

CASE STUDY ADJUSTING A CHURCH BUILDING TO REGULAR FLOODS



N.B. This case study considers only one possible approach, which will not be suitable for every church. Always seek professional advice.

Key Points

- St Denys in Severn Stoke has been flooded a total of 6 times since 2000.
- The church has adapted to manage the consequences of this flooding cycle by adopting a number of different strategies that minimise the damage of flooding on the church buildings and protect the objects stored within it.
- It is highly likely this pattern of flooding will continue, therefore it is important for the future of the church building to find able volunteers to continue to enact their flood plan.



FLOOD PROCEEDURES.

EMERGENCY ACTION IN THE EVENT of MAJOR RIVER FLOOD WARNING
@ St Denys Church, SEVERN STOKE

██████████ – Church Lane, Severn Stoke

ACTIONS in order of PRIORITY

1	Monitor River water levels within Embankment.
2	Once there is flow OVER embankment & E.A. Reports peak flow upstream Contact ██████████
3	CONSIDER Church Items 'uplift'.
4	Contact the Vicar: Revd. Canon Mark Badger ██████████
5	Contact Volunteer /Friends helpers
6	Uplift loose items in Nave, side aisle, Vestry and rear Vestry, small altar and carpets, and move to Sanctuary behind Communion Rails
7	Move kneelers & carpet strips out onto pews
8	Uplift pews onto crates – pushed together if a large flood is expected
9	Place kneelers onto pews to form platform for other items incl. Those in Choir Vestry and children's toys.
10	Disconnect Organ Pedals wiring loom and uplift Footpedals.
11	If crates are insufficient, use upholstered chairs to stand furniture on.
12	Move carpets through Altar rail gap to higher level
13	Move electric organ or place on crates. Contact Jigsaw Carpets ██████████ Only if carpets are damaged.
14	Request Secretary, Mrs Pat Comley ██████████ to notify Ecclesiastical In ██████████ churches@eigmail.com



1 The 2013 flooding can be seen surrounding the church building here.

2 An emergency flood plan was developed at St Denys, to deal with the frequent flood events.

3 Carpets were removed from the interior to mitigate effects of the flood water.

Managing a continuous cycle of flooding

St Denys has been forced to adapt to an ongoing cycle of flooding, occurring roughly once every 3 or 4 years, flooding a total of 6 times since the millennium and twice since 2020. This pattern has come as the result of increased fluvial (river) flooding, due to rainfall falling in shorter, but more intense windows. It is likely to continue to get worse over the next 30 years unless preventative actions are taken. This has resulted in many changes to the church building, including:

- Transitioning away from having carpets covering the floors, after the previous one was lost in the 2007 flood.
- Replacing the suspended wooden vestry floor with a raised concrete floor.
- Replacing pews with seats.
- Using an electronic keyboard instead of the pipe organ.

In the 2020 flood Severn Stoke lost its village hall, so St Denys now represents the primary community asset. However, plans to transition the church into a more community focused role have been limited by the need for money to be directed towards flood resilience measures, although it remains a dream for the congregation.

In order to deal with the continual flooding, the church wardens at St Denys have developed a flood strategy that is utilised whenever a flood warning is announced by the environment agency. It is reliant on volunteers being in the vicinity of the building and being able to leave their own homes, but can draw on a group of 15.

What happens to the church during and following the floods?

As a result of the extensive history of flooding, a church warden at St Denys developed and distributed a 'Flood Procedure' - a 14-step plan, enacted in the event that a flood warning is received from the Environment Agency. Among other things, this plan provides guidance on how to make the church building fit for incoming water and provides contact information for a number of key responders. Key items it covers include:

- Contact details for local volunteers and clergy.
- Carpets and Insurance contacts.
- A sequential plan for 'uplift' process for removing fabrics and other vulnerable items from potential flooded areas and as far off of ground level as possible
- Disconnecting organ pedals to ensure their safety

This plan, and the fact that it is well known by the wider community, allows for a rapid and effective response that minimises the potential damage and allows for a precise aftercare strategy.

How has the recovery been funded?

Insurance has covered the majority of the clean up work in St Denys across the cycle of flooding, however, wider work in the church to increase its resilience has had to be funded from other sources:

- The pipe organ has been damaged to a significant extent by the continual flooding events, leading to the need of significant overall which remains beyond the budget of the church. In its place they were able to receive grant funding for an electronic keyboard that can be easily moved from the local district council.
- In the past pews were cleaned and revarnished through an insurance claim, but in the last 5 years St Denys has been instead replacing them with stackable chairs that can be easily moved out of the way quickly, and this has been funded through donations and a small local grant.

How is the church preparing for flooding in the future?

For the last decade the local council has been working with the Environment Agency to create a flood bond in Severn Stoke that would protect the church and surrounding houses. This is yet to be completed as the most recent flood occurred as work began in earnest, but may be part of the long term solution once enacted.

A major issue facing St Denys is the current lack of a volunteer base to support the flood relief work. They are working to engage with the whole community through some events, but this represents a serious challenge for its future.

What could others learn from this case study?

1. In areas that currently flood regularly or may do in the near future, an emergency flood plan should be considered.
2. When considering church resilience, include the wider community in discussions to ensure buy-in and continuity of a response.
3. Maintain a close relationship with insurers, as they may also have resilience advice.
4. Communicate with local authorities and, if necessary, the Environment Agency to explore all possible options and to access any support that may be available.

"We've battled on saying, well, it only happens every sort of five or seven years and we can take three months out for it to dry and the insurance pays and so on. But I think it has a deadening effect. There's no sort of excitement about a church being flooded."

Church Warden, St Denys