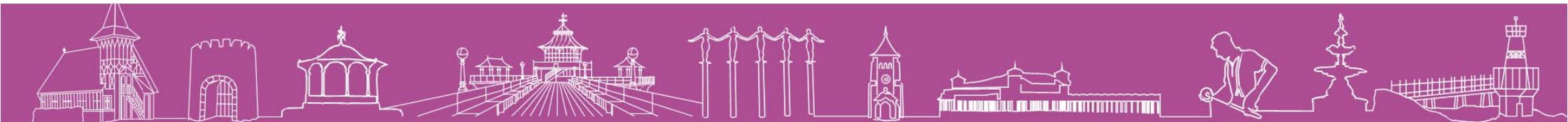
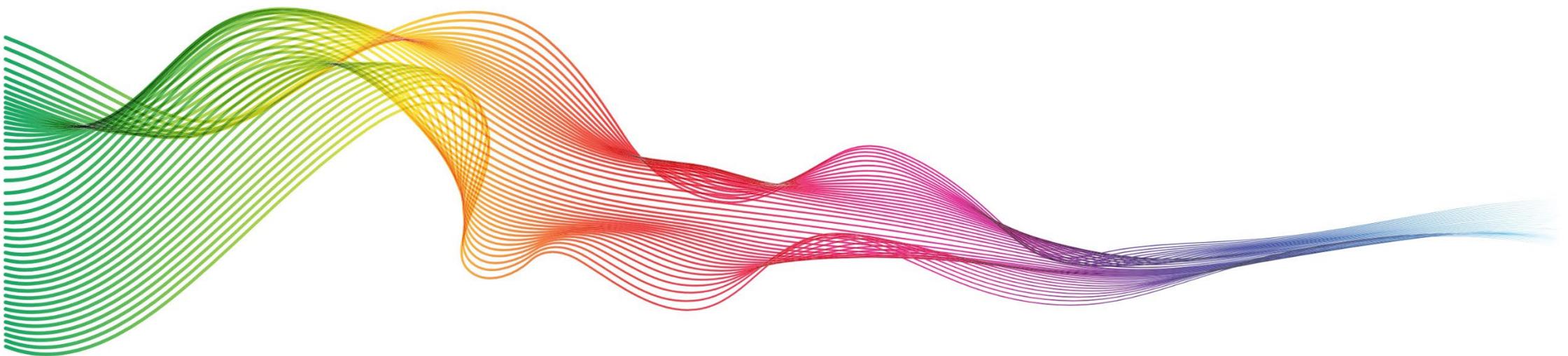


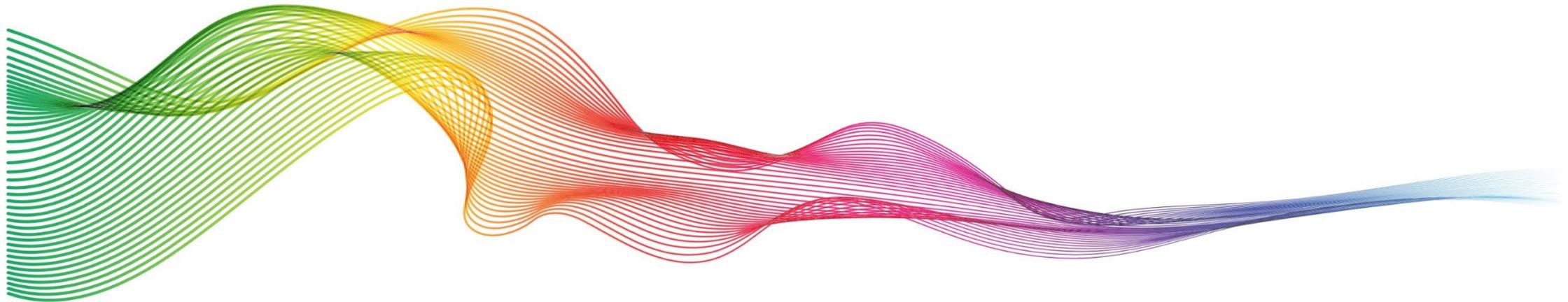
# Local Flood Risk Management Strategy for North Somerset

## Summary Document



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## 1.0 Introduction

Preparing for flooding is vital in North Somerset because there are around 4300 properties at medium risk of flooding (between 1% and 3.3% chance of happening each year, also known as a 1 in 100 year event). Flooding to low-lying land from the sea and tidal estuaries is a principal flood risk source within North Somerset. Without defences in place, approximately a quarter of the area of North Somerset is at risk of flooding. However, the tidal flood defence network across the study area is well-developed and extensive; therefore, flooding rarely occurs due to high tidal levels alone. Climate change and associated sea level rise will increase this risk. By 2080, without improvements to flood defences, as many as 63000 properties could be at risk.

North Somerset Council has developed a Local Flood Risk Management Strategy that sets out our objectives and actions to make your community more resilient to surface water flooding (sometimes known as flash flooding) and groundwater flooding. Parts of the strategy also cover broader flood risks, such as flooding from the sea and large rivers. The strategy is broken into seven parts for the ease of the reader.

All are self-contained documents and can be read independently to help navigate the complex strategy. These are described below:

|               |  |   |
|---------------|--|---|
| <b>Part A</b> | <b>Local Flood Risk Reduction Actions in North Somerset</b>        | This explains what all the relevant organisations are working together to achieve. It also explains the flooding risks North Somerset faces now, and in the future, and how to interpret and understand national mapping that is available online at <a href="https://www.gov.uk/check-long-term-flood-risk">https://www.gov.uk/check-long-term-flood-risk</a><br>There is also a detailed action plan explaining what the organisations with responsibilities for managing flood risk will do. |
| <b>Part B</b> | <b>A Guide to North Somerset Flood Risk Management Authorities</b> | Many organisations, including landowners, have different rights and responsibilities when managing flood risk. This part is an explanation of who does what in North Somerset.  |
| <b>Part C</b> | <b>A Guide to Flood Risk Funding</b>                               | Flood risk funding is complicated. An explanation of how flood risk activities are funded locally and nationally is explained in this part and what this means to us in North Somerset.   |
| <b>Part D</b> | <b>North Somerset Natural Flood Management</b>                     | Natural flood management uses natural features and planting to store and slow water flow. Across a large area, this can reduce flood risk downstream. This part explains how this approach will be used in North Somerset.  |

|               |  |   |
|---------------|--|---|
| <b>Part E</b> | <b>Flood Resilient North Somerset</b>              | Flood resilience is “the capacity of people and places to plan for, better protect, respond to, and recover from flooding and coastal change”. This part describes how communities in North Somerset can be more resilient to flooding and adapt and recover more quickly when flooded. |
| <b>Part F</b> | <b>Small Watercourse Maintenance Good Practice</b> | Watercourses are essential to flood risk management, and if they are not functioning or blocked, this can cause flooding. This part is a guide to maintaining small watercourses for flood risk and wildlife.   |
| <b>Part G</b> | <b>North Somerset Coastal Flood Risk Awareness</b> | This part explains the risk of coastal flooding and the impact of climate change and sea level rise on North Somerset.  |

## 2.0 Understanding the risk of flooding in North Somerset



Flooding can be from different sources, such as the sea, rivers, small watercourses, surface water, groundwater and reservoirs. Different authorities manage the risk of flooding from each of these. **Part B – A guide to A Guide to North**

**Somerset Flood Risk Management Authorities** explains who the risk management authorities are and what they do.

Flooding happens due to storms and too much rainfall, especially if it is heavy over a short amount of time. It can also happen if there is constant rainfall over an extended period. Sometimes flooding comes from more than one source, and there is a complex interaction between each one. Very often, not one thing will fix the problem.

The Environment Agency has computer models that have produced maps showing what flood risk looks like across North Somerset. These can be found at:

<https://www.gov.uk/check-long-term-flood-risk>

A full explanation of how to interpret and understand your risk as shown on the maps can be found in **Part A - Local Flood Risk Reduction Actions in North Somerset**

High rainfall can affect all of us but in different ways and there is a complex interaction between different types of flooding. One of the most obvious impacts of heavy rainfall is flooding of the highway. We maintain thousands of gullies on public land and their connections to the drainage system along roads. If you notice a problem please report it to the highway team, through the channels available. <https://www.n-somerset.gov.uk/my-services/nuisances-pollution-environmental-issues/flooding-drainage/drainage>

More serious flooding is that which affects homes and businesses, and it is essential that all such incidents are recorded to assist with the development of this strategy and the planning of future works. If your home or business has experienced flooding inside your home please report it to the flood risk team via this link: <https://www.n-somerset.gov.uk/my-services/nuisances-pollution-environmental-issues/flooding-drainage/reporting-flood>

### 3.0 North Somerset local flood risk management objectives and actions

The Local Flood Risk Management Strategy has objectives and local flood risk reduction actions adapted from the Environment Agency's National Flood and Coastal Erosion Risk Management Strategy for England. The Environment Agency's national strategy can be found here:

<https://www.gov.uk/government/publications/national-flood-and-coastal-erosion-risk-management-strategy-for-england--2>

The objectives are:

**OB1** - A flood resilient North Somerset

**OB2** - Today's growth and infrastructure in North Somerset being resilient in tomorrow's climate

**OB3** - North Somerset ready to respond and adapt to flooding

We have built on these to create local flood risk actions:

**A1** - Appropriately maintaining assets

**A2** - Inputting into planning

**A3** - Regulating surface water activities

**A4** - Making North Somerset flood resilient

**A5** - Investigating surface water flooding and assets

**A6** - Using natural flood management

**A7** - Scheme Opportunity Assessment (understanding where in North Somerset large schemes to reduce flood risk would be viable)

A full action plan that will be updated yearly, and the strategy will be reviewed and updated as needed every six years can be found in **Part A - Local Flood Risk Reduction Actions in North Somerset**.

#### 3.1 Local flood risk reduction actions

##### 3.1.1 Action A1 – appropriately maintaining assets

All flood risk and drainage infrastructure assets need maintenance to function as initially intended. Infrastructure assets can be many things, including natural features such as

watercourses, ponds and wetlands and artificial structures such as drains, pipes, culverts, weirs etc. Different organisations have different responsibilities for maintaining assets.

- North Somerset Council maintains highway drainage and reservoir and flood storage areas and has the power to maintain small watercourses elsewhere.
- North Somerset Levels Internal Drainage Board uses its powers to maintain strategic watercourses and culverts in its District.
- Wessex Water maintains public foul and surface water sewers.
- National Highways maintain the drainage for the M5.
- Network Rail maintains the drainage for railways.
- The Environment Agency uses its powers to maintain large rivers and sea defences.
- Private landowners are responsible for maintaining watercourses that flow through, next to or under their land.

These responsibilities are explained in **Part B - A Guide to North Somerset Flood Risk Management Authorities and Part F – Small Watercourse Maintenance Good Practice.**

The main action is to continue the high standard of maintenance across North Somerset, regularly reviewing what is maintained, how it is maintained and co-ordinating activities with other relevant organisations.



### 3.1.2 Action A2 – inputting on planning

New developments can increase the risk of surface water flooding without suitable mitigation. Risk Management Authorities such as North Somerset Council as the Lead Local Flood Authority, The Environment Agency, Wessex Water, and the Internal Drainage Boards all comment on planning applications. All risk management authorities also provide flood risk and drainage specific advice to the local planning authority when writing their local plan.

The main action is to continue to provide relevant comments on planning applications and to develop further guidance that assist with decision making.

### 3.1.3 Action A3 – regulating surface water activities

Work on watercourses, rivers and public sewers requires consent from the following organisations:

- North Somerset Council – for works on small watercourses outside of the Internal Drainage Board District
- North Somerset Levels Internal Drainage Board – for works on small watercourses inside their District

- The Environment Agency – for works on large rivers and sea defences
- Wessex Water – for works on or near public sewers

Further details and contact details can be found in **Part A - Local Flood Risk Reduction Actions in North Somerset**

The main action is to continue regulation of activities and improve co-ordination between organisations when decisions are made.

### 3.1.4 Action A4 – making North Somerset flood resilient

A flood resilience approach aims to reduce the impact and damage caused by floodwater. This can mean a combination of several small actions, such as:

- Being prepared for a flood
- Knowing what to do in a flood
- Being able to recover from a flood quickly
- Changing a property so there is less damage when it floods
- Adapting a community so that flooding has less of an impact

This action is described in detail in **Part F – Flood Resilient North Somerset**

North Somerset will work with residents and businesses to increase the resilience of North Somerset to flooding.



### 3.1.5 Action A5 – investigating surface water flooding and assets

The drainage and flood risk infrastructure in North Somerset has been constructed over many years. Not all of it has been recorded, so we don't know its condition. Knowing where places flood and why they have flooded is key to understanding if any actions can be taken to reduce the impact of the flooding. This can be as simple as ensuring landowners clean their ditches to investigating Victorian culverts in our towns.

#### Flood risk assets

North Somerset Council will update the information in the asset list (called an asset register) to improve the understanding of these. This will include collecting more information about ownership and condition.

#### Mapping surface water flow routes and modelling

North Somerset Council will survey and map surface water flow routes to provide more detailed and accurate information.

This information can then feed into continuously updating the computer models used to create surface water flood risk maps.

### Surface water flood investigations

North Somerset Council must investigate flooding if it is considered necessary or appropriate to understand if the relevant risk management authorities have done what they are reasonably expected to do in a flood. Investigations are usually only undertaken if:

- five or more properties have internal flooding
- a property or properties are impacted by frequent flooding
- significant infrastructure, such as schools and hospitals, are flooded

External flooding is not generally investigated unless it is significant or frequent.

### 3.1.6 Action A6 – using natural flood management

Natural flood management also benefits wildlife by increasing the variety and variability of where animals and plants live. How these and other methods will be used is explained in **Part D North Somerset Natural Flood Management**

North Somerset Council will work with landowners to deliver natural flood management schemes.

### 3.1.7 Action A7 – scheme opportunities assessment

North Somerset Council will undertake a high-level assessment of what measures would reduce the impact of flooding to these communities. The review will look for intervention opportunities and determine how much they would cost to build. This will then be compared to how much funding could be applied for from central government. An explanation of how flood risk work is funded can be found in **Part C - A Guide to Flood Risk Funding.**

