



# Adverse Weather Preparation

*A Practical Guide for the Third Sector*

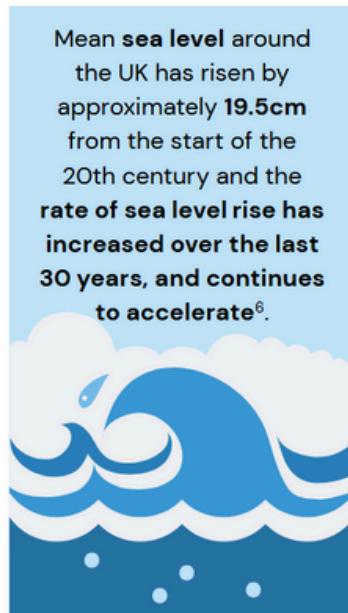
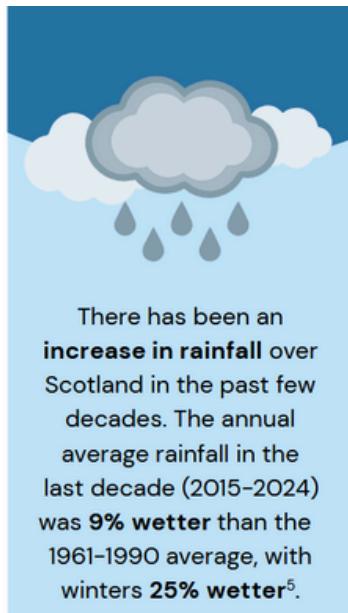
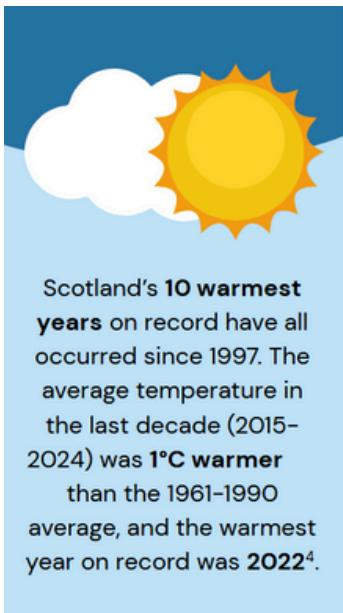
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# 1. BACKGROUND

***"Climate change is with us"***

*-John Swinney, First Minister of Scotland*



From *Climate Projections for Scotland* by Adaptation Scotland<sup>1</sup>

Climate projections predict the **climate will likely increase by 3°C** with current mitigation. Even meeting the Paris Agreement target of 2°C will result in major shifts in climate for Scotland. We can already see an increase in adverse weather caused by the climate crisis in Scotland, with heat, storms, and flooding breaking records in intensity and frequency. And it is set to worsen in the next decades.

While work must still be done to mitigate human impact on climate, the time of there being no change has passed. People and third sector organisations need to start making climate adaptations to protect their users, maintain services, and reduce the cost and damage the climate crisis will cause.

With this in mind, **Midlothian Financial Inclusion Network (MFIN)** and **Midlothian Climate Action Network (MCAN)** have created this document, with guidance on adaptations third sector organisations can make to ready themselves.

<sup>1</sup> [adaptation.scot/app/uploads/2025/06/2025-climate-projections-report.pdf](https://adaptation.scot/app/uploads/2025/06/2025-climate-projections-report.pdf)

## 2. DEFINITIONS

### **Adverse Weather**

Adverse weather includes any extreme or unusual weather conditions that can cause disruption or harm. This can include heavy rainfall, snow, ice, high winds, storms, or heatwaves. Adverse weather can affect roads, buildings, health, and public services, especially in already vulnerable communities.

### **Climate Adaptation**

Climate adaptation are actions taken to prepare for and reduce impact of climate change. It involves reducing vulnerability and increasing resilience through knowledge sharing, structural modifications, and behaviour changes.

### **Climate Mitigation**

Climate mitigation refers to actions taken to reduce the causes of climate change, especially by cutting greenhouse gas emissions. This can include using renewable energy, improving energy efficiency, reducing waste, and supporting low-carbon travel. Mitigation helps to slow down the rate of climate change and limit its long-term impacts.

### **Climate Resilience**

Climate resilience is the ability of people, places, systems, and organisations to withstand, adapt to, and recover from climate-related challenges such as flooding, heatwaves, and storms. It involves planning ahead, protecting infrastructure, supporting vulnerable communities, and ensuring services continue during extreme events.

### **High Impact Scenario**

A high impact scenario is a climate projection based on the assumption that greenhouse gas emissions remain high and little is done to reduce them. It shows what could happen if we do not take strong action—often including more extreme weather, higher temperatures, rising sea levels, and greater disruption to communities and services. 4°C is the climate temperature change of a high impact scenario.

### **Low Emissions Scenario**

A low emissions scenario is a climate projection that assumes global efforts are made to significantly reduce greenhouse gas emissions. These scenarios show a future where climate impacts are less severe because of policies, technologies, and behaviour changes that support a cleaner, more sustainable world. 2°C is the climate temperature change of a low emission scenario.

### **Net Zero**

Net Zero is when human activity is not adding more carbon to our atmosphere than planet Earth is naturally able to absorb and store. Natural carbon absorbers and storers include forests, the oceans and peat bogs. The Scottish Parliaments Climate Change (Emissions Reduction Targets) Act of 2024 set out a target date for net zero emissions of all greenhouse gases by 2045. It scrapped interim 2030 and 2040 net zero targets.

### **Paris Agreement**

The Paris Agreement is a global treaty adopted in 2015 where countries agreed to work together to limit global warming to well below 2°C and ideally to 1.5°C above pre-industrial levels. Countries that signed the agreement committed to cutting emissions, building climate resilience, and supporting developing nations through funding and technology.

### **Permitted Development Rights**

Permitted Development Rights allow certain building changes or improvements to be made without needing to apply for full planning permission. In the context of climate action, this may include installing solar panels, heat pumps, or insulation—making it easier for homes and community buildings to become more energy efficient.

### 3. COMMUNITY RESILIENCE

#### ASSESSING CLIMATE NEEDS

To build community resilience to climate change, adaptations must be tailored to the unique needs of the community. Before committing to any specific measures, organisations should **first assess the community's needs and what is realistic to achieve**. A number of tools exist to help evaluate what adaptations will work best.

##### ***Growing Climate Confidence's Net Zero Check-up***

This tool by SCVO can help organisations assess their emissions and understand their environmental impact. While this and similar tools are primarily designed for mitigation, they can play a valuable role in adaptation planning. By evaluating current energy use, organisations can reduce reliance on energy that can be impacted by adverse weather.

[scorecard.climateconfident.scot/net-zero](http://scorecard.climateconfident.scot/net-zero)

##### ***Climate Resilience Checklist***

Adaptation Scotland offers excellent resources for exploring practical ideas and tools for climate adaptation. One such tool is a checklist and case studies designed to help organisations identify adaptations that can protect their "People, Products & Services, Premises, Processes, and Place from the impacts of adverse weather. It also includes useful prompts to inspire innovation in responding to clients' climate-related needs.

[www.adaptation.scot/take-action/sme-resilience-checklist](http://www.adaptation.scot/take-action/sme-resilience-checklist)

##### ***Climate Ready Places Infographic Map***

Adaptation Scotland also offers the Climate Ready Places infographic map, which provides inspiration and examples of adaptations across multiple sectors, communities and environments

[www.adaptation.scot/take-action/climate-ready-places](http://www.adaptation.scot/take-action/climate-ready-places)

##### ***Met Office's Local Authority Climate Explorer***

The Met Office has compiled extensive research and data to provide insight into climate risks the UK is projected to face. A key feature allows users to view projected climate change and adverse weather impacts at a local level. It also offers accessible resources to help users understand climate change and view longer-term projections.

[www.climatedataportal.metoffice.gov.uk/pages/lacs-assess-your-risk](http://www.climatedataportal.metoffice.gov.uk/pages/lacs-assess-your-risk)

### 3. COMMUNITY RESILIENCE

#### COLLECTING KNOWLEDGE

To build community resilience third sector organisations need to not only benchmark and evaluate success and challenges of climate adaptation but also share it with the wider community. Building networks between third sector organisations will mean that the community is able to rely and support one another.

##### ***Benchmarking***

To get the most out of climate adaptions, to both justify them for funders and to access their success it is best to create information gathering steps that are followed at each stage of the implementation.

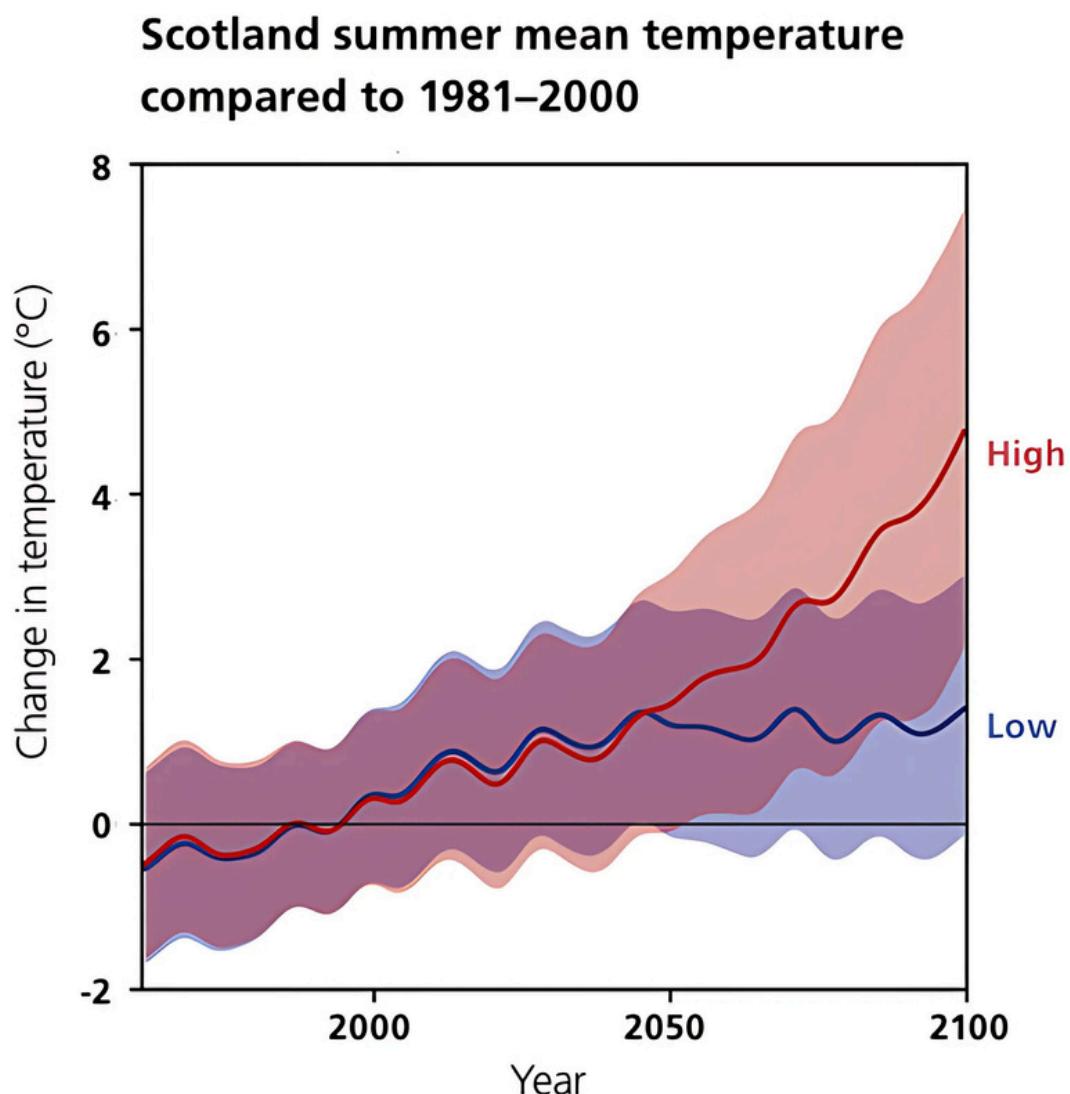
- Create a baseline of the organisation climate needs. What are the climate risks to the organisation, staff, and users?
- Define what a successful adaptation would look like to tackle these risk
- Track implementation of adaptations. How long it took, the cost, disruption it may caused, and what funding or resources were used?
- Measure the outcomes, what impact did it have, did it meet the definition of success and if not why?
- Create a shared document between staff so that people know where they can access it and are able to use it for future fundraising and adaptation planning.

## 4. Heat Risks

### PROJECTIONS

The 2018 UK Climate Projections produced by the Met Office Hadley Centre, provide up-to-date information about the potential future climate in Scotland. The projections provide a range of potential climate outcomes, based on a set of four pathways for greenhouse gas emissions: a low emissions scenario, two medium emissions scenarios, and a high emissions scenario which represents the high impact of a 4°C raise in global temperatures.

**Even a low emission scenario**, where we mitigate climate change quickly and in line with the Paris Agreements, **is still set to have consistently hotter summers.**



From *Climate Projections for Scotland* by Adaptation Scotland<sup>1</sup>

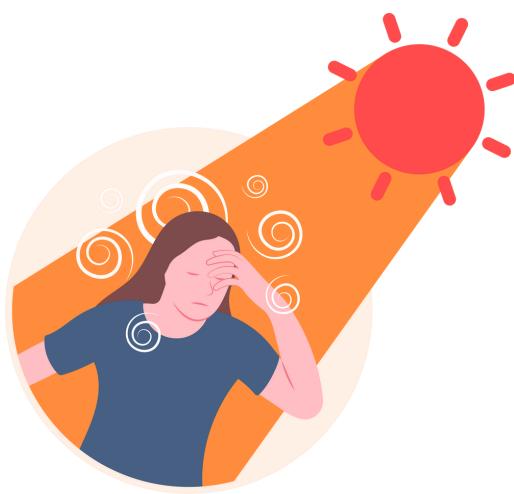
<sup>1</sup>[adaptation.scot/app/uploads/2025/06/2025-climate-projections-report.pdf](https://adaptation.scot/app/uploads/2025/06/2025-climate-projections-report.pdf)

# 4. HEAT RISKS

## PHYSICAL HEALTH

As heatwaves become more frequent, summer health risks in Scotland are expected to rise. **Research suggests that, without effective climate adaptation, deaths related to extreme heat in Scotland could surpass those from cold weather by 2080.<sup>1</sup>**

Adapting to climate change means being aware and sharing information on the risks climate change will bring.



### **Heat Exhaustion and Heat Stroke**

One of the most common health impacts will be heat exhaustion, which could escalate heatstroke if not addressed quickly.

Knowing the signs and differences is vital. Heat exhaustion can often be managed without emergency medical help if addressed within 30 minutes by cooling down in shade and drinking fluids.

#### **Heat Exhaustion**

Feeling faint or dizzy

Excessive sweating

Clammy skin

Nausea or vomiting

Muscle Cramps

#### **Heatstroke**

Feeling confused

No sweating

Temperature over 40C

Hot, dry skin

Nausea or vomiting

May lose consciousness or experience convulsions/seizures

Recognising it early is key to preventing heatstroke, which **does require urgent medical attention and a call to 999.**

<sup>1</sup><https://www.sciencedirect.com/science/article/pii/S0013935124006352>

# 4. HEAT RISKS

## PHYSICAL HEALTH



### **Dehydration**

Heat can also cause Dehydration, which can strain organs and increase the risk of kidney problems.

### **Heat Rashes**

When the skin sweats excessively, it can cause Heat Rashes and discomfort, particularly in vulnerable populations such as infants or elderly people.

### **Heart Attacks**

Hot weather increases the strain on the heart, leading to higher rates of heart attacks and strokes, especially in older adults and those at risk.



### **High Blood Pressure**

Heat can cause the blood vessels to dilate, raising the risk of low blood pressure, which is a risk for fainting and falls.

**Heart disease is the second highest cause of death in Scotland.**



### **Asthma & Other Respiratory Issues**

High temperatures can exacerbate air pollution levels which can worsen asthma, bronchitis, and other respiratory issues.

### **Hay Fever & Other Allergies**

Higher temperatures can prolong pollen seasons, causing an increase in seasonal allergies.

**Respiratory disease is the third highest cause of death in Scotland with the UK has one of the highest rates of asthma in the world.**

### **Spread of Diseases**

Warmer temperatures can expand the range of disease-carrying insects potentially spreading diseases such as malaria, dengue, with estimates of lyme disease set to increase with tick population almost doubling in a 4°C global temperature scenario.

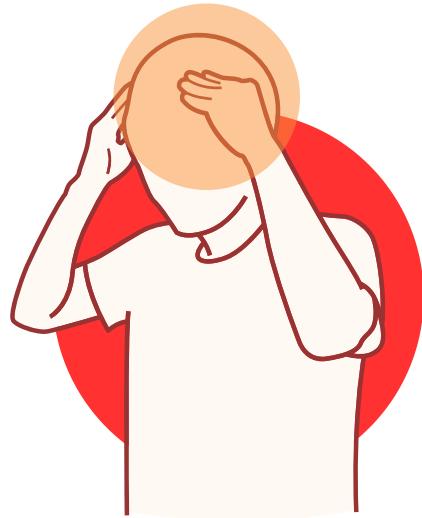
# 4. HEAT RISKS

## MENTAL HEALTH

**One in four people in Scotland experience a mental health problem each year.**

### **Sleep Disruptions**

Extreme heat can cause persistent sleep disruption, leading to increased mental stress and anxiety.



### **Mood Disorders**

Extreme heat has been associated with a rise in incidents of mental health issues, such as anxiety and depression.

### **Decreased Cognitive Function**

High temperatures have been linked to reduced mental performance, impairing concentration, decision-making, and memory, particularly in workplaces or schools.



### **Mental Health Resources**

If you are experiencing heat-related mental health symptoms, reach out to a healthcare professional or mental health service. Support services include:

- **Calm Zone:** A helpline offering support to men of any age who are down or in crisis. Phone: 0800 585 858
- **The Breathing Space:** A free and confidential phoneline service for anyone in Scotland who is experiencing low mood or depression. Phone: 0800 838 587
- **SupportLine:** A helpline that offers confidential emotional support to children, young adults and adults. Phone: 01708 756 200
- **Samaritans:** A free helpline available all day, 365 days a year that provides a safe place for you to talk about whatever's getting to you. Phone: 116 123
- **The Silver Line:** A free confidential helpline that provides information, advice, or friendship to older people. Phone: 0800 470 8090

# 4. HEAT RISKS

## VULNERABLE PEOPLE

Everyone can be affected by a heatwave but **some factors can make people more vulnerable**. People's age, work, housing health conditions and medication all can worsen the risks of heat impacts on health.

Age	Work	Home
<p>Peoples' ability to regulate heat develops as a child and becomes less efficient as you grow older. <b>Older and very young people are at greater risk.</b></p> <p>Especially those over 75 and 0-2 year olds.</p>	<p>Working environment can cause several risks. People who work outside are at greater risk, as are people in work spaces where temperature is not regulated properly.</p> <p>This can be worsened by peoples work rate. <b>The harder someone works the more body heat generated</b></p>	<p>People living alone face increased danger, as they lack assistance if they suffer heatstroke.</p> <p>Top-floor flats get hotter as heat rises and roofs absorb sun directly.</p> <p><b>Homeless people face great risks due to direct exposure to extreme temperatures, lack of access to water, and shelter to cool in.</b></p>
Health Conditions	Medication	
<p><b>Alzheimer's</b> can affect the brain's ability to regulate heat.</p> <p><b>Spinal injuries or neurological diseases</b> can prevent the body from feeling the heat.</p> <p><b>Kidney disease</b> can be worsened by dehydration putting additional strain onto the kidneys.</p> <p><b>Diabetes</b> can put people at greater risk as heat can effect blood level control</p>	<p><b>Dehydration</b> caused by diuretics used for high blood pressure, heart failure or kidney disease.</p> <p><b>Reduced sweating</b> caused by Anticholinergics, used for Parkinson's disease, and Antihistamines, used for allergies.</p> <p><b>Slow bodies response to heat</b> caused by Beta-blockers, used for high blood pressure, heart disease.</p> <p><b>Raised Core Body Temperature</b> caused by ADHD medication and some anti-depressants.</p>	

# 4. HEAT ADAPTATIONS

## INFORMATION

**To protect people from the health risks of extreme heat, adaptations are essential.**

One of the most important is making sure communities are well-informed about these risks and know how to respond, both for themselves and those they support.

Organisations can build resilience by clearly communicating the dangers of heatwaves and explaining what steps are being taken to reduce risks.

Providing training or informational materials (such as advice pamphlets on staying cool) can help the organisations and communities they serve stay safer and better prepared during adverse weather conditions.



### **NHS Advice on Preventing Heat Exhaustion and Heatstroke**

To help prevent heat exhaustion or heatstroke people should:

- **Stay hydrated:** Drink plenty of cold fluids, especially if active.
- **Dress appropriately:** Wear light-coloured, loose-fitting clothing.
- **Limit sun exposure:** Avoid direct sunlight between 11am and 3pm.
- **Reduce alcohol intake:** Excessive alcohol can increase dehydration.
- **Adjust physical activity:** Avoid intense exercise in extreme heat.
- **Keep indoor spaces cool:** Close curtains, shut windows if outside is hotter, and turn off heat-generating electronics and lights.

## 4. HEAT ADAPTATIONS

### INFORMATION

An adaptation can be putting up posters to inform people of this information, having staff provide free water more often, or ensuring services are provided between 11am and 3pm to provide cooling spaces at the riskiest times.

To protect users and staff, organisation can create **local alert systems** for heatwaves to warn about high temperatures.

This provide particular support for vulnerable populations elderly, isolated, those in top-floor flats who will need additional support in a heatwave. Doing this can help provide clarity for services being provided and encouragement for people to seek aid.

This can be done through any social media or messenger to keep up to date, and in combination with other services can be a tool to communicate updates to users and staff.

**Met Office** provides up to date warnings and advice in a heatwave or other extreme weather events.

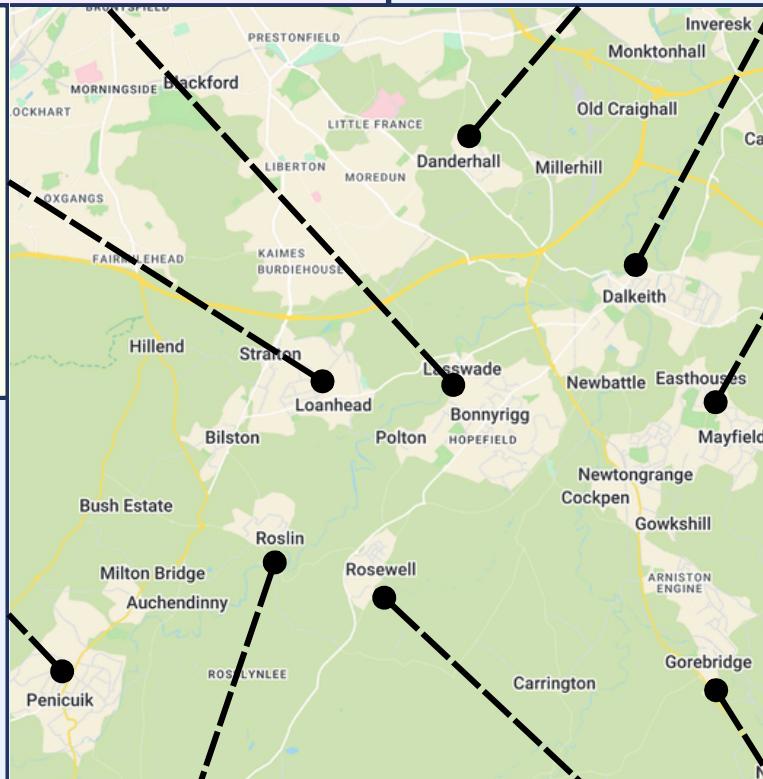
Making sure people know organisations they can go to that provide cooling. For a space to be adapted successfully for extreme heat it will need be at a comfortable temperature. While there is no legal definition, it is recommend to be roughly between 13°C and 30°C.

If staff or volunteers are doing more strenuous work activities, efforts should be made to keep the temperature at the lower end. Paper thermometers, also known as temperature stickers, can be a cheaper method to keep everyone aware of a rooms temperature.

# 4. HEAT ADAPTATIONS

## COOL SPACES

Places advertised as warm spaces can double as cool spaces in a heatwave. The warm spaces below are available on the Midlothian Council Website<sup>1</sup>

<p><b>BONNYRIGG &amp; LASSWADE</b></p> <p><b>Lasswade Library</b> 19 Eskdale Drive, Bonnyrigg, EH19 2LA Normal opening hours. Free hot drinks, soup and bread. Free wifi, toilets, books, games. Staff offer advise on Cost of Living crisis.</p> <p><b>St Leonard's Church</b> Dobbie's Rd, Bonnyrigg EH18 1LR Mondays: 10am - 12pm Free food and drink, people to chat to, toilets, accessible toilet, wheelchair accessible.</p>	<p><b>DANDERHALL</b></p> <p><b>Danderhall Library</b> 59 Edmonstone Road EH22 1QL Normal opening hours. Free hot drinks, soup and bread. Free wifi, toilets, books, games.</p> <p><b>Newton Parish Church Hall</b> Edmonstone Road EH22 1QE Tuesdays 10am - 1.30pm Wednesdays 10am - 12pm Free hot drinks.</p>	<p><b>DALKEITH</b></p> <p><b>St Mary's Church</b> High Street Dalkeith EH22 2NA Tuesdays: 12pm - 3pm Free food and drink, people to chat to, toilets, accessible toilet, parking, child friendly.</p>
<p><b>LOANHEAD</b></p> <p><b>Loanhead Library</b> 59 Edmonstone Road EH22 1QL Normal opening hours. Free hot drinks, soup and bread. Free coat collection. Free wifi, toilets, books, games.</p> <p><b>Loanhead Parish Church</b> 118 The Loan, Loanhead EH20 9AJ Every Friday 10.30am - 12pm Tea, coffee, snacks and chat.</p>		<p><b>MAYFIELD &amp; EASTHOUSES</b></p> <p><b>Mayfield and Easthouses Church</b> 2 Bogwood Road EH22 5DY Cafe Wed: 10am - 12pm £1.50 for unlimited tea and coffee.</p> <p><b>Men's group</b> Thur: 12pm - 2pm Free but donations welcome</p> <p><b>Friendship lunch</b> Last Tuesday of the month: 12pm - 2pm Free but donations welcome.</p>
<p><b>PENICUIK</b></p> <p><b>Food Fact Friends</b> 42 John Street EH26 8AB Mon to Fri: 10am - 3pm Sat: 11am - 1pm Free food, tea and coffee.</p> <p><b>St James the Less</b> Broomhill Road EH26 9EE Tue: 10am - 12pm Free tea, coffee and biscuits. Free wifi, games, TV or other online entertainment.</p> <p><b>Penicuik Storehouse</b> 22 High Street EH26 8HW Mon to Wed: 10am - 4pm Thu to Sat: 10am - 5:30pm Sun: 11am - 4pm Café and community group meeting space.</p> <p><b>Trinity Community Church Hall</b> Kirkhill Road EH26 8HX Thu: 10am - 12pm Free tea, coffee and biscuits.</p>	<p><b>ROSLIN</b></p> <p><b>Roslin Church</b> Penicuik Road EH25 9LH Wed: 10.30am - 12pm Coffee morning and a blether. Free food and drinks.</p> <p><b>Rosslyn Bowling Club</b> 108 Main Street EH25 9LT Wed: 2.30pm - 4:30pm Coffee, chat and games. Free food and drinks.</p>	<p><b>ROSEWELL</b></p> <p><b>Rosewell Development Trust</b> The Steading, Carnethie Street EH24 9AA Tuesday and Thursday. £3.50 for a two course meal To book, contact Rosewell Development Trust on 0131 629 9398</p> <p><b>GOREBRIDGE</b></p> <p><b>Gorebridge Beacon</b> Hunterfield Road, Gorebridge, EH23 4TT <b>Warm Space</b> Mon - Sat: 8am - 5pm Free WiFi <b>Community Cafe</b> Tue to Sat: 9am - 2pm. If you would like a bowl of soup (free) please say 'Robert Sent You' when you order.</p>

<sup>1</sup>[https://www.midlothian.gov.uk/info/200301/cost\\_of\\_living/645/support\\_coping\\_with\\_rising\\_living\\_costs/5](https://www.midlothian.gov.uk/info/200301/cost_of_living/645/support_coping_with_rising_living_costs/5)

# 4. HEAT ADAPTATIONS

## STRUCTURAL

### Local Heat and Energy Efficiency Strategy

The Local Heat and Energy Efficiency Strategy (LHEES) 2023 outlines the actions Midlothian Council must take and support to upgrade buildings and local infrastructure by 2045. This work is part of meeting Scottish Government targets and local priorities on heating in buildings.

This strategy can act as a foundation for the Third Sector in Midlothian to design and deliver climate adaptations. It also provides evidence that can be used to support funding applications for these adaptations.

It recommends:

- **Greenspaces**, collaborating between councils and the third sector to promote tree planting and other adaptations to create shaded spaces.
- **Retrofit buildings** with cooling and energy upgrades, to facilitate ventilation
- **Installation of heat pumps** to build climate resilience and reduce energy cost inefficiency

#### **Greenspaces**

Greenspaces or urban greening can be a low cost method to help adapt to hot weather. Trees and greenery provide natural shade and cooling, as well as creating accessible public spaces. Third sector can support this by:



- **Open up greenspaces** during a heatwave or promote their availability to vulnerable users if already accessible.
- **Advocate for fair access to greenspaces**, especially in lower-income areas. Research shows trees and parks are often concentrated in wealthier communities.
- **Deliver outdoor workshops or programs** in greenspaces to help people feel comfortable with them, while also sharing information on climate literacy and staying safe in a heatwave.

# 4. HEAT ADAPTATIONS

## GREEN WALLS AND ROOFS

### **Using Plants to Cool Buildings**

Installing plant on walls and roofs can absorb heat and cool the air. These *green roofs* and *green walls* are sustainable, cost-effective adaptations. Covering at least 50% of a major wall with dense, leafy plants helps **reduce its surface temperatures by up to 10–15°C**.



Plants can be added to walls roofs, or as temporary fixtures. What is important is **where they are placed** and **which plants are used**.

- **Focus on sun exposed, heat-absorbing areas.** Strategic placement is more effective than full coverage. Even 50% coverage can have benefits.
- **Denser vegetation** (more leaves, thicker layers) provides better cooling
- Good options include **evergreen climbers, ferns, and shade plants**
- **Ground-rooted climbers** can grow without irrigation, but other types of green walls need careful planning for watering and maintenance

Green walls and roofs can increase fire risk if not installed correctly.

- **Fire breaks:** Leave 20–50mm non-vegetated strips to prevent fire spread.
- **Fire-resistant plants:** Choose plants with high moisture and low resin, avoid dry grass or moss
- **Regular maintenance:** Keep plants healthy and watered, removing dead and dry vegetation
- **Consult insurers:** Inform your insurer to understand impact on premiums.

# 4. HEAT ADAPTATIONS

## GREEN WALLS AND ROOFS

### Benefits of Green Walls and Roofs

#### Improved Air Quality

Plants trap dust and pollutants and can absorb CO<sub>2</sub>, making the air cleaner and healthier—especially important during hot, stagnant weather.

#### Stormwater Management

Green roofs absorb rainwater, helping prevent flooding that can follow intense summer storms common in hot climates.

#### Reduced Urban Heat Island Effect

Green roofs and walls absorb less heat than concrete or asphalt surfaces, helping cool down cities overall.

#### Cooling Effect

Plants provide natural insulation and shade, reducing indoor temperatures by up to several degrees. Through evapotranspiration, plants release moisture, which cools the surrounding air.

#### Energy Savings

Lower indoor temperatures reduce the need for air conditioning, leading to lower energy bills and less strain on power grids during heatwaves.



# 4. HEAT ADAPTATIONS

## VENTILATION

During a heatwave, keeping rooms ventilated and cool reduces risks for staff and users. Comfortable temperatures are generally between 13°C and 30°C, though this can vary depending on individual comfort and activity levels. Ventilation can be achieved through **passive cooling** (natural airflow without machines) or **active cooling** (using powered equipment).

### Passive Cooling

Passive Cooling uses simple, low- or no-energy methods to reduce indoor heat. Being aware of these techniques helps manage rising temperatures more effectively.

- **Close curtains/blinds** through the day to block sunlight and reduce heat.
- **Shut doors** to empty or sun-heated rooms to stop warm air spreading.
- **Open windows** to create airflow, letting cool air in and hot air out. This is often more effective at night and called **Night Purging**. Before doing it ensure that:
  - Outside temperature is below 18°C
  - Humidity is under 70% to prevent damp or mold
  - The building is secure (use window restrictors, trickle vents, or upper-floor windows)

These simple methods are effective with no cost or energy use.

Passive vents can maintain airflow without energy use. Options include door grilles, trickle vents, or roof vents to help cool spaces naturally.

### Low-Energy Cooling

Low-energy cooling adaptions can be considered too, saving on long term energy costs.

- **Fans** (extraction, pedestal, or ceiling) move air to reduce heat without creating cold air, making them energy-efficient and low-cost.
- **Evaporative coolers** use water evaporation to cool air and are more energy-efficient than air conditioning. However, they work best in dry climates and are not as effective in humid ones, such as Scotland.

# 4. HEAT ADAPTATIONS

## VENTILATION

### Active Cooling

#### Air Conditioners

Air conditioners can be an effective adaptation to tackle extreme heat, create cool air when needed. They are widely available, with services ready to install them. There are many types, so when choosing a unit it is important to consider the **type that best suits your space, as well as the cost, energy usage, and planning requirements.**



#### **Portable Air Conditioners**

£300–£700 (no install cost)

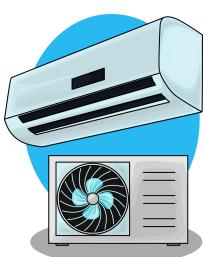
- ⊕ Movable, Low Upfront Costs, easy to store
- ⊖ Only suitable for single small room, can require window access for exhaust hose



#### **Window Air Conditioners**

£500–£900 (with installation)

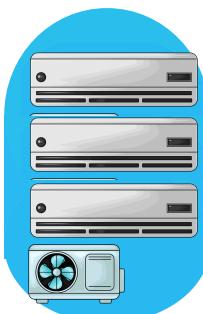
- ⊕ All in one, Less space taken for smaller rooms.
- ⊖ Blocks windows, noisy, not suitable for most Scottish and traditional windows, may require permission



#### **Split-System Air Conditioners**

£1,200–£2,500

- ⊕ Energy efficient, quieter operation, can provide cool and hot air, good for community buildings and long term use
- ⊖ High upfront cost, professional installation needed, may need permission in conservation area or if facing public view



#### **Multi-Split Systems**

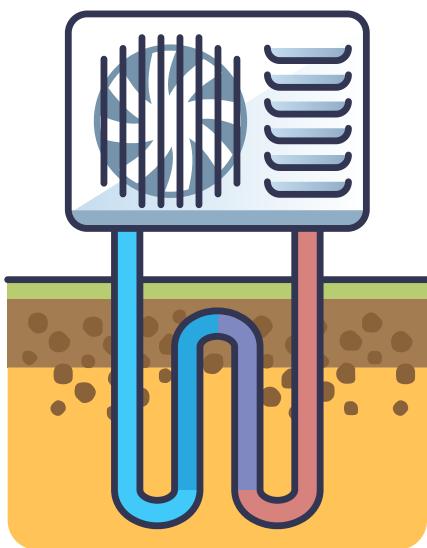
£2,500–£5,000+

- ⊕ Multiple room cool and heat, good for large offices and community spaces, long term solution
- ⊖ Expensive and complex installation, may require drilling, greater external impact and likely needs permission

# 4. HEAT ADAPTATIONS

## VENTILATION

### Active Cooling



#### Heat Pump

Heat Pumps transfer heat from one area to another and can both cool in summer and heat in winter, making them more versatile than air conditioning. There are three types, based on where the heat or cooling is drawn from:

- **Air**: Extracts heat from the outside air.
- **Ground**: Draws stable heat from the ground via buried pipes.
- **Water**: Uses a nearby body of water, like a pond or well, as a heat source.

While they require electricity to run, heat pumps are highly efficient because they move existing heat rather than generating it anew through combustion.

#### **Benefits:**

- Dual-function (heating and cooling) makes them more efficient year-round
- Lower carbon emissions than gas boilers or older electric heating.
- Eligible for Scottish Grants and recommended by the Scottish Government
- Reduced long term cost due to no reliance on fossil fuels.
- Often fall under permitted development rights

#### **Challenges:**

- High upfront costs (£6,000–£12,000)
- Performance depends on insulation and building design.
- Cooling mode often underused in Scotland, needs awareness and behaviour change.
- Increased electricity usage
- Requires outdoor space for installation
- May require full planning permission in some cases

You can learn more at [www.homeenergyscotland.org/heat-pumps](http://www.homeenergyscotland.org/heat-pumps)

# 4. HEAT ADAPTATIONS

## PLANNING PERMISSIONS

In Scotland, planning permission for heat pumps and air conditioning units is generally relaxed under permitted development rights. However, some installations may require full planning permission:

- **Listed buildings:** Any equipment on a listed property always needs planning permission.
- **Noise limits:** Units must not exceed 42 dB when measured 1m from a neighbouring habitable room.
- **Placement rules:** Units should be minimally visible from public spaces and roads, not placed on pitched roofs, at least 1m from boundaries, and no taller than 3m.
- **Multiple units:** Only one heat pump or AC unit is allowed under permitted development. Combining multiple units or adding solar PV/wind often needs permission.
- **Ground or water source heat pumps:** Check with your local authority. A limited excavation amount is allowed but water abstraction rights or environmental concerns means it is best to check first.



### Making Installation Easier

- **Submit a pre-application enquiry:** Many Scottish Councils let you check if permission is needed. [🔗 Midlothian Council Planning Advice](#)
- **Use MCS<sup>1</sup>-certified installers:** This can support compliance with building standards and simplify planning.
- **Check for a Building Warrant:** Even if planning permission isn't required, a warrant may be needed.
- **Get support from Planning Aid Scotland:** Can provide support on navigating permissions. [🔗 Planning Aid Scotland](#)

<sup>1</sup>MCS=Microgeneration Certification Scheme

# 4. HEAT ADAPTATIONS

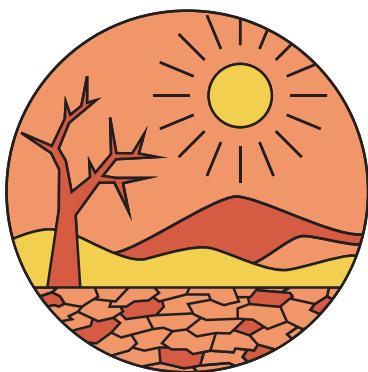
## BEHAVIOURAL

During a heatwave there will be a need for behavioural adaptations to reduce risk caused by the extreme weather.

### Water Scarcity

Higher temperatures increase the risk of water scarcity and drought. While Scotland is perceived as having heavy rainfall, changing climate patterns are making weather more erratic leading to periods of water scarcity. The Scottish Environment Protection Agency (SEPA) provides up to date information on when water scarcity is a concern.

[beta.sepa.scot/water-scarcity](http://beta.sepa.scot/water-scarcity)



#### **When there is water scarcity people should:**

- Reduce water use by showers, laundry, cleaning etc.
- Collect rainwater with buckets or by installing water butts
- Share water with neighbours and check on vulnerable people at risk of dehydration

### Wildfires

Although wildfires may seem unusual in Scotland, rising temperatures are increasing their frequency. Third sector organisations can reduce wildfire risks through behavioural adaptations, including:



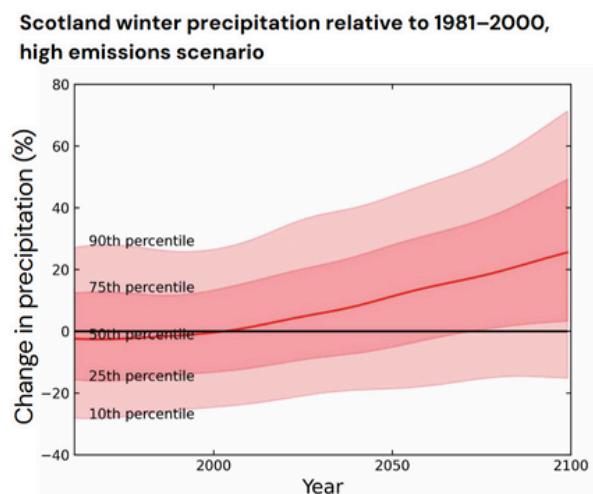
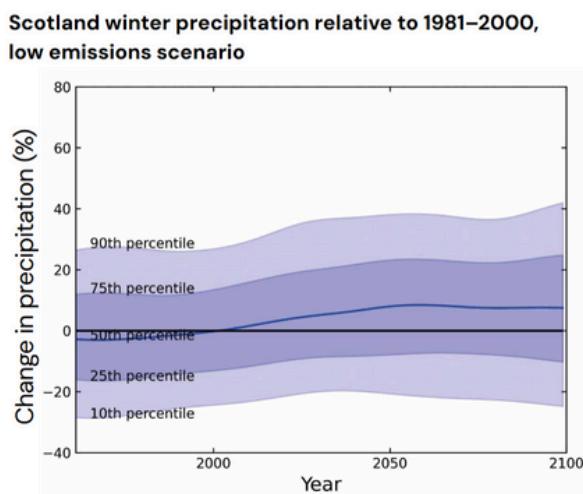
- Add a wildfire response plan into existing fire emergency procedures and run drills that include wildfire safety
- Restrict high-risk outdoor activities during hot seasons, such as BBQs and campfires.
- Store flammable materials away from main buildings and vegetation, and keep bins/skips covered and free from dry waste

Wildfires can also disrupt travel. Ensure clear communication systems and inform staff and service users when travel is unsafe

# 5. STORM RISKS

## PROJECTIONS

The 2018 UK Climate Projections from the Met Office Hadley Centre shows that winters are likely to become wetter, with heavier rainfall and more frequent storms expected under both high and low emission scenarios.



From *Climate Projections for Scotland* by Adaptation Scotland<sup>1</sup>

Data from the Met Office (2025) reiterates these findings and show that storms across the UK are projected to worsen over the next 100 years. Their research have found that:

- Most climate projections suggest a slight increase in the number and intensity of winter windstorms over the UK
- Warming North Atlantic waters could push more ex-tropical storms across the UK during autumn, though natural variability remains a significant factor
- Maximum wind speeds, Category 4 and 5 storms, and precipitation rates for tropical cyclones are all likely to rise

Scotland is already seeing these impacts. In January 2025, Storm Eowyn was the strongest in a decade, breaking an 80-year wind record in Ireland. It caused over 500 rail incidents and left 117,000 Scottish homes without power. PERILS, an independent company who collects and publishes data on industry-wide catastrophes effects on insurance, estimated it cost insurers over £580 million in insurance claims across Europe. In Scotland, councils faced costs of around £5 million, with Midlothian Council spending £50,000 on cleanup.

<sup>1</sup> [adaptation.scot/app/uploads/2025/06/2025-climate-projections-report.pdf](https://adaptation.scot/app/uploads/2025/06/2025-climate-projections-report.pdf)

## 5. STORM RISKS

### KEY HEALTH AND SAFETY RISKS

Storms can cause a number of risk to users, staff, and third sector organisations. Identifying these risks can help organisations plan adaptations to become more resilient to storm impacts

**Injuries** increase during storms including those caused by flying debris.

High winds can make streets particularly dangerous.

Common injuries: cuts, bruises, head trauma, and fractures.

**Access to healthcare** can also be disrupted due to blocked roads

**Power Outages** often occur due to storms. This can result in loss of heating causing an increase risk of hypothermia. Electrical equipment can also fail. This can lead to food insecurity as fridge and freezers fail, and greater danger to people with long term health issues as medical equipment loss power.

**Water Ingress** can occur due to heavy rain or storm surge, which can lead to flooding. This can cause water damage to property, as well as increase mould which can exacerbate respiratory issues such as asthma. Sewage water can spread diseases, however even clean water can carry illnesses.

**Wind Damage** is common in a storm with roof tiles being shaken loose or windows being smashed. Unsecured equipment can be damaged along with furniture and even records.

Many organisations are at greater risk if operating out of older or shared buildings that may not be storm-resilient.

**Disruption of Service** can be caused by storms. Loss of power, heating, or staff unable to travel safely to work may stop outreach services.

Drop-ins, events or support groups people rely on may be cancelled leaving users without support. Administrative and fundraising can also be disrupted, along with other events that may increase revenue

# 5. STORM RISKS

## VULNERABLE PEOPLE

Everyone can be affected by a storm, but some factors can make people more vulnerable.

Age	Disability	Families
<p>Older people face higher risks due to <b>reduced mobility, difficulty accessing updates</b> if they rely on landlines or don't use digital media, and <b>increased likelihood of injury</b> or hyperthermia.</p>	<p>People with disabilities may depend on <b>medical equipment that can fail</b> during power outages. Sensory or cognitive disabilities can make alerts harder to follow, and <b>access to care</b> workers may be delayed by transport or weather.</p>	<p>Families can experience stress and anxiety during storms, both for parents and children. Collecting or evacuating children can be difficult, and school closures add <b>childcare and food security pressures</b>. Store closures can worsen this, as can power outages by leading to loss of refrigeration which can spoil baby food and formula.</p>

Home	Isolation
<p>Housing and income affect resilience. <b>Low-income households, renters, or those in temporary accommodation are more vulnerable.</b></p> <p>Poor insulation, damp, and limited roof resilience increase storm damage risks.</p> <p>Renters depend on landlords for insurance decisions and low-income households may be unable to afford insurance or emergency supplies, putting both groups at greater risk of homelessness due to storm related damages.</p>	<p>Isolation greatly increases risk. People in rural or remote areas, those living alone, or non-English speakers may be cut off from support.</p> <p><b>Road closures</b> can prevent access to food, medicine, or emergency aid. In rural areas, <b>poor mobile or broadband coverage</b> can limit access to warnings and information.</p> <p><b>Language barriers</b> may prevent understanding of emergency information or access to shelter.</p>

# 5. STORM ADAPTATIONS

## INFORMATION

Ensuring that everyone in the third sector are aware of best practices can help to mitigate risks in a storm. This includes creating networks to reach vulnerable people, training staff, and making easy guidance available. everyone knows what to do during a storm.

### What to do in a Storm



#### At home or in a Building

- Stay inside until the storm has passed.
- Shut all windows and doors; keep away from them
- Do not use a landline unless it's an emergency
- If you must leave, use a sheltered exit and avoid boundary walls or fences that may fall
- If away from home, don't travel, seek shelter in a building or vehicle

#### When outside

- Avoid metal objects; they conduct and attract lightning
- Do not shelter under a tree, cliff or cave
- Get out of water immediately if swimming or on a boat.
- If traveling inform someone of your plans



If no shelter is available during a lightning storm, squat low with hands on knees and head tucked, touching as little ground as possible; never lie down.



#### Driving in a storm

- Don't drive unless your journey is necessary, instead delay your journey or change plans.
- If already driving, park in a safe location away from trees or power lines.
- Drive slowly and stick to the main roads.
- Take extra care when in highly exposed areas and around high-sided vehicles.

**Keep up to date on storms through:**

**The Met Office:** [weather.metoffice.gov.uk/warnings-and-advice/uk-warnings](http://weather.metoffice.gov.uk/warnings-and-advice/uk-warnings)

**Midlothian Council:** [midlothian.gov.uk/info/396/emergencies\\_safety\\_and\\_crime/839/building\\_closures\\_and\\_service\\_disruptions](http://midlothian.gov.uk/info/396/emergencies_safety_and_crime/839/building_closures_and_service_disruptions)

# 5. STORM ADAPTATIONS

## INSURANCE

### Insurance

With storms in Scotland expected to increase, it's important to review your organisation's insurance.

Only authorised providers can give advice on insurance, so make sure you consult trusted sources. The Scottish Council for Voluntary Organisations (SCVO) offers guidance and a list of recommended advisers.

[scvo.scot/support/running-your-organisation/finance-business-management/insurance](https://scvo.scot/support/running-your-organisation/finance-business-management/insurance)

Before making changes, check what cover your organisation already has and what may be needed. For storm risks, three key types of insurance can help:

- **Business Interruption Insurance:** Covers loss of income if premises become unusable due to adverse weather, particular useful if organisation provides a placed base service
- **Property/Material Damage Insurance:** Essential for buildings and contents at risk of storm damage.
- **Disaster Recovery and Continuity Planning:** Can help rebuild if severely impacted by adverse weather.



#### Tips for storm insurance:

- Confirm your current policy covers storm or weather-related damage under building and contents insurance
- Ensure sums insured match real rebuilding or repair costs (including professional fees and VAT)
- Document all structural improvements (e.g. storm-resistant upgrades), especially if they may reduce premiums
- Keep an up-to-date inventory of contents with replacement values to speed up claims processing
- Have an emergency response and continuity plan, as insurers value risk mitigation and it may help with claims

# 5. STORM ADAPTATIONS

## STORM-PROOFING BUILDINGS

### Storm-Proofing Buildings: Simple Adaptations

There are minor structural adaptations that can be made to ensure the security of buildings in a storm.

#### Outdoors

- Check and repair loose or cracked roof tiles, aerials, and satellite dishes that could easily fly off in strong winds.
- Clear moss and leaves from gutters to prevent overflow.
- Secure fencing and gate, ensuring they are sturdy and in good condition.
- Park vehicles in a garage or away from buildings, trees, walls, and fences.
- Remove loose bricks from around the chimney stack and inside the home, and move furniture from the area directly below. Avoid it until the storm has passed.
- Secure loose objects (e.g. trampolines) and fix or remove hazardous branches that could be blown away and cause damage. Speak with neighbours if risks extend beyond the property.

#### Indoors

- Prepare an emergency kit with a torch, radio, matches, and emergency contact numbers.
- Find out who supplies the organisation's energy and gas and have easy access to laminated copies of their contact info.
- Unplug non-essential electrical appliances to avoid potential power surge damage.
- Close and secure all windows and exterior doors (including garage doors), ensuring they are watertight. Use storm shutters if available.
- Make sure loft access is secure and, if possible, bolt down doors.

These low-cost adaptations can significantly reduce storm damage.

**Creating a checklist** like this helps ensure your organisation is prepared for a storm, even if the services closed due to the extreme weather.

# 5. STORM ADAPTATIONS

## STORM-PROOFING BUILDINGS

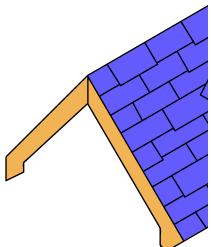
### Storm-Proofing Buildings: Larger Adaptations

More expensive and larger adaptations can further protect an organisation's premises. However, it's important to weigh the benefits against potential drawbacks. These projects may require planning permission and additional funding before they can go ahead.

#### Roof Reinforcement (Straps, Battening, Stronger Materials)

£1,500–£5,000

- + Reduces risk of roof tiles being blown off, strengthens structural integrity, protects against water ingress.
- High upfront cost, may require scaffold and professional installation, planning permission needed for major alterations in listed buildings or conservation areas.



#### Storm-Resistant Windows and Doors

£500–£2,000 per window; £1,000–£3,000 per door

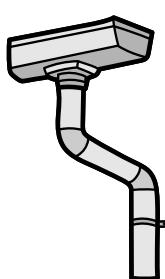
- + Protects from windborne debris, improves insulation, enhances security.
- Expensive to upgrade whole property, may need approval in conservation areas, potential disruption during installation.



#### Secured Gutters, Drains

£200–£1,000

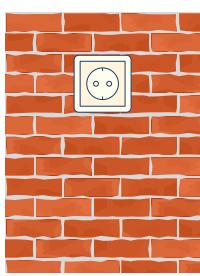
- + Prevents water overflow and roof damage, reduces debris impact, lower-cost preventive measure
- Needs regular maintenance, difficult access in some buildings, may not be enough during extreme events.



#### Surge Protection and Raised Electrical Equipment

£500–£2,000

- + Protects systems from power surges during storms, enhances electrical safety, reduces replacement costs.
- Requires an electrician, may be overlooked until after an event, internal-only protection.



# 5. STORM ADAPTATIONS

## PLANNING PERMISSIONS

In Scotland, planning permissions for storm adaptations fall into two categories: those covered by **Permitted Development Rights** and those that **require planning permission**.

Smaller adaptations usually do not need permission, but it's always best to check, especially for listed buildings. Local planning authorities can also restrict certain works or apply additional regulations.

### **Usually allowed under Permitted Development**

- Roof repairs or tile replacement (if like-for-like and no structural change)
- Securing gutters, downpipes and chimneys
- Tree trimming or branch/tree removal on your own land
- Internal reinforcement or insulation
- Adding surge protectors or raising electrical points

### **May require Planning Permission:**

- Replacing a roof with different materials or a new shape
- Installing storm shutters or external cladding
- Adding permanent canopies, awnings, or barriers
- Reinforcing garage doors or outbuildings



### **Tools to Make the Process Easier**

- **Submit a pre-application enquiry:** Many Scottish Councils let you check if permission is needed.  [Midlothian Council Planning Advice](#)
- **Use MCS<sup>1</sup>-certified installers:** This can support compliance with building standards and simplify planning.
- **Check for a Building Warrant:** Even if planning permission isn't required, a warrant may be needed.
- **Get support from Planning Aid Scotland:** Can provide support on navigating permissions.  [Planning Aid Scotland](#)

<sup>1</sup>MCS=Microgeneration Certification Scheme

# 5. STORM ADAPTATIONS

## EMERGENCY PLAN

An important adaptation for adverse weather, especially storms, is to have a clear emergency plan. Having a clear understanding of what to do reduces risks for staff, volunteers, and service users. A good plan should include:

### Communication

- Share emergency contacts with all staff and volunteers.
- Set up a system to check on vulnerable service users.
- Use a central group chat or network for quick updates.



### Remote work

- Create a clear *bad-weather* policy for when staff should work remotely rather than risking traveling
- Use cloud storage and online communication tools to keep services running remotely

### Emergency Kit

- Store a clearly marked emergency kit with supplies in an accessible place.

Review and update the plan with each storm to ensure that it includes what works best for your organisation, and provide refresher training for staff and volunteers if needed.

### What to include in an Emergency Kit:

- First aid supplies
- Battery-powered or wind-up radio
- Flashlight
- Extra batteries
- Bottled water
- Non-perishable food
- Blankets
- Warm clothing
- Power banks
- Copies of critical documents (such as insurance etc.)
- Spare keys
- Local authority and emergency contacts
- Basic tools

### After a Storm

Once a storm has passed, follow these safety steps safety.

- Avoid touching fallen electrical or telephone cables.
- Stay clear of walls, buildings, and trees that may have been weakened.
- If safe, check on vulnerable neighbours or family members.
- Report fallen trees to Midlothian Council. [Report a tree](#)
- If a fallen tree or hazard poses an immediate danger to life, call 999.

# 6. FLOOD RISKS PROJECTIONS

Climate change is driving a significant increase in flooding across Scotland. More intense rainfall during autumn and winter is leading to a rise in both river and surface water flooding. Simultaneously, rising sea levels are escalating the threat of coastal flooding.

## The National Picture

In 2024 alone, 870 flood alerts and warnings were issued for Scotland. The figure includes 346 alerts, 521 warnings and 3 severe warnings, averaging out at **17 warnings per week**. This is the second highest number since records began, with only 2020 being higher.

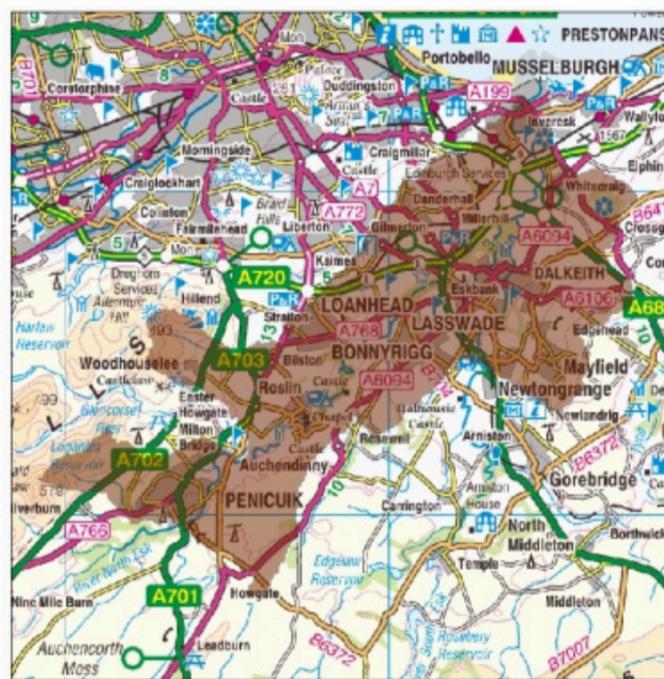
The financial impact is substantial, with flooding costing Scotland an estimated £260 million annually. Looking to the future, the Scottish Government projects that the number of properties at risk will surge from 284,000 to nearly 400,000 by 2080.

## Local Impact in Midlothian

In Midlothian, the risk of flooding is concentrated near rivers, as indicated by data SEPA's flood maps<sup>1</sup>. However, projections show that Midlothia's Potential Venerable Areas (PVAs) will expand as more extreme rainfall causes greater river and surface water flooding.

SEPA has already identified several Midlothian communities<sup>2</sup>, including Lasswade, Penicuik, Dalkeith, and Musselburgh, as PVAs due to flood risk from the River Esk and surface water sources.

It is estimated that within these areas, approximately **320 residential and 320 non-residential properties are at risk, with potential Annual Average Damages reaching £1.8 million.**



From Forth Estuary Local Plan District - Lasswade, Penicuik, Dalkeith and Musselburgh by SEPA

[beta.sepa.scot/flooding/flood-maps](https://beta.sepa.scot/flooding/flood-maps)

<sup>2</sup> [www2.sepa.org.uk/frmstrategies/forth-estuary.html](http://www2.sepa.org.uk/frmstrategies/forth-estuary.html)

# 6. FLOOD RISKS

## KEY HEALTH AND SAFETY RISKS

Floods can cause a number of risks, and disrupt third sector services. Understanding how can help plan what adaptations will work best.

**Injuries** Increase due to flooding, especially from slips, trips, and falls on wet or uneven surfaces. Moving water can be deceptively strong, knocking people over. There is also a risk from hidden hazards under floodwater like sharp debris, open drains, or fallen power lines.



**Just six inches of fast-flowing water can knock an adult off their feet.**

**Just two feet of moving water can float a car, causing loss of control and putting lives at risk**

**Water Ingress** can occur due to heavy rain or storm surge, which can lead to flooding. This can cause water damage to property, as well as increase mould which can exacerbate respiratory issues such as asthma. Sewage water can spread diseases, however even clean water can carry illnesses.

**Structural Damage** can occur due to flooding, particularly community facilities or housing with poor damp-proofing or low door thresholds. Flooding may rot woodwork, corrode electrics, or lead to long-term damp. In some cases, walls or foundations may be undermined by sustained water exposure.

**Disruption of Service** can be caused by storms. Loss of power, heating, or staff unable to travel safely to work may stop outreach services. Drop-ins, events or support groups people rely on may be cancelled leaving users without support. Administrative and fundraising can also be disrupted, along with other events that may increase revenue

# 6. FLOOD RISKS

## VULNERABLE PEOPLE

Everyone can be affected by flooding, but some factors can make people more vulnerable.

Age	Disability	Families
<p>Older people are at greater risk due to <b>reduced mobility</b>, which can hinder their ability to evacuate or tackle water ingress.</p> <p>Wet and damp conditions can <b>exacerbate chronic illnesses</b>, as well as increase the danger of <b>hypothermia</b>.</p>	<p>Individuals with physical disabilities may <b>face evacuation challenges</b>.</p> <p><b>Sensory impairments</b> can hinder receipt of warnings, while <b>cognitive impairments</b> may limit understanding of the danger or safety procedures.</p> <p>A higher <b>reliance on medical equipment</b> can increase vulnerability to power outages.</p>	<p>Families are vulnerable due to the <b>increased stress and anxiety to both parents and children</b>.</p> <p>Evacuation is complicated by the challenge of <b>collecting children from school</b>.</p> <p><b>School closures</b> can also add further strain through the loss of childcare and food security.</p>

Home	Isolation
<p>People living in poverty are disproportionately at risk, as financial constraints often force them into <b>substandard housing that is highly vulnerable to environmental hazards</b>.</p> <p>Low-income households are frequently concentrated in <b>older, poorly maintained rented or temporary accommodations</b>. These often <b>lack adequate insulation, drainage, or flood defences</b>, crucial and expensive adaptations previously deemed unnecessary due to low flood risk.</p> <p>Without affordable flood insurance, recovery is extremely difficult, and the <b>cost of replacing damaged items or relocating</b> can be devastating.</p>	<p>Residents in <b>properties near rivers, burns, and low-lying areas</b> in Midlothian, such as parts of Dalkeith, Lasswade, and Bonnyrigg, face a higher immediate risk of experiencing flooding, especially during periods of heavy rainfall.</p> <p>These areas may suffer from both river flooding and surface water runoff, especially where <b>drainage is inadequate or poorly maintained</b>.</p> <p>The proximity to water means <b>warnings can be short</b>, leaving little time to evacuate. Repeated flooding can also lead to <b>property devaluation</b> and difficulty securing alternative housing.</p>

# 6. FLOOD ADAPTATIONS

## INFORMATION

For the third sector, adapting to flood risk involves more than just sharing resources with users, but also building understanding of responsibilities and insurance to mitigate impacts. The Scottish Environment Protection Agency (SEPA) provides essential tools to help organisations understand risks, make plans, and build resilience by making information readily available to staff and users.

### Flood maps

SEPA's interactive flood maps can show the likelihood of coastal, river, and surface water flooding. They also include future projections for vulnerable areas, helping organisations plan and justify necessary adaptations.

[www.beta.sepa.scot/flooding/flood-maps](http://www.beta.sepa.scot/flooding/flood-maps)

### Floodline

SEPA's Floodline is a free 24/7 service via text, phone, or email that provides live flooding information and advice on how to prepare for or cope with the impacts of flooding. By entering a postcode, users can sign up for one of two warning services:

- **Flood Warning:** If a property is within an area covered by a SEPA flood monitoring system, the user will be able to sign up to receive a targeted Flood Warning message for the local area.
- **Flood Alert:** If a property is not within a Warning Area, the user can sign up to receive a more general Flood Alert message for the wider geographical area, usually representing Local Authority boundaries.

The service also provides live updates during flooding events.

[myfloodline.sepa.scot/register](http://myfloodline.sepa.scot/register)

### Responsibilities

SEPA clearly outlines the flood responsibilities of individuals, organisations, and local authorities. This information helps third sector organisations understand their own adaptation duties and hold local authorities and other governing bodies accountable for theirs. A summary of these responsibilities is provided on the next page.

# 6. FLOOD ADAPTATIONS

## RESPONSABILITIES

### Third Sector Organisations

Your organisation is responsible for managing its own flood risk, protective measures, and any resulting damage or disruption. While there are no specific legal duties, the responsibility for risk assessments and protective measures falls solely to you. Always check your lease agreement, as responsibilities differ if you own or rent your property.

### Landlord's responsibilities

Commercial landlords have limited legal duties, which typically include:

- Maintaining the building's structural integrity (roof, foundations, etc.)
- Ensuring gutters, drains, and roofing are in good repair.
- Complying with health and safety laws, which may require action if flooding causes persistent damp, mould, or electrical hazards.
- Building insurance (though specific flood coverage is not required).

### Tenant's responsibilities

As a tenant, you should:

- Report any signs of a leak or flooding to your landlord immediately.
- Carefully checking your lease for clauses on flood repairs and resilience.
- Looking for a *force majeure* clause, which defines landlord exemptions during a natural disaster. *Note: This clause is not automatic; it must be expressly written into the contract to apply.*

### Local Authorities

Local authorities are responsible for producing and implementing Local Flood Risk Management Plans. It is their responsibility to inspect, clear and repair watercourses to reduce flood risk and routinely maintain road gullies on public roads and highways. During severe flooding, local authorities will coordinate with emergency services and provide shelter for people evacuated from their homes

### Scottish Water

Scottish Water is responsible for draining surface water from roofs and paved areas within a property boundary and can help protect properties from flooding caused by overflowing or blocked sewers, including support and clean-up when originating from their assets. Customers affected by internal sewer flooding due to system failure may be eligible for a payment under Scottish Water's Guaranteed Standards Scheme (GSS).

# 6. FLOOD ADAPTATIONS

## INSURANCE

Only authorised providers can give advice on insurance, so make sure you consult trusted sources. The Scottish Council for Voluntary Organisations (SCVO) and SEPA both provide lists of recommended advisors and general guidance on the websites of the following organisations:

### **Scottish Council for Voluntary Organisations (SCVO)**

[scvo.scot/support/running-your-organisation/finance-business-management/insurance](https://scvo.scot/support/running-your-organisation/finance-business-management/insurance)

### **Scottish Environmental Protection Agency (SEPA)**

[beta.sepa.scot/flooding/prepare-for-flooding/flooding-guides/flood-insurance](https://beta.sepa.scot/flooding/prepare-for-flooding/flooding-guides/flood-insurance)

Before making changes, check what cover your organisation already has and what may be needed. For flood risks, three key types of insurance can help:

- **Business Interruption Insurance:** Covers loss of income if premises become unusable due to adverse weather, particular useful if organisation provides a placed base service
- **Property/Material Damage Insurance:** Essential for buildings and contents at risk of storm damage.
- **Disaster Recovery and Continuity Planning:** Can help rebuild if severely impacted by adverse weather.



# 6. FLOOD ADAPTATIONS

## INSURANCE

Flood insurance can vary across the industry. Some insurers may increase premiums or excess if your building is in a known high-risk area (e.g., near River Esk in Midlothian).



### Top Tips for Flood Insurance

- **Check Your Flood Risk:** Use SEPA's flood maps to see if your property is in a high-risk area now or will be in the future. This information can help you decide if you need to relocate or can be used to negotiate long-term fixed insurance rates.
- **Find a Specialist Broker:** Contact an insurance broker who specialises in flood cover. They often have access to insurers who understand and specialise in these specific risks.
- **Shop Around:** Always get multiple quotes. Carefully check what is covered and the amount of the excess you'll have to pay yourself. It can be cheaper to combine different types of insurance into one package.
- **Be Upfront:** Tell insurers about any previous flooding and any steps you've taken to prepare, such as signing up for Floodline warnings, training staff, or having emergency plans. Being prepared can lower your risk and potentially reduce your costs.
- **Adapt Your Property:** Installing flood defences (like barriers or non-return valves) can prevent damage. Some insurers may offer lower premiums if you have these adaptations in place.
- **Get Trusted Advice:** Use reputable sources like SCVO and SEPA to find reliable information and recommended insurers.
- **Avoid Under-Insurance:** This is crucial. If you insure your building for less than its full rebuild cost, any claim you make will be reduced.

**Example:** If your property would cost £100,000 to rebuild but you only insure it for £75,000, you are 25% under-insured. A £25,000 flood claim would then be reduced by 25%, meaning you would only receive £18,750.

# 6. FLOOD ADAPTATIONS

## FLOOD DEFENCES

If your organisation owns a building in a high flood risk area, installing permanent flood defences can significantly reduce potential damage and may even lower your insurance costs.

### Key considerations before getting flood defences:

- Before purchasing any products, ask your insurance provider if installing them will affect your premium. In some low-risk areas, adding defences could unexpectedly increase your costs.
- Some adaptations, especially permanent ones, may require planning permission or a building warrant from your local council. Always check the rules at [mygov.scot](http://mygov.scot) first.

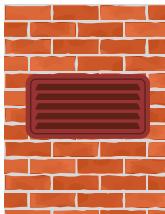
#### Flood Barriers & Door Guards



£500–£2,000 per door

- + Reusable protection for doorways; suitable for homes and small buildings
- Must be fitted in advance. Requires storage. Permanent options may need permission in listed/conservation areas.

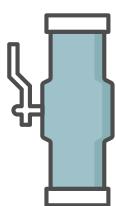
#### Air Brick Covers



£50–£200 each

- + Easy. Cost-effective blocks for low-level ventilation bricks.
- Must be fitted in advance. May reduce airflow. Not sufficient as a stand-alone measure.

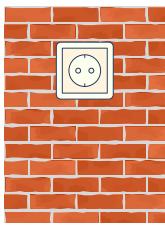
#### Non-Return Valves (Sewage and Drain Pipes)



£50–£300 per valve

- + Prevents dangerous backflow of sewage and flood water. Easy to maintain and relatively cheap.
- May require groundworks. Needs regular checks. Installation can be complex in older drainage systems.

#### Raised Electrical Systems



£500–£2,500

- + Protects systems from water damage. Meets safety & insurance rules. Good long-term protection.
- Requires a professional electrician. Can be costly in larger properties. Often overlooked.

# 6. FLOOD ADAPTATIONS

## PLANNING PERMISSIONS

In Scotland, planning permissions for storm adaptations fall into two categories: those covered by **Permitted Development Rights** and those that **require planning permission**. Smaller adaptations usually do not need permission, but it's always best to check, especially for listed buildings or location-specific regulations.

### **Usually allowed under Permitted Development**

- Air brick covers and non-return valves on drains
- Flood barriers and door guards (removable types)
- Raising electrical sockets
- Internal waterproofing or wall sealants
- Replacing existing features with flood-resistant alternatives

### **May require Planning Permission**

- Permanent flood walls/embankments where it alters the land or drainage
- Ponds, swales, or detention basins if they change land or natural features
- Re-landscaping greenspaces if it affects drainage or visual appearance
- Installing new external doors, shutters, or hard landscaping if they change a building's appearance or surface area.
- Drainage or piping works crossing land boundaries, as it may require wayleaves or consents.



### **Tools to Make the Process Easier**

- **Submit a pre-application enquiry:** Many Scottish Councils let you check if permission is needed.  [Midlothian Council Planning Advice](#)
- **Use MCS<sup>1</sup>-certified installers:** This can support compliance with building standards and simplify planning.
- **Check for a Building Warrant:** Even if planning permission isn't required, a warrant may be needed.
- **Get support from Planning Aid Scotland:** Can provide support on navigating permissions.  [Planning Aid Scotland](#)

<sup>1</sup>MCS=Microgeneration Certification Scheme

# 6. FLOOD ADAPTATIONS

## GREENSPACES

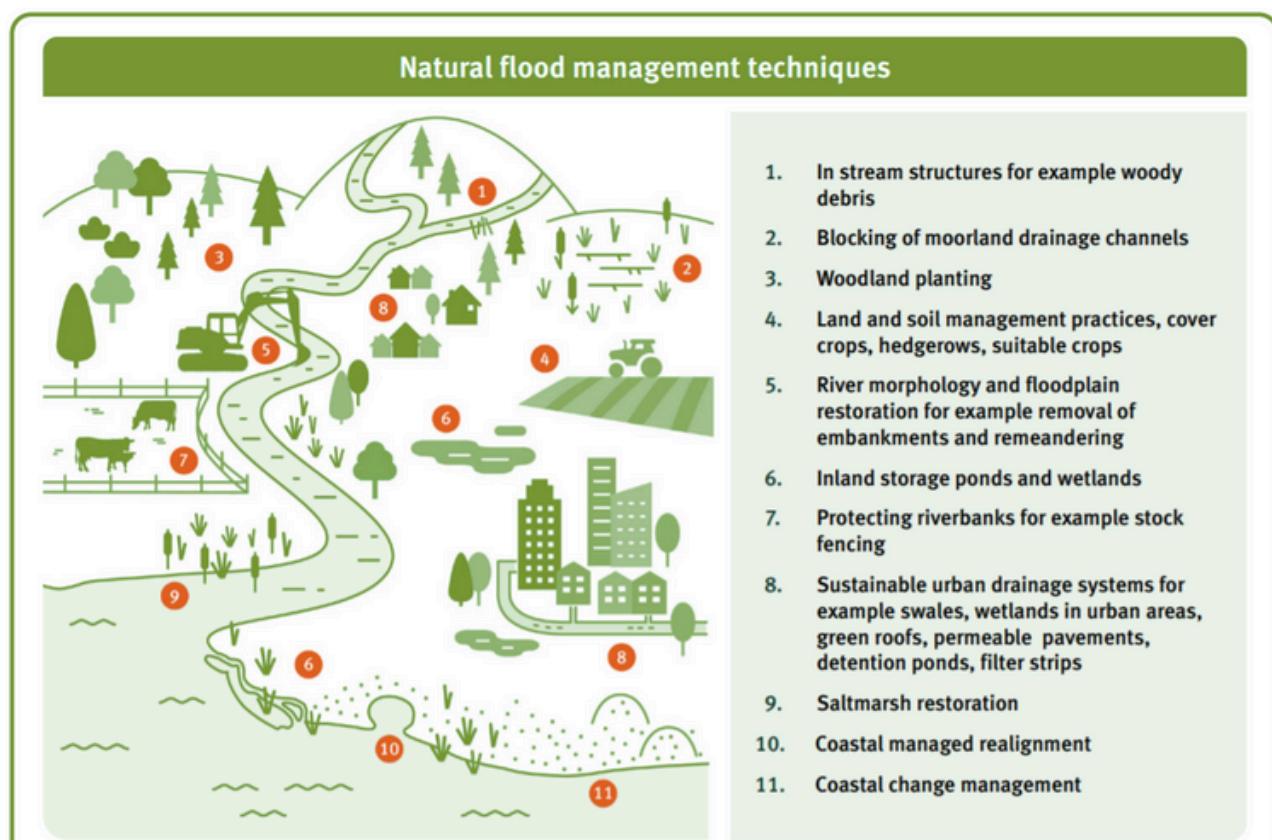
Green Spaces can act as natural flood defences to reduce flooding risk. They use natural landscape features and planting to manage water, acting as a sustainable and effective flood defence. These nature-based solutions help to build climate resilience by absorbing rainfall, slowing down surface water runoff, and redirecting floodwaters away from vulnerable areas.

Organisations can incorporate a variety of ideas, such as:

- **Creating rain gardens** to capture and filter runoff.
- **Installing permeable paving** that allows water to soak into the ground.
- **Planting trees and restoring wetlands** to increase water absorption.
- **Building bioswales** (shallow, planted channels) to direct water safely.

Sites like The Flood Hub can provide guidance and inspiration on how third sector organisations can incorporate greenspaces and natural flood defences to build climate resilience. Grants and funding also exist that can help the third sector develop these adaptations

[thefloodhub.co.uk](http://thefloodhub.co.uk)



From [National Flood and Coastal Erosion Risk Management Strategy for England](http://www.gov.uk/government/publications/national-flood-and-coastal-erosion-risk-management-strategy-for-england--2)<sup>1</sup> by Environment Agency<sup>1</sup>

<sup>1</sup> [www.gov.uk/government/publications/national-flood-and-coastal-erosion-risk-management-strategy-for-england--2](http://www.gov.uk/government/publications/national-flood-and-coastal-erosion-risk-management-strategy-for-england--2)

# 6. FLOOD ADAPTATIONS

## EMERGENCY PLAN

As with storms, having an emergency plan is crucial to mitigate the impacts of flooding. Pay special attention to keeping your emergency kit waterproof and planning for the possibility of being cut off.

When preparing your kit, consider the needs of everyone in and around your organisation, including children, babies, older adults, individuals with disabilities, and pets. Remember to include items like medications, toys, and nappies.

For more information and advice on what to do in a flood and how to prepare you can visit The Scottish Flood Forum website.

[www.scottishfloodforum.org](http://www.scottishfloodforum.org)

The Scottish Flood Forum advises you consider the following when putting together your emergency kit:



### ***Key things to include in an Emergency Kit:***

- Hard copies of insurance documents
- Important phone numbers
- Mobile phone
- Portable charger
- Children's essentials (medication, nappies, toys)
- Emergency cash/credit cards
- Essential medication and prescriptions



*First Aid Kit*



*Essential toiletries*



*Portable/Windup Torch*



*Umbrella and waterproofs*



*Non-perishable food items*



*Portable/Windup radio*



*Playing Cards or Family Games*



*Bottled Water*



*Spare batteries*



*Blankets, duvets, warm clothes*



*Digital camera to record damage*



*Emergency numbers/ helplines*

# 7. COMPENSATION & SUPPORT

## OUTAGES

Adverse weather can cause power, gas, and water supply interruptions.

Beyond having emergency plans, insurance, and adaptations in place, you may be entitled to compensation for significant disruptions. Keeping a log of the outage duration, any damage and how it disrupted the service can help support claims and mitigate costs.

### Electric Power Outages

Your electricity network operator categorizes storms by severity to determine compensation timelines:

- **Category 1 Storm:** 8-12 times the normal daily fault rate.
  - £85 if power isn't restored within 24 hours.
- **Category 2 Storm:** More than 12 times the normal daily fault rate.
  - £85 if power isn't restored within 48 hours.

**For both categories:** An additional £45 is paid for every subsequent 6 hours without power, up to a cap of £2,165.

### Claims must be made within:

- **Unplanned Cut:** Claim within 3 months.
- **Planned Cut (under 2 days' notice):** Claim within 1 month.
- **Vulnerable Customers** on the Priority Services Register<sup>1</sup> have no time limit for unplanned cuts.

Your electricity network operator should either transfer the money into your bank account or send you a cheque. They might need to contact you first to make sure they have the right details.

If you don't receive compensation within 4 weeks, contact your network operator to make a claim. If unresolved after 8 weeks, escalate to the Energy Ombudsman.

*These payments are part of the Guaranteed Standards of Performance enforced by the regulator, OFGEM.*

<sup>1</sup>Check if you're eligible for Priority Services Register: <https://www.citizensadvice.org.uk/scotland/consumer-energy/energy-supply/get-help-paying-your-bills/getting-extra-support-from-your-energy-supplier/>

# 7. COMPENSATION & SUPPORT

## OUTAGES

### Gas Outages

You can get higher compensation when the outage is unplanned.

- **Unplanned Outage:** Claim £70 for every 24 hours the gas is off. Businesses can get £120.
- **Planned Outage (under 7 days' notice):** You can claim £50, plus extra if off for more than 24h. Businesses can get £120.

**Exemptions:** *No payment if over 30,000 homes were affected, the consumer caused the outage, or the operator took reasonable steps to prevent it.*

If gas was cut off, contact your gas network operator to find out how many homes were affected and if reasonable steps were taken to prevent it.

They should pay you directly through your supplier. If they haven't paid within 10 working days you are entitled to another £40 compensation. Contact your gas network operator.

 [www.energynetworks.org/customers/find-my-network-operator](http://www.energynetworks.org/customers/find-my-network-operator)

*These payments are part of the Guaranteed Standards of Performance enforced by the regulator, OFGEM.*

### Water Outages

You may be eligible for compensation if your water supply is cut off for more than 12 hours due to a fault like flooding or storms.

**Compensation:** Typically £30 for every 12-hour period without water.

#### How to claim:

1. **Contact Scottish Water:** Report the outage via their website, phone, or social media.
2. **Provide Details:** Be ready to share details, such as how long the outage lasted.
3. **Complete a Claim Form:** Scottish Water will guide you to fill out a claim form, often available online or by phone

# 7. COMPENSATION & SUPPORT

## DAMAGES

Beyond insurance certain compensations or government grants exist that can be used to build, repair and recover from storms and flooding.

### **Sewer Flooding Compensation**

You may be eligible for compensation if flooding is caused by an issue with Scottish Water's sewer infrastructure.

#### **Eligibility:**

- Flooding must be linked to Scottish Water's infrastructure.
- Compensation amounts vary depending on the severity and type of flooding (internal or external).

#### **How to Claim:**

- **Report Immediately:** Contact Scottish Water as soon as possible to report the flooding.
- **Gather Evidence:** Take photos, write down details of the damage, and keep any reports from emergency services.
- **Submit a Claim:** Complete all necessary claim forms as directed by Scottish Water.

### **Storm Recovery Support from the Scottish Government**

**What it funds:** Emergency grants announced after specific major storms. Funding may cover minor repairs, temporary relocation costs, or operational losses for organisations directly affected by flooding.

**Eligibility:** Charities, community groups, and small businesses in affected areas as designated by local authorities.

 [www.gov.scot/news/package-of-support-following-storm-babet/](http://www.gov.scot/news/package-of-support-following-storm-babet/)

# 8. BUILDING RESILIENCE

## GRANTS & FUNDING

### **Community & Practice Fund (National Centre for Resilience)**

**What it funds:** One-year projects aimed at strengthening local resilience to natural hazards like flooding. This can include creating emergency plans, conducting risk assessments, or building organisational capacity.

**Eligibility:** Third sector organisations across Scotland that have a focus on community resilience or emergency response.

 [www.ncr.glasgow.ac.uk](http://www.ncr.glasgow.ac.uk)

### **Let's Do Net Zero Fund – Infrastructure Support (CARES)**

**What it funds:** Larger-scale energy projects (e.g., solar panels, battery storage, heat pumps) for community buildings. These adaptations reduce emissions and improve resilience by providing backup power during outages.

**Eligibility:** Charities, SCIOs, or community anchor organisations that own or operate buildings for public use.

 [www.localenergy.scot/funding/lets-do-net-zero-fund/](http://www.localenergy.scot/funding/lets-do-net-zero-fund/)

### **UK Shared Prosperity Fund – Local Delivery (via Midlothian Council)**

**What it funds:** Projects that support community resilience, the transition to net zero, and place-based recovery. This can include repairs from flood and storm damage.

**Eligibility:** Third sector groups partnering with or applying through Midlothian Council.

 [www.gov.uk/government/publications/uk-shared-prosperity-fund-prospectus](http://www.gov.uk/government/publications/uk-shared-prosperity-fund-prospectus)

### **Nature-based Solutions for Resilience (NatureScot)**

**What it funds:** Projects that use natural features (e.g., restoring floodplains, creating woodlands, managing coastal zones) to build resilience to climate impacts like flooding, often while improving biodiversity.

**Eligibility:** Environmental charities, local partnerships, and community organisations.

 [www.nature.scot/climate-change/nature-based-solutions](http://www.nature.scot/climate-change/nature-based-solutions)

# 9. REFERENCES

## **Adaptation & Assessment Tools**

Adaptation Scotland SME Resilience Checklist [adaptationscotland.org.uk](http://adaptationscotland.org.uk)  
Climate Ready Places [adaptation.scot/take-action/climate-ready-places](http://adaptation.scot/take-action/climate-ready-places)  
Growing Climate Confidence – Net Zero Scorecard [scorecard.climateconfident.scot/net-zero](http://scorecard.climateconfident.scot/net-zero)

## **Climate Data & Projections**

Met Office Climate Data Portal [climatedataportal.metoffice.gov.uk](http://climatedataportal.metoffice.gov.uk)  
SEPA Flood Maps & Risk Data [sepa.org.uk](http://sepa.org.uk)  
UKCP18 (UK Climate Projections) [metoffice.gov.uk/research/approach/collaboration/ukcp](http://metoffice.gov.uk/research/approach/collaboration/ukcp)  
Adaptation Scotland [adaptation.scot/scotland-and-climate-change](http://adaptation.scot/scotland-and-climate-change)

## **Funding Programmes**

CARES – Let's Do Net Zero Fund [localenergy.scot](http://localenergy.scot)  
Nature Restoration Fund – NatureScot [nature.scot/funding](http://nature.scot/funding)  
National Centre for Resilience – Practice Fund [ncr.glasgow.ac.uk](http://ncr.glasgow.ac.uk)  
UK Shared Prosperity Fund (via Midlothian Council) [Via.gov.uk/government/publications](http://Via.gov.uk/government/publications)

## **Health & Community Support**

NHS Scotland – Heat Health Advice [nhsinform.scot](http://nhsinform.scot)  
Scottish Flood Forum [scottishfloodforum.org](http://scottishfloodforum.org)  
Calm Zone [thecalmzone.net](http://thecalmzone.net)  
The Breathing Space [breathingspace.scot](http://breathingspace.scot)  
SupportLine [supportline.org.uk](http://supportline.org.uk)  
Samaritans [samaritans.org](http://samaritans.org)  
The Silver Line [thesilverline.org.uk](http://thesilverline.org.uk)

## **Insurance & Legal Advice**

SCVO – Charity Insurance Advice [Via scvo.scot/support/running-your-organisation](http://Via.scvo.scot/support/running-your-organisation)  
SEPA – Flood Insurance Advice [sepa.org.uk](http://sepa.org.uk)

## **Scottish Government Policies**

Climate Change (Emissions Reduction Targets) (Scotland) Act 2024 [Full Act via legislation.gov.uk](http://Full Act via legislation.gov.uk)  
Local Heat and Energy Efficiency Strategy – Midlothian (2023) [midlothian.gov.uk/LHEES](http://midlothian.gov.uk/LHEES)  
Scottish National Adaptation Plan 24-29 [Full plan via gov.scot/publications](http://gov.scot/publications)  
Planning Aid Scotland [pas.org.uk](http://pas.org.uk)  
Ready Scotland – Emergency Advice [ready.scot](http://ready.scot)

## **Scientific Research**

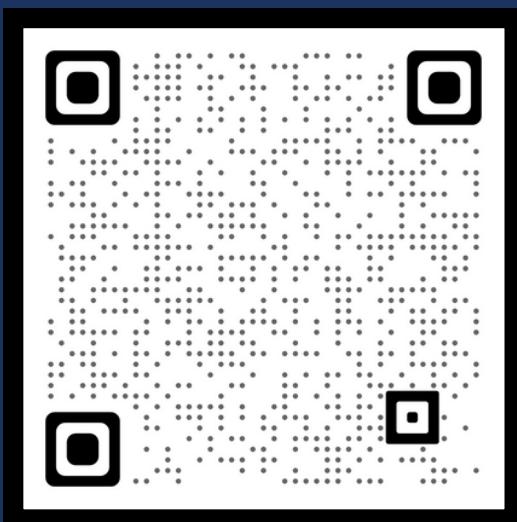
Mortality Risk in High-Heat UK Scenarios – ScienceDirect [Via sciencedirect.com](http://Via sciencedirect.com)

## **Technical Support**

Home Energy Scotland – Heat Pumps, Insulation [homeenergyscotland.org](http://homeenergyscotland.org)  
The Flood Hub – Natural Flood Management [thefloodhub.co.uk](http://thefloodhub.co.uk)

The climate crisis is already impacting communities across Scotland. To protect vulnerable users, maintain critical services, and reduce future costs, third-sector organisations must begin to adapt.

This practical guide, created in collaboration between Midlothian Climate Action and the Midlothian Financial Inclusion Network provides clear, actionable steps to help your organisation build resilience to extreme weather and secure the continuation of its services.



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