
Contains Ordnance Survey data © Crown copyright and database right 2012

This partnership approach allows partial funding from other organisations (councils, community organisations etc.), enabling the Government to provide money for a wider range of schemes than previously. This also permits funding of health and safety improvements on existing flood risk management assets.

The availability of local 'partnership funding' has become an increasingly important factor in obtaining both grant and Local Levy funding. The strategy addresses three aspects:

- Making the case for local funding, in order to lever in significant grant and Local Levy contributions. This will require political and community engagement.
- Identifying holistic schemes with wider benefits, which could foster broader support and elicit contributions from more stakeholders
- Educating stakeholders about the reality of what is (and is not) affordable.

The areas of potential partnership funding opportunities have been overlaid with the areas likely to receive grant and is shown below.

Fig. 4.2 Potential opportunities for multi-agency funding
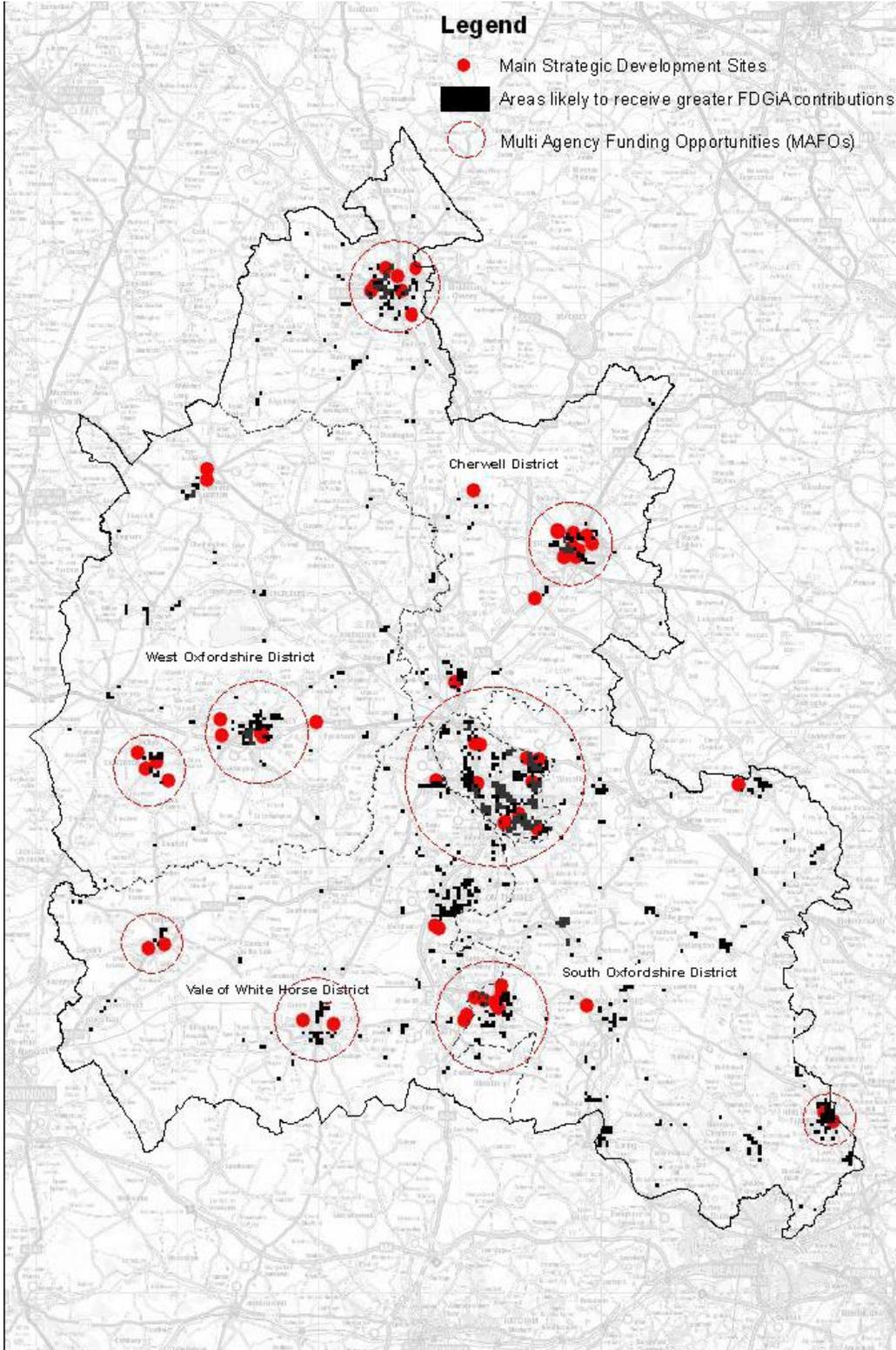
Contains Ordnance Survey data © Crown copyright and database right 2012

Central government Flood Defence Grant in Aid is the major funding source. At present, £160million per annum is invested by government through this grant with a further £30million from Regional Flood and Coastal Committees through Local Levy, and £25million from "partnership funding" – contributions from other sources. Government policy is for the latter to grow significantly and the rules for accessing grant funding have been adjusted to assist this.

Provisional figures from Department for Communities and Local Government indicate Oxfordshire County Council will receive £322,000 in 2014/15 and £267,000 in 2015/16. This grant is made available to the Lead Local Flood Authority (Oxfordshire County Council) to fund additional activities as part of their role as the lead local flood authority. This funding is not intended for delivery of schemes.

Schemes will be considered on an individual basis as part of the annual capital programme and in line with the governance required for this programme.

Alongside this is the prioritisation of schemes by the Oxfordshire Strategic Flood Group and the process for this is outlined in the prioritisation of schemes section.

These will form the basis for the Medium Term Plans which have to be submitted annually to the Environment Agency to indicate the level of grant aid support sought, and to compete nationally for grant funding. The schemes are assessed taking into account their ability to meet DEFRA's Outcome Measures. A "Sanctioned List" of agreed allocations for each region is then published.

The Regional Flood and Coastal Committee has an important role in this, both through support for the plan and in influencing distribution of funds allocated to the region. The RFCC is a committee established by the Environment Agency under the Flood and Water Management Act 2010 that brings together members appointed by Lead Local Flood Authorities (LLFAs) and independent members with relevant experience for three purposes:

1. to ensure there are coherent plans for identifying, communicating and managing flood and coastal erosion risks across catchments and shorelines;
2. 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;
3. to provide a link between the Environment Agency, LLFAs, other risk management authorities, and other relevant bodies to engender mutual working.

Communications

As a result of a survey in 2012 which indicated that many people (45%) want to know more about where work is planned to manage flood risk, Oxfordshire County Council will undertake to do the following:

- For each major planned scheme we will keep residents informed and engage at a local level

- Provide information to relevant County and District Councillors and Parish Councils

- Develop guidance notes to help improve public understanding of surface water management issues and what property owners and riparian land owners can do for themselves to reduce flood risk

- Develop and publicise a system for recording all flooding incidents and undertaking flooding investigations as needed

Review Arrangements

Oxfordshire County Council will maintain a log of issues arising with operation of the Strategy to which all local authorities can contribute, and to which all partners can refer.

Strategy

Oxfordshire County Council will arrange for this strategy to be reviewed every five years.

It will consult all risk management authorities on outline timetabling arrangements at least 18 months before the date proposed for formal adoption, to enable approval and adoption procedures to be programmed. The timetable will include an appropriate period for public consultation.

Appendices

Oxfordshire County Council will notify all risk management authorities of changes to Appendices which result from changes in legislation, information or practice by other organisations.

Oxfordshire County Council will consult risk management authorities on any other proposed changes to Appendices, giving an appropriate period for response.

Consultation

As part of the public engagement Oxfordshire County Council will be undertaking a 12 week consultation through e-consult and raising the profile on the council's homepage of the website. In addition to this, direct e-mails will be sent to stakeholders inviting them to comment on the strategy. It is expected that this will take place in early June2014.

APPENDICES

Appendix 1: Strategy Objectives

The high level strategy objectives below are listed with explanatory comments:

1. **IMPROVE UNDERSTANDING of flood risks and ensure that all stakeholders understand their roles and responsibilities for flood risk management.**

   - Provide a clear explanation of the statutory duties of Risk Management Authorities and the important roles of individuals, businesses and land managers.

   - Consider comments and representations by property owners on flood risk management decisions.

   - Risk management authorities will provide information about flood risk in consistent and easy formats for public use, including websites with relevant links.

   - Ensure that information enables the public and businesses to make informed decisions about managing residual flood risk and to become more flood resilient.

   - Develop guidance notes to help improve public understanding of surface water management issues and what property owners can do themselves to reduce flood risk.

   - Develop and publicise a system for recording all flooding incidents and undertaking flooding investigations as needed.

   - Develop a system for consistent recording of flood assets and make it readily available to all interested parties.

   - Develop a consistent approach to designation of structures.

   - Improve understanding of surface water flood risks through targeted detailed investigations (surface water management plans).

   - Promote local community resilience to emergencies (including flooding) and provide appropriate support and information to ensure effective response.

   - Co-ordinate flood risk management activities with the work of the Emergency Planning Unit.

2. **TAKE A COLLABORATIVE APPROACH to reducing flood risks, using all available resources and funds in an integrated way and in so doing derive enhanced overall benefit.**

   - Develop partnership work in the Oxfordshire Strategic Flooding Group.

   - Use appropriate opportunities to reduce short-term flood risk while working to reduce longer-term flood risks.

   - Promote self-help for property protection.

- Assess resources and skills available to all RMAs in order to identify the optimum flood risk management programme.

- Establish communication systems and encourage interchange and publication of best practice in flood management, to ensure that local decisions take account of this.

- Develop improved, effective communication arrangements between Oxfordshire County Council, the Risk Management Authorities and all organisations with responsibility for flood risk management in Oxfordshire.

3. **PREVENT AN INCREASE IN FLOOD RISK from development where possible, by preventing additional flow entering existing drainage systems and watercourses.**

- Establish a sustainable drainage systems approval system to Defra guidelines.

- Establish a robust sustainable drainage system inspection system

- Prepare Advisory Guidelines to Planning Authorities about sustainable drainage systems in new developments in order to promote the need for no increase in surface water flow from sites, give guidance on site layout and levels, advise on impacts on natural environments and inform about inspection systems.

- Ensure that planning decisions take proper account of all flood risks.

- Ensure that new developments include proper and consistent management of surface water.

- Ensure that riparian land owners are informed of their roles and responsibilities.

- Develop and maintain a database of historic and predicted local flood risk and provide data to risk management authorities planning.

4. **TAKE A SUSTAINABLE AND HOLISTIC APPROACH to flood risk management, seeking to deliver wider environmental and social benefits, climate change mitigation and improvements under the Water Framework Directive.**

- Promote water cycle management and blue corridors/green infrastructure in master planning.

- Ensure that flood risk management schemes take account of all relevant plans and policies and the impact on protected environments.

- Ensure that planning and other guidance documents include reference to advice on flood management and these wider environmental issues.

- Work with the Climate Resilience Strategy Board to engage all stakeholders in the flood management aspects of resilience to climate change.

- Work with Emergency Planning on implementing flood action plans in communities building resilience in the event of flooding.

- Develop improved communications with communities on support, sign-posting and funding opportunities.

- Develop and promote straightforward processes for consenting to new structures on watercourses, encouraging maintenance to reduce the risk of blockage and enforcement where necessary.

- Work with the Environment Agency and other partners to ensure that land owners are aware of their riparian responsibilities.

- Record all structures and assets on watercourses that have a role in flood management.

Appendix 2

Oxfordshire County Council Action Plan 2013 – 2018 (reviewed annually)

N.B. This action plan will be shaped by the outcomes of the consultation process

Ref:	Title	Description	Responsibility	Funding/Source	Timescale	Action & Status
1. Improve Understanding						
1.1	Explanation of statutory duties of Risk Management Authorities	Roles of Individuals, businesses and land managers	OCC	Lead Local Flood Authority Grant		
1.2	Consider comments and Representations by property owners	On Flood Risk Management Decisions	OCC	Lead Local Flood Authority Grant	2014	Consultation from strategy
1.3	Information on Flood Risk	Easy formats for public use	EA &OCC	Lead Local Flood Authority Grant	April 2014	On going
1.4	Information on residual flood risk	The public and businesses to make informed decisions	EA & OCC	Lead Local Flood Authority Grant	On going	EA and OCC web site
1.5	Develop Guidance notes on Surface Water Management issues	To inform the public and property owners on reducing flood risk	EA & OCC	Lead Local Flood Authority Grant	EA and OCC web site	On going

1.6	Develop system to record flooding incidents	To inform the public and undertake flooding investigations	OCC	Lead Local Flood Authority Grant	Dec 2014	On going
1.7	Recording of Flood Assets	Available to the Public	EA & OCC	Lead Local Flood Authority Grant	2015	Started
1.8	Designation of Flood Structures ie walls, banks	Design a consistent approach	EA & OCC	Lead Local Flood Authority Grant	On going	Started
1.9	Improve Knowledge of Surface Water Flood Risks	Produce Surface Water Management Plans	OCC	Lead Local Flood Authority Grant	On going	On going
1.10	Promote Flood Resilience	Support and Information to Emergencies	Emergency Planning Unit	Core Funding	On going	On going
1.11	Co-ordinate flood risk management with Emergency Planning	Work closely with Emergency Planning	OCC		On going	On going
2. Take a Collaborative Approach						
2.1	Oxfordshire Strategic Flooding Group	Develop Partnership Work	OCC & Partners	Core Funding	On going	On going
2.2	Oxfordshire Strategic Flooding Group	Invite Emergency Planning	OCC & Partners	Core Funding	June 2014	

2.3	Forward Planning on potential schemes	Reduce short and longer term flood risk	OCC & Partners	Core Funding	On going	On going
2.4	Western Conveyance Channel	Investigate the potential scheme and financial contribution required.	OCC			
2.5	Funding Schemes	Co-ordinate funding opportunities available for potential schemes	OCC & Partners		On going	On Going
2.6	Assess resources and skills	To identify flood risk management program	OCC & Partners	Core Funding	On going	On going
2.7	Promote good practice	On consenting, enforcement and maintenance	OCC	Core and Lead Local Flood Authority Grant	On going	On going
2.8	Work with Partners	Provide information on Riparian responsibilities	EA, OCC & Partners	Core Funding	On going	On going
2.9	Records management	Structures affecting flood management	EA, OCC & Partners	Lead Local Flood Authority Grant	2015	On going
3. Prevent and Increase in Flood Risk						

3.1	Set up SuDs Adoption Body	To Defra Guidelines	OCC	Core Funding	06/04/2014	Started
3.2	Set up Inspection System	For Inspection of SUDS	OCC	Core Funding	06/04/2014	On going
3.3	Production and Publishing of Advisory Notes	For Planning Authorities, Developers & Consultants	OCC	Lead Local Flood Authority Grant	06/04/2014	On going
3.4	Working with Planning Authorities	Guidance on SUDS	OCC & Partners	Core Funding	06/04/2014	On going
3.5	Developers Guidelines	Guidance on SUDS	OCC	Core Funding	06/04/2014	On going
3.6	Riparian Land Ownership	Work with land owners to ensure responsibilities are carried out	OCC & Partners	Core Funding		
3.7	Flooding Database	Guidance for Risk Management Authorities	OCC	Lead Local Flood Authority Grant	2015	On going
3.8	Groundwater Flood Risk	Develop a system for providing advance warning of areas with potential groundwater	OCC & Local Resilience Forum			

		flood risk				
4. Take a Sustainable and Holistic Approach						
4.1	Community Resilience – Flood Plans	Work with communities and parish councils to establish flood management plans	Emergency Planning	Core Funding	On going	
4.2	Community Resilience - Communications	Increase the level of communications about self help and support available	OCC & Partners	Core Funding		
4.3	Community Resilience – removing barriers	Work with volunteers to remove the barriers to clearing watercourses	OCC & Partners	Core Funding		
4.4	Flood Volunteers	Consider the use of the national website for flood volunteers [13]				
4.5	Training	Improve training for Customer Service Advisors in	OCC			

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[13] http://floodvolunteers.co.uk/

		dealing with flood related issues				
4.6	Promote SUDS design in Master Planning	Blue and Green Corridors	EA, OCC & Partners	Core Funding	On going	On going
4.7	Flood Risk Management Schemes	Take account of all plans and policy's	EA, OCC & Partners	Capital Programme	On going	On going
4.8	Develop and Publish guidance documentation	Include guidance on flood management and environmental issues	OCC	Lead Local Flood Authority Grant	06/04/2014	On going
4.9	Work with Climate Resilience Strategy Board	All aspects of climate change	OCC	Core Funding	On going	On going

Appendix 3: Corporate Objectives

Oxfordshire County Council
http://www.oxfordshire.gov.uk/cms/content/corporate-plan
The Corporate Plan for the period to 2014/15 - 2017/18 outlines the overall goal of achieving a "Thriving Oxfordshire" and the three overarching aims. These are:
- A Thriving Economy
- Thriving People and Communities
- A Safety Net

Environment Agency
http://www.environment-agency.gov.uk/aboutus/131960.aspx
The Corporate Plan is for the period to 2011 - 2015 set by the UK and Welsh governments. The work is grouped around five priority themes which are:
- Act to reduce climate change and its consequences
- Protect and improve water, land and air
- Work with people and communities to create better places
- Work with businesses and other organisations to use resources wisely

Oxford City Council
http://www.oxford.gov.uk/Library/Documents/Policies%20and%20Plans/Corporate%20Plan%202014%20-%202018.pdf
The Corporate Plan for the period 2014 - 2018. These are:
- Vibrant, sustainable economy
- Meeting housing needs
- Strong, active communities
- Cleaner, greener Oxford
- Efficient, effective Council.

Cherwell District Council
http://www.cherwell.gov.uk/media/pdf/j/1/cdc_business_plan_2013-14.pdf
The Corporate Plan for the period to 2013 /14. These are:
- A District of Opportunity
- A Cleaner, Greener District
- A Safe, Healthy and Thriving District
- An Accessible, Value for Money Council

South Oxfordshire District Council
http://www.southoxon.gov.uk/sites/default/files/FINAL%20for%20web.pdf
The Corporate Plan is for the period to 2012/16 and the strategic objectives are:
- excellent delivery of key services
- effective management of resources
- meeting housing need
- building the local economy
- support for communities

Vale of White Horse District Council
http://www.whitehorsedc.gov.uk/sites/default/files/Vale%20corporate%20plan%20for%20web_0.pdf
The Corporate Plan is for the period to 2012/16 and the strategic objectives are:
- a strong local economy
- positive and constructive work with community groups
- housing for people who need it
- affecting their local area
- communities involved in decisions about development and other things
- an efficiently run council, keeping council tax low.

West Oxfordshire District Council
http://www.westoxon.gov.uk/council/CP.cfm
The Council Plan is for the period to 2012/15 and its priorities are to:
- Protect and enhance the environment of West Oxfordshire and maintain the district as a clean, beautiful place with low levels of crime and nuisance;
- Work in partnership to sustain vibrant, healthy and economically prosperous towns and villages with full employment;
- Be recognised as a leading council that provides efficient, value for money services.

Thames Water
http://www.thameswater.co.uk/tw/common/downloads/five-year-plan-summary-2015-2020.pdf
The Business Plan is for the period 2015/20. Within the plan the aims are to:
- Provide a safe and reliable water service that complies with all necessary standards and is available when our customers request it
- Provide a safe and reliable wastewater service that complies with all necessary standards and is available when our customers require itWe will demonstrate to our customers and stakeholders that they can trust us, that we are easy to do business with and that we care
- Provide a level of service our customers require, in the most economic and efficient manner, to ensure that bills are no more than necessary
- Limit our impact on the environment and achieve a socially responsible , sustainable business for future generations, including reducing levels of leakage.
- Provide our customers with a choice of easy to use contact options.

Anglian Water

http://www.anglianwater.co.uk/about-us/statutory-reports/EF4060AF6BE345CE9F73F7F86158824C.aspx

The Business Plan is for the period 2010/15. The aims of the plan include:

- secure the supply of reliable and resilient water and wastewater services
- offer an innovative and affordable pricing structure
- ensure we meet our goal of limiting average bill increases to an average of less than 1% p.a. above inflation for the AMP5 period
- build additional capacity in our networks to meet the needs of housing growth over the next five to ten years
- reduce even further the risk of customers being without water because of flooding, drought or exceptional events
- actively encourage water efficiency, in particular by increasing the number of customers on meters
- safeguard the precious environment in which we operate
- develop further the business in a sustainable way for the benefit of all the customers.

Severn Trent Water

http://www.stwater.co.uk/about-us/our-business-and-strategy/our-five-year-plan-2010-2015/

The Business Plan is for the period 2010/15. The aims of the plan are to:

- Lower bills on average
- Further investment
- A more efficient water company
- A more sustainable impact on the environment

Highways Agency

http://www.highways.gov.uk/publications/corporate-documents-strategic-plan/

The Strategic Plan is for the period 2010/15. The goals within the plan include:

- To provide a service that our customers can trust
- To set the standard for delivery
- To deliver sustainable solutions
- To ensure roads are the safest in the world
- To ensure the network is a dynamic and resilient asset

Appendix 4 Prioritisation of Schemes

Drainage Scheme Priority Assessment
(This sheet is best used in MS Exel due to automatic calculation cells)

Location	Parish	Assessment Date:

Location plan attached:	Yes or No	
Has a flood Form been filled in?	Yes or No	
Photo's attached:	Yes or No	
Is land or property affected?	Yes or No	

Incident Date

Reason for assessment   If flooding, date(s) of incident(s):

Type of Flooding

Provide details : ie Extent of Flood, Flood Zone?

Number of known flooding incidents at this location.

Additional Information

A - Assessment Criteria

Score

A1.1 - Flooding of property = (10 points)	A1.1	A1
A1.2 - Number of properties flooded	A1.2	
A2 - Health Hazard = (9 points)		A2
State Main Hazard -		
A3 - Flooding of highway= (8 points)		A3
A4 - Disruption to traffic= (7 points)		A4
A5 - Flooding of land etc.= (6 points)		A5

A6 - Vulnerable Occupier(s) ie. Disabled. = (5 points)   A6 [ ]

A7 -Critical transport route into rural locations = (5 points)   A7 [ ]

A8 - Route used to service industrial area extensively used by HGV's (5 points)   A8 [ ]

A9 - Automatically calculated total   A9 [ ]

(A9 = A1.1+A1.2+A2+A3+A4+A5+A6+A7+A8 x Incident frequency)

B - Risk Catagories

B1 - Road category   B1 [ ]
    (Un-cl + Rural =1,   C & B Road=2,   A & Urban Road=3)

B2 - No. of properties affected: B2 [ ]
(1 – 5 = 1,   5 – 10 = 2,   10 – 15 = 3,   15 – 20 = 4,   25+ = 5)

C - Pedestrian flow   Low = 1,   Moderate = 2,   Significant = 3.   C [ ]

D - Traffic Speed   D [ ]
(0 -20 = 1,   20 – 30 = 2,   30 – 40 = 3,   50 – 60 = 4,   60+ = 5).

E - Traffic Flow   Low =1,   Moderate = 2,   Significant=3.   E [ ]

Risk of incident (C x D x E)   [ ]

F - Community Facilities affected (2 points for each)

F1 - Bus Stop   F1 [ ]
F2 - Premium Bus Route   F2 [ ]
F3 - Road Layout (Bend / Roundabout etc) 2 point for each   F3 [ ]
F4 - Emergency Services (Fire, Ambulance etc)   F4 [ ]
F5 - Hospital   F5 [ ]
F6 - Care Home   F6 [ ]
F7 - Electricity Installation   F7 [ ]
F8 - Sewer Pumping Station   F8 [ ]
F9 - Sewer Treatment Works   F9 [ ]
F10 - Shopping Area (3 or more shops)   F10 [ ]
F11 - Filling Station   F11 [ ]
F12 - School   F12 [ ]
F13 - OTHER: (Specify) [ ]   F13 [ ]

Grand Total: [ ]

Drainage Engineers Assessment

Estimated cost of repair	

Cost benefit . (Cost/points	#DIV/0!	per point

Conclusion & action required:

| |
|---|
| |

Appendix 5: Core development strategies

The City and District Councils' Core Strategy documents are available through these links:

Council	Link
Cherwell District Council	http://www.cherwell.gov.uk/index.cfm?articleid=1730
Oxford City Council	http://www.oxford.gov.uk/PageRender/decP/Core_Strategy_occw.htm
South Oxfordshire District Council	http://www.southoxon.gov.uk/services-and-advice/planning-and-building/planning-policy/core-strategy
Vale of White Horse District Council	http://www.whitehorsedc.gov.uk/services-and-advice/planning-and-building/planning-policy/local-development-framework/core-strateg-3
West Oxfordshire District Council	http://www.westoxon.gov.uk/residents/planning-building/planning-policy/local-development-framework-(ldf)/draft-local-plan-(previously-core-strategy)/

The framework for housing development is rapidly changing and these will be changed as the Strategic Housing Market Assessment is published.

Appendix 6: Catchment Flood Management Plan Policies
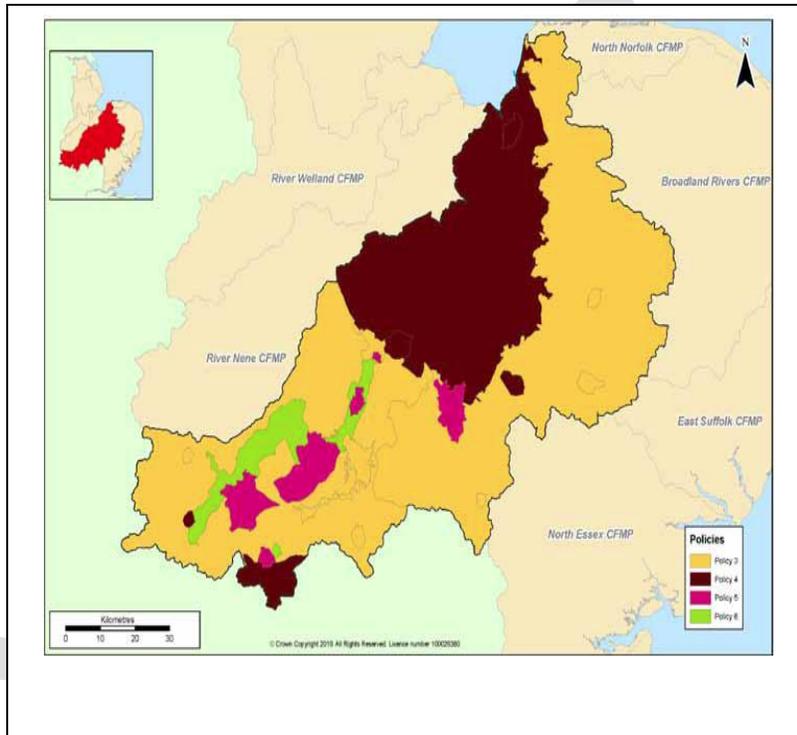
Figure A6-1 Thames
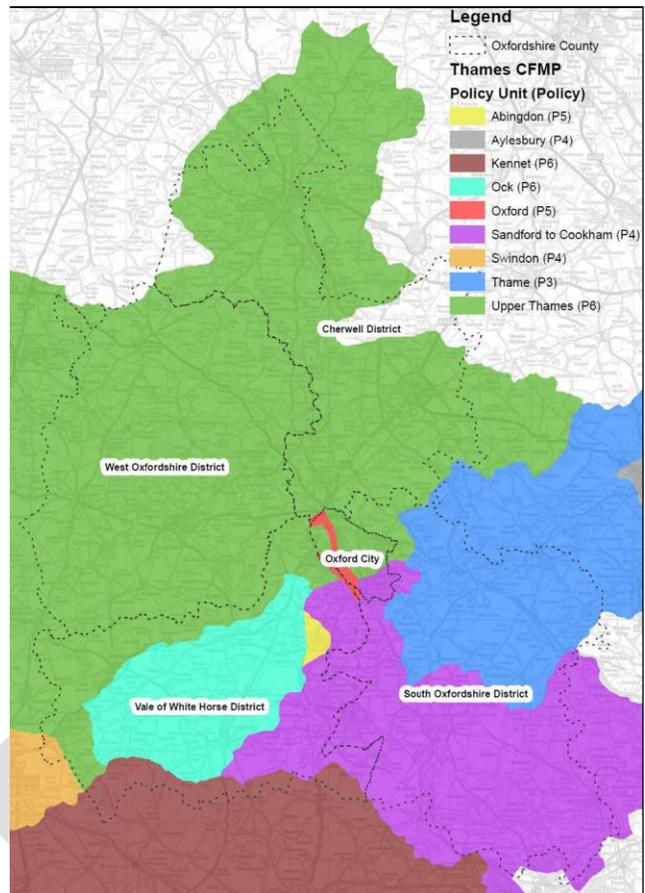
Contains Ordnance Survey data © Crown copyright and database right 2012

Thames Catchment Flood Management Plan	
Catchment	**Policy** (EA wording)
Thame	**Policy 3:** Areas of low to moderate flood risk where we are generally managing existing flood risk effectively
Sandford to Cookham	**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
Swindon	**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
Abingdon	**Policy 5:** Areas of moderate to high flood risk where we can generally take further action to reduce flood risk
Oxford	**Policy 5:** Areas of moderate to high flood risk where we can generally take further action to reduce flood risk

Ock	**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
Upper Thames	**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

Figure A6.2 Great Ouse Catchment Flood Management Plan policies for Oxfordshire

Contains Ordnance Survey data © Crown copyright and database right 2012

Great Ouse Catchment Flood Management Plan	
Catchment	**Policy**
Bedford Ouse Rural and Eastern Rivers	**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.

Appendix 7:   River Basin Management Plan policies

Thames: http://cdn.environment-agency.gov.uk/geth0910bswa-e-e.pdf

Anglian: http://cdn.environment-agency.gov.uk/gean0910bspm-e-e.pdf

Table A7-1   Thames River Basin Management Plan action areas

Catchment	Actions applicable to Oxfordshire
Cherwell	• Encourage uptake of Voluntary Initiative best practice advice by farmers and agronomists, eg Ditch/Watercourse maintenance • Target high-risk farms and undertake regulatory farm visits using pollution prevention notices and advisory letters where necessary. • River Ray Landscape Restoration Project. • Further investigations to improve understanding of (the scale of) habitat restoration required to achieve "Good Ecological Status". Improve understanding of the scale of habitat restoration required to achieve Good Ecological Status / Good Ecological Potential.
Cotswold	• Contribute to achieving favourable condition on Cotswold Water Park Sites of Special Scientific Interest by implementing invasive species control programme. • Investigate impact of sediments on ecological status. • Contribute to achieving favourable condition on Cotswold Water Park Site of Special Scientific Interest by planning permission - enforcement/revocation. • Apply national guidance framework on disposal of dredging to refine local measures as appropriate (where not is proportionately costly or technically infeasible).
Thame	• Actively promote the use of storage reservoirs for non-potable water uses (e.g. irrigation storage reservoirs). • Promote "Best Farming Practice", including the use of soil and nutrient management plans. • Ensure the need for Water Cycle Studies are included in policies in regional strategies and local development frameworks where appropriate, particularly in growth and/or high risk areas. • Further investigations to improve understanding of (the scale of) habitat restoration required to achieve GES / GEP.
Vale of White Horse	• Target high risk farms and undertake regulatory farm visits using, pollution prevention notices and advisory letters where necessary. • Further investigations to improve understanding of habitat restoration required to achieve Good Ecological Status / Good Ecological Potential.

Table A7-2   Anglian River Basin Management Plans action areas

Catchment	Actions applicable to Oxfordshire
Upper Ouse and Bedford Ouse	This is only a small part of Oxfordshire, in the upper reaches of the Ouse catchment, which drains out of Oxfordshire: The impact on the strategy has yet to be assessed.

Appendix 8: Flood legislation and useful reference documents

Information relevant to the Local Flood Risk Management Strategy includes:

LEGISLATION:

- **Flood Risk Regulations (2009)**
  http://www.legislation.gov.uk/uksi/2009/3042/contents/made

- **Flood and Water Management Act (2010)**
  http://www.legislation.gov.uk/ukpga/2010/29/contents

- **Climate Change Act (2008)** - requires a UK wide adaptation programme and risk assessment every five years. It gives the Government power to see how public bodies, statutory organisations and water companies are adapting to Climate Change.
  http://www.legislation.gov.uk/ukpga/2008/27/contents

- **The Conservation of Habitats and Species Regulation (2010)** – transposes the Habitats Directive[14] into UK law.
  http://www.legislation.gov.uk/uksi/2010/490/contents/made

- **The Civil Contingencies Act (2004)** – The Act sets out the actions that need to be followed in the event of a flood. It is separated into two parts, the first defines the local arrangements for civil protection and the second describes emergency powers.
  http://www.legislation.gov.uk/ukpga/2004/36/contents

- **Strategic Environment Assessment Directive (2001)**
  http://ec.europa.eu/environment/eia/sea-legalcontext.htm

- **Land Drainage Act (1991)** - outlines the duties of a number of bodies to manage land drainage, i.e. LLFA, IDBs, navigation authorities and riparian owners.
  http://www.legislation.gov.uk/ukpga/1991/59/contents

- **Water Framework Directive (2000)** – described as the most substantial piece of water-related legislation. Aimed at improving the chemical and ecological status of inland and coastal waters to "good" by 2015.
  http://ec.europa.eu/environment/water/water-framework/index_en.html

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[14] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora available at
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0043:EN:NOT

DOCUMENTS:

- **The Pitt Review:**
  http://webarchive.nationalarchives.gov.uk/20100807034701/http:/archive.cabinetoffice.gov.uk/pittreview/thepittreview/final_report.html

- **National Planning and Policy Framework** and associated Technical Guide (2012): http://www.communities.gov.uk/documents/planningandbuilding/pdf/2116950.pdf
  (This superseded PPS 25: Development and Flood Risk)

- **Thames River Basin Management Plan** [2009]:
  http://www.environment-agency.gov.uk/research/planning/125035.aspx

- **Thames Catchment Flood Management Plan** [2008]
  http://cdn.environment-agency.gov.uk/geth1209bqyl-e-e.pdf

- **Strategic Flood Risk Assessments** – by City and District Councils
  Cherwell DC: http://www.cherwell.gov.uk/index.cfm?articleid=4356

  Oxford City C:
                        http://www.oxford.gov.uk/PageRender/decP/SitesandHousingProposedSubmissionConsultation.htm

  South Oxon DC: http://www.southoxon.gov.uk/services-and-advice/planning-and-building/planning-policy/evidence-studies/district-flood-risk
  VoWH DC: http://www.whitehorsedc.gov.uk/services-and-advice/planning-and-building/planning-policy/local-development-framework/core-strategy/evidence-base/strategic-floo
  West Oxon DC: http://www.westoxon.gov.uk/environment/floodreviews.cfm

- **Adverse Weather Plan** [July 2012, v7] – by Thames Valley Local Resilience Forum

- **Preliminary Flood Risk Assessment** [June 2010] – by Oxfordshire County Council
  http://www.oxfordshire.gov.uk/cms/content/oxfordshire-preliminary-flood-riskassessment-pfra

Where links do not work please copy and paste into the internet explorer address bar.