# RHONNDA CYNON TAFF COUNTY BOROUGH COUNCIL Local Flood Risk Management Strategy Summary



### **FOREWORD**

During recent years, communities in Rhondda Cynon Taf have experienced the severe impacts and consequences of flooding. We have also witnessed other areas of the United Kingdom being subjected to devastating flood events. It is widely held that floods such as these are likely to become more frequent as the effects of climate change develop. The consequences of this unchecked expected increase in flooding will likely see greater risks to life, the economy and the environment of Rhondda Cynon Taf. In response to the above, Rhondda Cynon Taf County Borough Council has developed a holistic response to



managing flood risk in the form of its first Local Flood Risk Management Strategy.

The first Rhondda Cynon Taf County Borough Council Local Flood Risk Management Strategy is a key milestone in ensuring that the risk of flooding within Rhondda Cynon Taf is managed as a whole, integrating the work done by the Council, Government Bodies, Water Companies, communities and individuals. The Strategy considers how various activities can be used to manage flood risk, from better planning policy to ensure new development does not increase flood risk for its neighbours, through to the efficient management of the surrounding landscape to reduce flooding at source. It should be stressed that the activities outlined within this Strategy only contribute to the management of flood risk. Even if the economy as a whole were not experiencing times of austerity, it would be unrealistic to protect all property and infrastructure from the risk of flooding. This Strategy therefore encourages all involved to make efforts to reduce flood risk by concentrating not only on reducing the probability of flooding, but also the impact when it does occur.

This Strategy focuses on local flood risk, defined as flooding caused by surface runoff, groundwater and ordinary watercourses (streams, ditches etc.). This type of flooding was responsible for the highly publicised flooding of 2009, and is as an important mechanism of flooding within Rhondda Cynon Taf as is flooding from main rivers. However, it is appreciated that it is not the source of flooding that is of importance to those affected, but the effects. This Strategy therefore sets out how RCTCBC will work collaboratively with other key stakeholders to input into the management of all sources of flood risk and ensure that investment decisions are made according to levels of risk.

Measures within this Strategy outline how RCTCBC will attempt to gain a better understanding of the risks of flooding. By using modern modelling software it is possible to determine properties that are at risk from flooding, or are likely to be at risk of flooding in the future. It is appreciated that householders may have concerns about using models to determine areas of flood risk, but they are a significant and important tool in ensuring that limited resources are used in an effective manner to target flood risk measures to areas at the highest risk.

This Flood Risk Management Strategy presents Rhondda Cynon Taf County Borough Council's preferred methodology for dealing with flood risk and ensuring that communities, infrastructure and the wider environment are more resilient to the impacts of flooding and climate change.

Councillor Andrew Morgan

Cabinet Member for Frontline Services

### INTRODUCTION

Rhondda Cynon Taf County Borough Council (RCTCBC) has produced a strategy that details the objectives and measures that have been developed to outline, at a high level, how the Authority intends to manage flood risk within the life of this particular strategy and sets out to adopt a holistic approach to flood risk management.

The Flood and Water Management Act 2010 was introduced following the review of the 2007 flooding that was widespread across the UK. The Act sets out to provide a better and more comprehensive management of flood risk for people, homes and businesses.

Under this legislation, Rhondda Cynon Taf County Borough Council became a Lead Local Flood Authority (LLFA) and has a duty to produce the strategy in partnership with other risk management authorities.

### WHAT IS FLOODING?

The Flood and Water Management Act 2010 devolves the management of local flood risk to RCTCBC. Local Flood Risk is defined as flooding from surface water, groundwater and ordinary watercourses, such as small rivers, streams and ditches. A full description of these sources of flooding is provided at the bottom of the page.

RCTCBC is now taking the lead on the management of flooding from local sources with help from other risk management authorities. The strategy deals solely with the management of local flood risk.

The Strategy was completed and approved without comment by Welsh Government in April 2013.

The responsibility for the management of flooding from main rivers and seas remains with Natural Wales. For further Resources information on the flooding from main seas, please rivers and www.naturalresourceswales.gov.uk.

| What are the sources of Local Flooding? |   |  |  |
|---|---|--|--|
| Surface Water                           | Surface water flooding occurs when rainwater (including snow and other precipitation) has fallen on the ground and not yet entered a watercourse, drainage system or public sewer and flows across the land.  This type of flooding is usually associated with intense rainfall events where the volume of water is unable to enter highway drains or culverts. This type of flooding is often difficult to predict.  |  |  |
| Groundwater                             | Groundwater is held within permeable rocks and soils beneath the surface of the earth. Following prolonged periods of rainfall the water levels within the rocks and soils rise above the ground surface.  Groundwater levels are slower to respond than water levels in rivers and begin to rise some time after a storm event. This slow response also means that when groundwater flooding does occur it tends to be more prolonged as it takes time for the levels to fall. |  |  |
| Ordinary<br>Watercourse                 | Ordinary watercourses are defined as watercourses that do not form part of a main river. Flooding from ordinary watercourses occurs when the watercourse channel cannot contain all of the water feeding it from its catchment and it spills out onto the adjacent land.  |  |  |

### **LEGISLATION**

There are two principle legislations that have influenced the management of flood risk.

The purpose of the Flood Risk Regulations 2009 is to translate the European Commission Floods Directive (2077/60/EC) into domestic Law. The legislation placed the requirement on LLFA's to produce:

- Preliminary Flood Risk Assessment Report;
- Flood Hazard and Flood Risk Maps;
- Flood Risk Management Plans.

Following the devastating flooding observed in 2007, Sir Michael Pitt's Review set out a number of recommendations for the government to better manage the risk posed by flooding. The Flood and Water Management Act 2010 implemented many of these recommendations and set out the desire for the sustainable management of risk associated with flooding.

Under the Flood Risk Regulations 2009 and the Flood and Water Management Act 2010, Rhondda Cynon Taf County Borough Council has been identified as a Lead Local Flood Authority (LLFA) and has been given a number of roles responsibilities for local sources of flood risk, notably to "develop, apply and maintain, monitor a local for flood risk strategy management" in Rhondda Cynon Taf.

Though flooding is an inevitable natural process, through careful management and by implementing Rhondda Cynon Taf County Borough Councils (RCTCBC) Local Flood Risk Management Strategy document, the probability of flooding along with its impacts can be reduced.

#### THE STRATEGY

The Local Flood Risk Management Strategy sets out to satisfy and fulfil the requirements of the Flood and Water Management Act 2010 and adopts a holistic approach to flood risk management.



### STRUCTURE OF THE STRATEGY

The Local Flood Risk Management Strategy is comprised of several documents that support the main strategy document. A table detailing these documents is provided in the table below.

The Local Flood Risk Management Strategy document itself begins with an introduction, followed by a summary of the relevant legislation that underpins local flood risk management.

A review of the geography of RCTCBC is summarised, including the social and political background of the County Borough along with the physical location and designated sites. Following this, the strategy provides an assessment of the nature and level of flood risk in RCTCBC.

The strategy then documents the strategic and detailed objectives of the strategy, which in turn will be delivered by a series of measures and actions that are set out. The costs and benefits of the measures are then analysed.

Finally, the strategy assesses its contribution to the wider environmental objectives and finally provides details of the review process.

It is important to note that the strategy is a high level document and does not state or detail any specific projects. It does state strategic actions along with principles to aid decision making for future flood risk management initiatives.

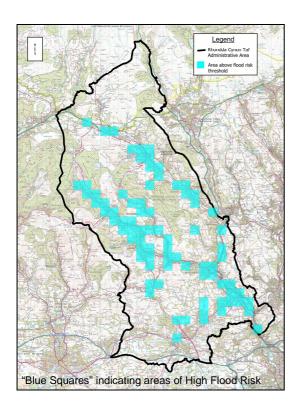
| Strategy Documents                      |  |  |
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| Summary                                 | This document. It provides a summary of Rhondda Cynon Taf County Borough Council's Local Flood Risk Management Strategy.   |  |
| Local Flood Risk<br>Management Strategy | The main document is the culmination of all research and work. The document sets out flood risk in RCTCBC and the measures and objectives proposed to address these risks.   |  |
| Consultation Report                     | The consultation was launched on the 9 <sup>th</sup> October 2012 and covered the Draft Local Flood Risk management Strategy, the SEA Environmental Report and the Appropriate Assessment. The consultation questionnaire and associated documents were made available to the public on the RCTCBC website and publicised via a press release. Additionally, a number of stakeholders were also consulted. The report provides a summary of the consultation comments and the responses to those comments. |  |
| Strategic Environmental Assessment      | The report considers the potential impacts of RCTCBC's Local Flood Risk Strategy on the environment.   |  |
| Appropriate Assessment                  | This was completed as a requirement of the Conservation of Species and Habitats Regulations (2010). The assessment was carried out to assess the potential impact of the aims and objectives detailed in the LFRMS on European Designated Sites, such as Sites of Special Scientific Interest. The Assessment concludes that significant effects on these sites are unlikely.  |  |

### FLOOD RISK WITHIN RCTCBC

The Local Flood Risk Management Strategy encompasses the administrative boundary of RCTCBC, an area of approximately 424km<sup>2</sup> with a population of 234,000 (mid 2010).

RCTCBC includes the catchments of the River Taff, Ely, Rhondda, Cynon and Clun. Flood Risk in RCTCBC will be affected by population levels, wealth and settlement patterns.

Preliminary Flood Risk Assessments (PFRAs) were completed in 2011 by all LLFAs, as required by the Flood Regulations 2009. Risk which provided high level overview of flood risk from local sources. RCTCBC has been identified as a Flood Risk Area and within the administrative boundary, 50% is considered as an area of Flood Risk. This affects approximately 38,000 people, 2890 non-residential properties and 96 pieces of critical infrastructure.



### WHO ARE THE RISK MANAGEMENT AUTHORITIES?

Flood Risk management should not be left solely to certain organisations; collaboration of all stakeholders, including residents and businesses, is required to manage flood risk.

As a requirement of the Flood and Water Management Act 2010, LLFA must specify the risk management authorities. These are organisations that have responsibilities around flooding, both existing responsibilities and those set out in the Flood and Water Management Act 2010.

### The Risk Management Authorities are:

- Rhondda Cynon Taf County Borough Council
- Natural Resources Wales; and
- Dwr Cymru Welsh Water

### **OBJECTIVES OF THE STRATEGY**

RCTCBC have developed a series of flood risk management objectives which outline, at a high-level, how the Authority intends to manage flood risk within the life the strategy.

As previously detailed, RCTCBC's strategy must be consistent with the National Strategy, which has the following four overarching objectives:

- Reducing the consequences for individuals, communities, businesses and the environment from flooding and coastal erosion;
- Raising awareness of and engaging people in the response to flood and coastal erosion risk;
- Providing an effective and sustained response to flood and coastal erosion events; and
- Prioritising investment in the most at risk communities.

At the highest flood risk management level, there are four strategic options. RCTCBC's high level strategy decision is to:-

## <u>'Reduce the Consequences of</u> Flood Risk'

The high-level option will be delivered by four core objectives, detailed below and will be delivered through a series of detailed objectives, which in turn will be delivered by the implementation of a series of measures and actions.

RCTCBC have produced 38 measures, which are summarised in the table on the next page. The table also details the high-level themes provided by Welsh Government that the measures are linked to. These measures and actions have been considered in the short (0-20 years), medium (20-50 years) and long term (50-100 years).

#### **COST AND BENFITS**

Currently it is difficult to determine the costs and benefits as it is difficult to know the required scope and the nature of the works associated highlighted within the strategy.

An assessment of the of the costs and benefits is considered by RCTCBC to be better placed within the Flood Risk Management Plans, which will be undertaken by RCTCBC as a requirement of the Flood Risk Regulations 2009.

The main source of funding will be delivered by Welsh Government. RCTCBC and other Welsh Local Risk Authorities will need to find other sources of funding. Such examples may be the Council's Capital programme, European Funding, Community Infrastructure Levies and local fundraising.

Partnership working/funding will also be considered as a way of achieving flood risk management objectives which are of mutual interest to parties.

# RCTCBC have <u>developed Four Core Objectives</u> with regard to the management of flood risk:

- To utilise a risk based approach to managing flood risk, recognising that drainage and structural defences may not always be the most appropriate solution;
- 2. To develop a greater strategic understanding of flood risk from all sources within RCTCBC and at a wider 'catchment scale';
- 3. To raise community awareness of and actively engage communities in the response to flood risk;
- 4. Use of local planning policy to ensure that no new flood risk is created and where possible, opportunities to reduce flood risk are taken.

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### **WHAT NEXT?**

The Local Flood Risk Strategy will be subject to continuous improvement and will not be completed by one off exercises. A formal review of the Strategy will take place in 2017 and every six years thereafter, to run alongside the production of the National Strategy for Flood and Coastal Erosion Risk Management in Wales', as suggested by the Welsh Government.

### **FURTHER INFORMATION**

For further information or to view the documents, please visit <a href="https://www.rctcbc.gov.uk/flooding">www.rctcbc.gov.uk/flooding</a> or contact the Flood Risk Management Team at <a href="https://www.rctcbc.gov.uk">FRM@rctcbc.gov.uk</a>.