

What is a Potentially Vulnerable Area (PVA)?

Potentially Vulnerable Areas (PVAs) are where significant flood risk exists now or is likely to occur in the future. Identifying PVAs is a vital part of protecting people, properties, businesses, communities, infrastructure and the environment from flooding. PVAs help us and our partners understand the potential impacts of flooding and prioritise where work could benefit the most.

Based on the National Flood Risk Assessment (NFRA), SEPA has identified areas where the potential impact of flooding is most significant. Identifying the PVAs will inform Scotland's Flood Risk Management (FRM) Strategies and Plans and become the focus of FRM actions, helping responsible authorities to work with communities to prioritise investment and reduce the impacts from flooding.

For each PVA identified:

- We will produce flood hazard and flood risk maps for the area;
- We, in consultation, will set objectives and identify actions to address flood risk;
- Local Flood Risk Management Plans will be produced by lead local authorities; and
- Scottish Water will undertake an assessment of the risk of flooding from the sewerage system.

Why have changes been made to the PVAs since the 2011 NFRA?

New PVAs have been added due to an improved understanding of risk, or because of future risk due to climate change. Some have been proposed for de-designation where our more recent data shows less risk than the 2011 NFRA. There have been boundary adjustments to some PVAs to better represent the distribution of risk within them. Many PVAs remain unchanged, but our understanding of the risk within them will be improved.

Why is my property in a PVA when I don't flood?

Not all properties within a PVA will be affected by flooding. Similarly, there will be homes and businesses outside PVAs which are at risk of flooding. We use a catchment approach to setting the boundaries of the PVAs. This means that we look across whole river systems and coastal areas and use these natural boundaries, rather than using local authority or other borders that have no connection to flood waters.

My property floods but I am not in a PVA? What happens to me?

There will be some people and places outside of proposed PVAs at risk of flooding. Not being included in a PVA does not mean that the risk of flooding is insignificant to the individual or that support will not be provided by flood risk authorities. Flood risk management actions will still be applicable to those people at risk of flooding outside of the PVAs. PVAs are used to identify locations where a partnership approach may be required to resolve widespread and often complex flooding issues. The management of flood risk to address local issues can still be taken forward by local authorities and others in locations outside of PVAs.

Why is my area, which has flooded in the past, not been designated within a PVA?

Not all properties at risk of flooding are captured within PVAs. Information on previous floods has been used to inform the NFRA where they have been reported to local authorities or SEPA and collated from published sources. The presence of a past flood on its own is not sufficient to classify the area as a PVA.

Why are you consulting?

We'd like you and your local communities to be involved in how we're shaping flood risk management. Your views are very important to us and will help us make sure we have accurately identified all PVAs. Feedback from you and your community is essential to ensure we have taken as much relevant information into account as possible.

Who can respond to the consultation?

Everyone is invited to respond to the consultation. Input from all interested organisations, groups and individuals will be sought and welcomed. As well as hearing the views from individuals and local communities, we're particularly keen for Responsible Authorities and informed professionals to take part in the consultation and provide feedback on the data sets.

What action will you take on my response to the consultation?

Following the consultation SEPA will take account of the views received. We will be engaging proactively with our stakeholders to communicate the responses from the consultation and the actions we will take next. A final version of the NFRA and PVAs will be published in December 2018.

What is the National Flood Risk Assessment (NFRA)?

First published in December 2011, the NFRA has provided Scotland with the knowledge and tools to assess the causes and consequences of river, coastal and surface water flooding, taking into account the effects of climate change. It considers the potential impact of flooding on human health, economic activity, the environment and cultural heritage and is based on the most up to date data available.

Why are you reviewing the NFRA?

A key requirement of the FRM (Scotland) Act 2009 is that SEPA must review and update the NFRA every 6 years. Now that we have reached the end of the first flood risk management planning cycle, we are working with key stakeholders to review and update the NFRA as part of preparations for the second planning cycle.

Our understanding of flood risk is constantly developing and improving. It is not a static field of work and therefore periodic review and update is essential to ensure we effectively support flood risk management in Scotland.

How does the NFRA take account of climate change?

Climate change predictions indicate that parts of Scotland may experience wetter winters and more extreme weather events including intense rainfall in summer months. This may lead to an increase in the number of damaging floods. Climate change is also expected to increase sea levels.

The next major update to UK climate change understanding will be UK Climate Projections 2018 (UKCP18), which is expected to be published in November 2018. This publication will require significant analysis and interpretation and it will not be possible to include it in the 2018 NFRA. As soon as the updated climate change projections become available, SEPA will immediately begin work to take them into account in future flood risk management activities. Understanding the impacts of climate change on flood risk will help us to establish sustainable local Flood Risk Management Plans which will be able to manage current and future flood risk.

The NFRA uses the same climate change scenarios (2080, high emissions) described in the Flood Risk Management Strategies. This is based on the UK Climate Projections 2009 (UKCP09) analysis, which remains the most appropriate data until UKCP18 is published.

The predicted rise in rainfall increases the potential for river and surface water flooding. The NFRA considers both the flooding impact associated with future climate change and how sensitive river catchments are to the effects of climate change. Climate change is not expected to affect catchments in all regions of Scotland in the same way and this has been taken into account with varying climate change factors.

The expected sea level rise also varies around the coastline. Like river flooding, this has been taken into account through a future coastal scenario and a consideration of expected change in coastal locations.

The future flood risk assessment within the NFRA is solely based on the impact of a changing climate on the magnitude of flooding; it does not take into account any potential increase due to population change, development pressures or urban creep. SEPA, Scottish Government and Responsible Authorities are undertaking ongoing research and development to better understand the impacts of climate change on all sources of flood risk to ensure that it can be robustly embedded in decision making.

What is a Flood Risk Management Strategy?

A [Flood Risk Management Strategy](#) sets out a long-term vision for the overall reduction of flood risk. It contains a summary of flood risk in each Local Plan District together with information on catchment characteristics and a summary of objectives and measures for PVAs.

What is a Local Flood Risk Management Plan?

Local [Flood Risk Management Plans](#) will be developed by lead local authorities. SEPA will prepare Flood Risk Management Strategies which will identify the main flood hazards and impacts and set objectives for reducing risk, establishing the best combination of actions to achieve this. Local Flood Risk Management Plans will take these objectives and set out what actions will be taken and how they will be funded.

What is a Local Plan District (LPD)?

LPDs are the geographical areas for which Flood Risk Management Plans will be produced. There are [14 Local Plan Districts](#) together covering the whole of Scotland.

Does every local authority have an input to the FRM planning process?

All local authorities have additional responsibilities for flood risk management and are involved in partnership working with other local authorities, SEPA and Scottish Water.

All local authorities will contribute to:

- Producing local FRM plans
- Reducing overall flood risk when exercising their flood risk related functions;
- Achieving objectives set out in Flood Risk Management Strategies;
- Mapping, assessing and maintaining watercourses; and
- Co-ordinating flood-related work with other local authorities.

Who is responsible for flood risk management?

We all have a responsibility to manage the risk of flooding and to protect ourselves, our families, property and business. There are many actions we can take to minimise the flood damage to our land and property. SEPA, Scottish Water and local authorities also have a responsibility to do what they can to reduce the overall impacts of floods and ensure that, where possible, the risks are minimised. The Flood Risk Management Act creates a framework for a co-ordinated and sustainable approach to flood risk management which has at its centre, a series of assessments and plans designed to improve our understanding of flooding and target investment in actions where they are most needed.

What can members of the public do to reduce flood risk?

You are the first line of defence against flooding and responsible for protecting yourself, your family, property and/or business. It is important to know what actions you can take to reduce the impact of flooding on yourself and your property. SEPA's Floodline service can help you be prepared for flooding. Floodline can provide free advanced warnings of floods in your area. Please visit the [Floodline website](#) or call Floodline on 0345 988 1188 for more information.

You can also:

- Get involved in community organisations and events by joining a local flood group;
- Share your views and opinions by responding to consultations on flood risk management;
- Keep up to date with developments on flood risk management by regularly visiting SEPA and your local authority websites'

Where can I get advice on flooding?

SEPA's website hosts a comprehensive [flooding section](#) which gives you advice and information on how to be prepared and take action to manage your own flood risk. There is also information on how Scotland is tackling flooding more powerfully by developing our knowledge of the impacts and sources of flooding and preparing plans to manage it. Your local authority website may also have more local information to help you deal with flooding.