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Church buildings are often solidly built and, when maintained well, have withstood the weather over the centuries.

However, as the climate changes, and weather events becomes more extreme, they can become vulnerable. We need to be protect these precious buildings from harm.

At the same time, our churches act as sanctuaries for their communities; they are often built on higher ground and more solidly-constructed than the houses around them, so can be a place of safety during a flood, and can act as a cool sanctuary in a heatwave.

Below, you can explore the kinds of changes that could help your church adapt to our changing climate, so that extreme weather events cause less harm and can be recovered from more quickly.

Clicking on diagram below will let you explore the main risks, and potential risk mitigation actions you can take.

Why does climate resilience / adaptation matter?

Even if all greenhouse gas emissions were to stop today, climate change would continue to become more severe for another 30 to 40 years, due to the greenhouse gasses already in the atmosphere. After this period, the climate would slowly start to stabilise.

It is therefore crucial that we protect our communities and buildings from existing and future climate change, and the associated severe weather events which come with it.

We need to become 'Climate Resilient' so we can respond to more extreme, changing weather.

Read more about climate change here.

What weather do we need to be ready for?

The following general changes in climate can be expected. The longer we keep releasing greenhouse gasses into the atmosphere, the more severe and frequent they will become:-

Headline climate changes:

- Greater risk of warmer, wetter winters
- Greater risk of hotter, drier summers
- Greater risk of severe weather event

Likely changes in severe weather events:

- Increased risk of very hot days and intensity of heatwaves.
- Increased risk and intensity of droughts.
- Increased risk of intensive rainfall and flash (pluvial/urban) flooding over short periods, mainly during the summer period.
- Increased risk of high daily rainfall totals and (fluvial/river) flooding, especially during the winter.
- Reduced risk of wintry conditions, snowfall and frost.
- Increasing frequency and severity of severe weather events, including storm surges.
- Increasing rate of sea level rise.

You can find more on this on the Met Office website.

Where to start, and where to get advice

The first step is to **check the condition of your building. Look at your past Quinquennial Inspection reports**, to see what may have already been highlighted. Discuss any points you are unsure of with your Quinquennial Inspector.

Review your existing maintenance plan, and find out if it is being followed. A well maintained and thermally insulated building will not only be more climate resilient it will also be more energy efficient and so have a lower carbon footprint (see the **Practical Path to Net Zero** for more details).

Use the diagram below to learn more about the potential risks, and what actions can be taken to become more resilient.

If changes need to be made, it would also be wise to **seek advice from your church architect** on any proposed alterations to the building.

If your church contains any sensitive fixtures and fittings, such as stained glass windows or wall paintings, make sure you have **checked with your DAC and any appropriate specialists** about how climate change, and any actions you take in response, might affect them.

Prior to taking any of the potential resilience actions, ensure you have appropriate permission such as List B (Archdeacon's permission). Charles with your DAC if you are ungured.	ssion), faculty or planning
permission. Check with your DAC if you are unsure.	
Regarding any type of flood risk, please contact your Local Authority, Environment Agency, and water company. These organisations	often work together as a
Resilience Team to tackle and advice on all types of flood protection.	
The climate resilient church	

Guidance

Becoming a Climate Resilient Church may seem initially daunting, but the guidance provided below provides a breakdown of the process that can be undertaken in any church to begin its resilience journey.

Five key steps every church should take to ensure their church building is climate resilient include Good maintenance practices, Identifying and discussing potential risks, Creating a Future Climate Action Plan, Communicating expectations and Undertaking a regular review process.

The guidance produced by the Church Buildings Council goes into depth on how this is best achieved and provides support in creating climate-resilient communities.

Climate Resilient Church Guidance

Webinars, advice and support

There is a range of advice and support available to help you on your journey towards being a 'climate resilient church'.

Church of England Webinars on Climate Resilience

Below, you can find links to the recordings of these two very valuable and practical webinars on climate resilience; (1) for our buildings and (2) for our communities.

Webinar 1: CHURCH CLIMATE RESILIENCE - HOW TO PREPARE YOUR BUILDINGS FOR MORE EXTREME WEATHER

Watch the recording here, from 10th November 2022

The UK climate in 2050 is going to look quite different to how it is now. We will be facing hotter summers, wetter winters, more storms and multiple other changes. This webinar recording details how we can begin the process of adapting our churches to this new climate.

Using case studies from churches large and small from across England, we discuss how changes in our climate will impact our churches, what practical steps some churches have already taken to adapt their buildings, and what kind of actions we can all take now to ensure our churches are well protected in the future.

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Webinar 2: COMMUNITY CLIMATE RESILIENCE - HOW TO USE YOUR CHURCH TO PROTECT YOUR COMMUNITY

Watch the recording here, from 25th November

As our climate changes, many of our homes and neighbours will be affected by heatwaves, floods, and extreme winds among other impacts. This webinar looks at the role churches can play in protecting their community (enhancing community climate resilience).

Using case studies of churches that have already provided community services regularly and as a result of emergencies, we unpack what role the church has in community resilience and practical steps to create a resilience plan for your church.

Speaker: Chris Walsh is a researcher from the Tyndall Centre for Climate Change Research who spent 12 months embedded in the Church of England. Chris gathered case studies of churches already dealing practically with climate change (see below) and developing guidance on these issues (to be shared here by end Jan 2023).

People to speak to

- Speak to your local 'Resilience Team'; the local authority, the water company, and the Environment Agency
- Contact your own inspecting architect.
- Get advice on your building from your local DAC Secretary. If you don't have their contact details, look on the map here.
- Find your local Diocesan Environment Officer.
- At a national level, contact Catherine Ross, who leads on environmental matters for the Cathedral and Church Buildings Division

Historic England guidance

- Flooding in historic buildings.
- Emergency Response Plans
- How to treat and store items after an emergency
- Lighting protection

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Webinar recording - flooding part 1.

- Webinar recording flooding part 2
- Webinar recording flooding, lessons from the past
- Webinar recording Climate adaptation, whole house approach to retrofit
- Webinar recording Assessing Future Summertime Overheating Risk

Other useful resources

Download Historic Environment Scotland's "Short Guide to Climate Adaptation for Traditional Buildings" and "A Guide to Climate Change Impacts"

For pests, look at What's Eating Your Collection? and Integrated pest management.

Case studies of climate resilient churches

During 2022, the Cathedral and Church Buildings division received funding from NERC to create a cache of valuable case studies and resources.

Our researcher identified examples from around the country, showing churches creating climate resilient, future-proof buildings and supporting their communities through extreme weather events.

- Responding as an emergency flood centre: When the bottom half of the town flooded in February 2021, Snaith's St Laurence Priory opened their doors to act as a community hub for the emergency response.
- Creating a flood resilient church building: As part of a major re-ordering scheme, Tirley St Michael & All Angels church have introduced an array of flood resilience features.
- St Marys Ellenbrook provides a cool refuge during a hot summer: As a building with a high heat capacity, St Marys Ellenbrook was uniquely placed within the local area to provide a space for people to escape the high temperatures, during the heatwave of July 2022.
- Protecting a church from wildfire: After being affected by a wildfire in 2022, St Mary & St Peters in Wennington learnt how to best protect the land for the future.
- Adjusting to subsidence, as part of a major reordering: Facing the effects of local subsidence, St Edward the Confessors church in Mottingham were forced to intervene, adapting to emerging cracks in the floor.
- Protecting a church from future subsidence | The Church of England: St Johns has had to contend with subsidence for most of its history, and recently took practical action to protect its future.
- Taking early preventative action on damp ingress | The Church of England: This Major Church took early steps to prevent the worsening damp in its historic fabric.
- Adjusting a church building to regular floods | The Church of England: With flooding becoming an accepted reality, St Denys has created proactive plans to mitigate damage.
- Responding to extreme flooding events | The Church of England: Unexpected flooding caused significant problems for St Aidans in Carlisle.
- Recovering from floods alongside the community | The Church of England: Community was put at the heart of this church's flood response, with mutual benefits.
- Providing a refuge against flooding | The Church of England: The elevated position of St Cuthberts afforded it protection from a flood, in turn allowing it to act as a refuge for locals.
- Creating a warm refuge for the community | The Church of England: An existing church hall cafe became a warm community space during a winter when energy bills were on the rise.

This page was created collaboratively with staff and volunteers from the Diocese of Leeds.

We are very grateful to them for their expert input.



Also of interest



Net Zero Carbon Church Guidance



net zero carbon at your church.

Why you should act

There is a climate crisis, and it is impacting around the world now

Source URL: https://www.churchofengland.org/about/environment-and-climate-change/climate-resilient-church